



KPN Integrated Annual Report 2022

Fiber Forward



Contents



● Report by the Board of Management

Introduction by the CEO	4
Our purpose and the world around us	6
Strategy and key performances	9
Value creation model	13
Our valuable assets	15
Our value for stakeholders	
- Customer value	17
- Shareholder value	23
- Employee value	27
- Impact on society	32
Our performance	
- Network infrastructure	36
- Focused innovation and digitalization	41
- Safeguarded privacy and security	45
- Environmental performance and responsible supply chain	50

● Governance

Corporate governance	58
Tax and regulations	62
Compliance and risk	67
Composition of the Board of Management	77

● Report by the Supervisory Board

Composition of the Supervisory Board	80
Supervisory Board Report	83
Remuneration Report	90

● Financial Statements

Consolidated Financial Statements	104
Corporate Financial Statements	167
Other information	175

● Appendices

Appendix 1: About this report	186
Appendix 2: Alternative performance measures	189
Appendix 3: Materiality assessment	191
Appendix 4: Non-financial information	199
Appendix 5: TCFD	202
Appendix 6: NFRD	203
Appendix 7: EU Taxonomy	204
Appendix 8: List of top risks	208
Appendix 9: Social figures	218
Appendix 10: Supply chain	220
Appendix 11: Environmental figures	222
Appendix 12: Tax overview for continuing operations per country	229
Appendix 13: GRI index	230
Appendix 14: SASB index	239
Appendix 15: Glossary	241

Statement - This copy of the Integrated Annual Report is the PDF/printed version of the KPN Integrated Annual Report 2022. This version has been prepared for ease of use, and does not contain ESEF information as specified in the Regulatory Technical Standards on ESEF (Delegated Regulation (EU) 2019/815). The official ESEF reporting package is available on our website at: <https://annualreport2022.kpn/>

● Introduction by the CEO

Moving fast forward

We are strongly committed to connecting everyone in the Netherlands to a sustainable future, a responsibility we take very seriously. Our investments over the years have resulted in excellent networks and together with our services we help the country move forward in its digital transformation.

Transformation into a fiber company

With the roll-out of fiber and 5G, we are leading the way in the digitalization of the Netherlands. In 2022, for the first time, we had more retail customers using fiber services than copper. In 2023, we will pass the threshold where more than half of all households in the Netherlands will have access to a fiber connection of KPN or our joint venture Glaspoort. With this, we are working to set a new standard for internet quality in the country, helping consumers, businesses, and Dutch society move forward.

Our efforts around network infrastructure are contributing to the transformation of KPN into a modern fiber company. This enables us to deliver the fastest connectivity and to serve our customers in a more efficient way.

Long-term value creation in a competitive playing field

We have been successful in 2022, delivering on the promises in our *Accelerate to Grow* strategy. Through innovation, we improved our products and services for our customers, and achieved the planned growth in service revenues. The turnaround in the Business market – especially in the SME segment – was an important milestone in this regard. In the Consumer market, we switched many customers to our KPN Unlimited proposition and fiber with speeds of 1 gigabit per second, underscoring growing customer demand for unlimited data usage in mobile and higher speeds.

These efforts were also recognized externally. Consumers voted KPN as the best internet service provider on both fiber and copper, and our mobile network was recognized as the best in the Netherlands as well as globally. These are results to be proud of, and I'd like to thank all our colleagues and partners for their contribution in this success.

Solid financial performance

We have achieved strong financial results, showed growth, and maintained our solid financial position due to our strategic progress. This enables us to take good care of all stakeholders. We invest heavily in an excellent customer experience, and in the quality of our fixed and mobile network. We also invest in our employees, which is reflected in a salary increase for 2023, training programs and a work from home allowance. At the same time, we have room for strategic projects, the purchase of 3.5 GHz spectrum licenses. And we offer our shareholders an attractive return.

In the competitive market in which we operate, clear regulation is important. In 2022, the Netherlands Authority for Consumers and Markets (ACM) declared a proposal from KPN regarding wholesale access by other service providers to our fiber network as binding. This creates clarity and stability in the market for a period of about eight years.

Cybersecurity

In 2022, cybersecurity was once again on top of our agenda. We are able to turn our plans into action thanks to the expertise of our people, our professional organization, and our ability to cooperate decisively with business partners, science, and government parties. Through the work of our Chief Information Security Office (CISO) team, and active participation in the Cyber Security Council (CSR) and other working groups, we can mitigate risks together. Protecting the vital domains of the Dutch digital infrastructure is crucial, and a permanent focus within KPN. A report by the Dutch Authority for Digital Infrastructure on the safeguards in the lawful intercept wiretapping chain are providing feedback for us to continue to guarantee security at the highest level. The trust that customers and other stakeholders have in KPN is of paramount importance to us.

● Introduction by the CEO

Clear environmental targets

We continue to score highly on sustainability rankings such as the MSCI and CDP and we are committed towards ambitious environmental objectives, both in the short and long-term. In doing so, we link our ambitious targets directly to our green financing instruments.

We also set clear conditions for suppliers so that, for example, the hardware we supply to customers is sustainable and enables them to save on energy consumption. Partly due to COVID, we increased hybrid working, which makes us more efficient, due to the reduced footprint of our offices and less travel by our employees.



Connected together

KPN is at the heart of society, and society is at the heart of our company. We want to be an organization that is there for everyone and that reflects society. We aim to stimulate social contact, a basic necessity of life and extremely important for the well-being of people. For people who feel lonely we organize various special projects and activations with our KPN Mooiste Contact Fonds which celebrated its 15th anniversary in 2022. Within KPN, we constantly pay attention to inclusion and diversity, through initiatives such as 'KPN Pride' and 'Colorful KPN' ('Kleurrijk KPN'). This strengthens mutual connection, helps us to have relevant conversations and makes us a better company. 'We get positive feedback on this from independent organizations focussing on fostering diversity and inclusion in the workplace, like Taskforce Diversiteit & Inclusie (D&I) and SER Diversiteit in Bedrijf.'

Proud of TEAM KPN

Our gratitude goes to all employees who have helped KPN and its customers move forward this year. Employee engagement remains high, and colleagues continue to express their pride in working at KPN. We want to make KPN one of the greatest places to work in the Netherlands.

We constantly invest in making teams and individuals stronger, so working towards a culture in which engagement and better performance go hand in hand. Modern facilities, good terms of employment, and room for talent development are essential to this. For our colleagues, we try to limit the impact of rising costs; in 2022, we twice paid employees a supplementary contribution. We also agreed on a salary increase for 2023 with the trade unions.

Looking ahead to 2023

2022 was a year of growth for KPN. Our strategy is paying off. Thanks to our investments, we are transforming the company step by step. In the coming year, we intend to continue on this course. Despite the challenging economic context, we will focus on service revenue growth and remain focused on costs.

I am looking forward to 2023 with confidence, and thank all our employees, customers, shareholders, friends, and other stakeholders for their support.

**Joost Farwerck,
CEO and Chairman of the Board of Management of KPN**

● Our purpose and the world around us

A central role in society

Our purpose

We believe connections bring people closer and move them forward. That is why we are going all out to connect everyone in the Netherlands to a sustainable future. Every day we build the network of the future, a network of people and technology solutions that moves us forward. We enable new secure ways of working and want to offer first-class connections, flexibility, and an outstanding customer experience that is both safe and simple. This way people can relax, do business, make friends, collaborate, and discover new worlds. We are striving to make the Netherlands the most connected country in the world. We want to lead the country's digitalization and become the preferred partner in digital life.

The connected society

For consumers, a great part of daily life depends on connectivity – for entertainment, personal finances, shopping, staying connected to loved ones, or working from home. For businesses, there's even more of a dependency on connectivity, with critical applications becoming Software-as-a-Service, that is to say, moving completely to the cloud, and hybrid work being the norm for many people.

Additionally, for a number of businesses, the primary service is digital or primary processes are fully digitalized. Well-known examples include streaming, food delivery or car-sharing services. We are seeing how connectivity can deliver solutions for society as a whole, solving challenges and unlocking new opportunities. From climate change to addressing food scarcity, new solutions are being developed that make use of connected devices, real-time data processing, low-latency communication, and other technologies that require high-quality connectivity.

A modern society needs a modern communications infrastructure. In this respect, the Netherlands is one of the most advanced countries in the world. This is due to the efforts of KPN and peer telco's who are building fixed and mobile networks across the country. According to the Digital Economy and Society Index (DESI) Report of 2022¹, the Netherlands is one of the best performers in connectivity in Europe.

The same DESI research reveals that the Netherlands has one of the most advanced digital economies and societies in the EU, together with Denmark and Finland. Also, together with Italy and Denmark, the Netherlands has the highest 5G coverage in

Europe, covering more than 95% of the country. We have excellent infrastructure and a highly digitally-skilled population, making us a popular entry point for international companies to bring their services to Europe. A more developed digital ecosystem can contribute to economic growth. The effect on gross domestic product (GDP) per capita is driven by the productivity and efficiency gains afforded by digital technologies. This occurs through output from new products and enhanced productivity. These are just a few of the reasons why infrastructure investments by KPN are so important for the Netherlands.

KPN as part of Dutch society

The core of our strategy is to accelerate and enable society's digitalization. Every day, we improve the network of the future, a network of people and technology that makes progress happen. In 2022, KPN continued rolling out fiber to more households and businesses in the Netherlands, connecting 348k households increasing our total fiber network to 3.56m homes passed. To this end, we are making good progress towards our goal of ~80% of households with fiber in the Netherlands by 2026 reaching 47%, together with Glaspoort, KPN's Joint Venture with APG.

In 2022, we almost completed the modernization of our mobile network. Thanks to these efforts, we were recognized by benchmarking experts as the best mobile network. This is also emphasized by an increase of our mobile base with 195k customers. With partners, we are testing the benefits of 5G in field labs across different industries. This includes, for example, automated guided vehicles – essentially robots – in factories, and innovations in the health industry.

A related effect of a more connected society is an increasing need for cybersecurity. Threats to both national and personal security are increasing, and keeping critical systems and personal data safe is a key priority for Dutch society. KPN is taking an important role in ensuring cybersecurity for all, both through its services and, perhaps more importantly, through its work with the Dutch government and other companies. For example, in 2022, KPN joined nine other Dutch companies in establishing the Chief Information Security Office (CISO) Circle of Trust foundation, aimed at creating a platform to share information about cybersecurity threats, as well as increasing awareness about cybersecurity issues in the Netherlands.

¹ This report is mainly based on 2021 data and published in 2022

● Our purpose and the world around us

Connectivity is already at the heart of Dutch society and its relevance would only increase. This creates new opportunities as well as big responsibilities for KPN. We are excited about supporting our customers in making the most of their digital lives, and we take our responsibility very seriously to provide high-quality safe connectivity.

Our market position

Consumer market

KPN aims to be the preferred digital partner for all people in the Netherlands. We do this by providing digital access with our fast fiber network, reliable copper network, in-home WiFi, and the best mobile network. We have simplified our offering to our customers under the KPN brand and broadened our portfolio with new content.

We see fiber as the technology of the future for fixed-line connectivity. We believe it is superior compared to the other technology, due to its stability and reliability, and symmetrical up-and download speeds. Higher upload speeds, in particular, will become increasingly important with increased data usage from new applications such as gaming and virtual reality.

Acting on this belief, we are building the largest fiber network in the Netherlands. We passed an important milestone in 2022, with more than half our broadband customers now on our fiber network. Our copper network customers receive good quality services, but we do see that they are more likely to choose other providers than fiber customers. This is even more reason to connect more of the Netherlands to our fiber network as quickly as we can.

The recognition of our mobile network confirms that we offer the best coverage and highest speed in the Netherlands. The mobile market in the Netherlands is competitive, with several players focusing on a 'no frills' or 'value for money' approach. We believe the quality of our network offers our customers a lot of value, and this year we have again grown our postpaid base by 111k SIMs. Our continued focus on fixed mobile convergence (FMC) is paying off too - we have the highest market share in FMC in the Netherlands.

Business market

We offer our business clients the connectivity and tools they need to make their businesses truly digital. Our customer-centric approach enables us to offer our customers a standardized but customizable portfolio to suit their specific needs. Our business market strategy has a clearly differentiated segmented approach: our product and service propositions are specifically aligned to our small and medium enterprises (SME), large corporate enterprises (LCE), and Tailored-Solutions customers.

For our SME customers, we offer standardized and future-proof solutions (KPN ÉÉN MKB) and focus on cross- and upselling with the aim of becoming the preferred digital partner for both fixed and mobile. Our focused strategy here is now clearly paying off, with service revenues for the SME segment having grown by 8.8% in 2022.

Our LCE customers are served through our modular Smart Combinations propositions, where we offer connectivity, cloud, security, and workspace services. Competition in the LCE mobile segment continues to be strong, with competitors challenging us on price. We remain focused on delivering quality in the mobile market and on track to deliver sustainable inflection in LCE in 2023.

Our Tailored Solutions customers are in different phases of their digital journey and facing complex cloud, network, workplace and security challenges. We guide and facilitate them on their journeys with integrated technology services supported by SIAM framework processes (Smart Integration) in order to empower customers in innovation and to let them remain in control for future digitalization.

Wholesale

In 2022, we achieved an important milestone for our Wholesale business. We introduced a new and improved fiber offering, which ACM declared binding, giving clarity to the market for the next eight years. With this new offering we show our continued commitment to our open-access model to guarantee consumers in the Dutch market the highest-quality services. Our Wholesale business continued its growth in 2022, driven by increased mobile and broadband service revenues. The continuous investments in the quality of our fixed and mobile network makes KPN an attractive partner.

SWOT

We continuously review our business model and adapt our resources and capabilities to counter risks and create new opportunities. The overview on the next page summarizes our main insights and position in the environment in which we operate.



● Our purpose and the world around us

Overview of our strengths, weaknesses, opportunities and threats

Strengths that make us stand out

Network

- Network advantage maintained through compelling fiber strategy
- Mobile network quality confirmed as world's best

Business activities

- Strong brand reputation
- Open network policy, granting wholesale access to third-party operators
- Trusted provider of critical communication services to governmental bodies

Corporate social responsibility

- Externally recognized as ESG frontrunner
- An attractive employer with skilled and engaged employees

Financial

- Sustainable service revenue growth
- Strong and growing free cash flow covering progressive dividend
- Robust balance sheet and liquidity position

Opportunities for growth

Network

- Growing fiber footprint
- Improving fiber activation rate, leading to broadband base growth
- Developments in infrastructure, software, 5G, IoT and virtual networks
- Partnerships with content providers

Business activities

- Create synergy between product portfolios to capitalize trend of working from home
- Digitalizing customer interactions
- Further increasing household value by cross- and up-selling opportunities
- Utilizing data and analytics capabilities to create more value in current and new business
- Creating value from new 5G and fiber products and service offerings

Corporate social responsibility

- Substituting existing products and services with more sustainable alternatives

Financial

- Copper switch-off, resulting in energy and spend savings

Weaknesses to improve

Network

- Dependency on worldwide supply chains for hardware (chips)
- Legacy network infrastructure

Business activities

- Relatively high cost to serve due to complex IT systems and processes

Corporate social responsibility

- Gender diversity, especially in middlemanagement functions

Financial

- Lower cost-cutting run-rate

Threats we face

Network

- Confidentiality, integrity and availability of networks, systems and data
- Impact on our technical infrastructure due to impact of climate change
- Shortage of materials

General

- Potential restrictive regulation for telecommunication companies
- Challenging labor market
- Reliance on suppliers subject to international geopolitical discussions

Competition

- Price pressure from fierce competition
- Disruptive technologies and new business models that we need to adapt to

Financial

- Cost inflation (i.e. higher wages and energy prices)
- Uncertain outcome of future spectrum auction
- Increased risk of customer spend optimization due to high inflation rates

● Strategy and key performances

Accelerate to Grow strategy pays off

Accelerate to Grow strategy

KPN has three key pillars underpinning its Accelerate to Grow (2021-2023) strategy:

1. Leverage & expand superior networks
2. Grow & strengthen customer footprint
3. Simplify & streamline operating model

With this strategy, KPN aims to lead the Dutch digitalization wave to connect the Netherlands to a sustainable future in which we deploy our services while being frontrunner on safeguarding environmental, social and governance aspects. The strategy has already led to sustainable growth in mass-market service revenues and adjusted EBITDA AL, and enables the continuation of its progressive dividend policy, covered by free cash flow. For these financial key performances see page 11.

Leverage & expand superior networks

The next wave of digitalization, fueled by artificial intelligence (AI), Internet of Things (IoT), and 5G, is continuing at pace. To meet this head on, we launched our Accelerate to Grow strategy in November 2020 and are at the end of the second year of our three-year plan. Over the past two years, KPN has built a strong fiber foundation, covering 44% of the Netherlands with fiber. In the coming years, KPN will continue to expand and leverage this superior network as it sees attractive returns from fiber investments with increased network penetration and more loyal customers with an increased willingness to pay for quality. KPN's roll-out speed in terms of homes passed slowed down somewhat compared to 2021 (2022: 348k additional homes passed vs 2021: 433k), as labor shortages and competition for this scarce capacity in the sector increased.

Grow & strengthen customer footprint

In Consumer, service revenues remained stable in 2022. KPN's retail fiber base surpassed its copper base and contributed to the strong retail fiber broadband service revenue growth, accompanied by an improving Consumer Net Promoter Score (NPS) of 15. 79% of KPN's service revenues are generated in the 'mass-market' or Consumer, SME, and Wholesale segments. KPN now sustainably grows mass-market service revenues through a strengthened and stable-to-growing customer footprint. In Business, KPN has a clearly segmented customer focus for SME, LCE and Tailored Solutions. Business revenues increased, mainly driven by strong growth in SME. Revenues from our tailored products and services also grew. LCE, however, faced ongoing competition in the market, pressuring ARPU (average revenue per user) levels and resulting in a decline of LCE service revenues. However, the trend in the service revenue is improving, as the decline is lower compared to prior year. Wholesale service revenues showed continued growth.

Simplify & streamline operating model

KPN will further simplify and streamline its operating model to prepare for the next wave of digitalization, which in our opinion will improve customer experience, enhance KPN's time-to-market and contribute to further cost efficiencies. At the start of 2021, KPN started a new indirect cost-savings program running until 2023 with a total target of EUR 250m net direct Opex savings. Net indirect cost savings are lower than initially planned, mainly impacted by the effects of higher energy prices and wage indexation. The impact of the inflationary effects makes the initial target even more challenging, therefore it is not possible to predict when the target is met. However, KPN remains fully focused on neutralizing cost pressures.

● Strategy and key performances

Strategy

Leverage & expand superior networks

Connecting the Netherlands through fiber

Fiber footprint

■ KPN ■ Glaspoort (GP)



KPN 35%
2020



41%
KPN 40%
GP 1%
2021



47%
KPN 44%
GP 3%
2022

Fiber own roll-out



319k
2020



433k
2021



348k
2022

5G coverage Dutch population

Population coverage



81%
2021



96%
2022

Grow & strengthen customer footprint

Consumer

Stable customer base: households



3.55m
2020



3.53m
2021



**3.52m
2022**

Business

Net growth customer base (Mobile, BB, VoIP, Fixed-voice)



3.1m
2020



3.2m
2021



**3.4m
2022**

Customer satisfaction



11
2020



16
2021



**15
2022**

Customer satisfaction



-2
2020



4
2021



**2
2022**

Simplify & streamline operating model

New ways of digital working

Employee engagement



86%
2020



82%
2021



**81%
2022**

Continued disciplined cost control program

Indirect cost reduction



€ 137m
2020



€ 47m
2021



**€ 38m
2022**

● Strategy and key performances

Financial key performances

Adjusted revenues



€ 5,275m
2020



€ 5,255m
2021



**€ 5,327m
2022**

Free cash flow



€ 765m
2020



€ 784m
2021



**€ 862m
2022**

Adjusted EBITDA AL¹



€ 2,320m
2020



€ 2,347m
2021



**€ 2,404m
2022**

Committed to progressive dividend policy



€ 13.0ct
2020



€ 13.6ct
2021



**€ 14.3ct²
2022**

Capital expenditure



€ 1,147m
2020



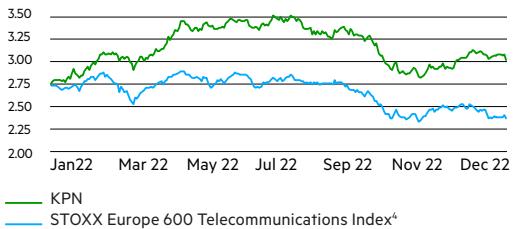
€ 1,216m
2021



**€ 1,206m
2022**

Total shareholder return (TSR)

KPN 10.4% 2022 Telco index -14.5% 2022



Return on capital employed³

11.0%
2021

13.1%
2022

¹ KPN defines EBITDA as operating result before depreciation (incl. impairments) of PP&E and amortization (incl. impairments) of intangible assets. Adjusted EBITDA after leases are derived from EBITDA and are adjusted for the impact of restructuring costs and incidentals ('adjusted') and for lease costs, incl. depreciation of right-of-use assets and interest on lease liabilities ('after leases' or 'AL'). Reconciliations can be found in Appendix 2.

² To be proposed at the AGM 2023

³ Net operating profit less adjustments for taxes divided by capital employed

⁴ Rebased to KPN's closing price of the last trading day 2021

● Strategy and key performances

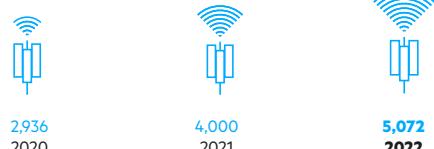
Non financial key performances

Network infrastructure

FttH households



Sites 5G

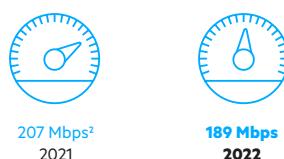


Network speed

Average maximum download speed broadband fixed per year-end



Average 5G download speed mobile network per year-end



2 Restated number due to improved calculation methodology

Energy consumption in petajoules

Energy consumed by KPN



Estimated energy consumption saving by KPN customers



1 2020-2021 figures have been restated, for details see Appendix 11

B2C products and services

Fixed-mobile households as percentage of fixed households



Postpaid customers



RepTrak Reputation score

“KPN maintains a lead over all benchmarks on reputation”



● Value creation model

The value we create

Our purpose, going all out to connect everyone in the Netherlands to a sustainable future, is the core of the value we create. By delivering connectivity, serving our customers, and building and maintaining our network infrastructure, we want to make the Netherlands the most connected country in the world.

To properly understand how we impact society, we have identified the value we create for our stakeholders and society as a whole, using the six capitals model of the International Integrated Reporting Council (IIRC). We have plotted KPN's impact on Dutch society and highlighted the assets most valuable to our business model and provide the necessary input for performing our core activities. The value we create for our stakeholders is the direct result of our business model. Our business outcomes ensure that we can create long-term value for society. This helps us to contribute to the realization of the UN's Sustainable Development Goals (SDG's) by providing products and services to Dutch society.

To align our goals with our materiality assessment and value creation model, we held a consultation session on our current KPIs with the Board of Management. For this session, the theme owners together with the responsible board members prepared proposals based on our Purpose and main ESG pillars. This led to a smaller but more focused set of ambitions and provided input for the strategy update that is to be expected in 2023. See also chapter 'Connecting the Netherlands to a sustainable future' and Appendix 4.

Structure of the report

Our Integrated Annual Report is based on the structure of our value creation model (see p. 14), providing insights into our results, the value we created in 2022 for our stakeholders, and the long-term value we create for society.

Materiality assessment

To examine the topics most important from a business and stakeholder perspective, we perform an annual materiality assessment. This important tool affirms our focus is the right one. The result of this year's assessment shows the top five material topics that will have an effect for KPN on its surroundings:

1. Network quality
2. Cybersecurity, data & information protection
3. Customer value
4. Sustainable ICT solutions & product innovation
5. Greenhouse gas (GHG) emissions

Besides the impact materiality assessment, which represents an inside-out perspective (the impact KPN has on the surroundings), we also performed a financial materiality assessment, providing insights into which topics are material from an outside-in perspective (the impact that the surroundings has on KPN). For details, we refer to Appendix 3 Materiality assessment.

All material topics are described in detail in the following chapters of this report. The non-financial information tables in Appendix 4 show how the most material topics are linked to our value creation model and how they are reported on in this Integrated Annual Report.

- Strategy, key performance and value creation model
- Value creation model

Value creation model

Our valuable assets



Loyal customers



Strong
partnerships and
supplier base



Future-proof
infrastructure
and mobile
spectrum



Skilled and
motivated
workforce



Solid financial
basis



Climate-neutral
operations

Business model

'We go all out to connect everyone in the Netherlands to a sustainable future'

Our ambition

To make the Netherlands the most connected country in the world and to become customers' preferred partner in digital life

Strategic themes

- Leverage and expand superior networks
- Grow and strengthen customer footprint
- Simplify and streamline operating model

Safeguarding value

- Governance
- Compliance
- Risk management

Our performance



Network
infrastructure



Flexible, simple
and converged
products and
services



Focused
innovation and
digitalization



Safeguarded
privacy and
security



Sustainable
employability



Environmental
performance and
responsible
supply chain

We create value for our customers, shareholders and employees, and we impact Dutch society as a whole

Impact in the Netherlands

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Secure future-proof connectivity

11 SUSTAINABLE CITIES
AND COMMUNITIES



Social and digital inclusion

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Environmental impact

● Our valuable assets

Overview of our resources to operate

Our organization is fueled by six key capitals, enabling us to contribute to digital transformation. Each of the capitals is vital to maximize the value we create for our organization, our stakeholders and society at large in the short and long-term.



Loyal customers

We aim to build a satisfied customer base, providing customer journeys designed to accommodate the digital needs of our customers, ranging from consumers to large corporate enterprises.



Strong partnerships and supplier base

We join forces with ambitious companies to work on the applications of tomorrow, providing better and more innovative products to our customers while reducing adverse impacts across the supply chain.

	2022	2021
Consumer and Business postpaid customer base	5,863k	5,669k
Consumer and Business broadband customer base	3,139k	3,137k
Fixed-mobile households	1,525k	1,496k
Wholesale broadband customer base	1,128k	1,101k

	2022	2021
Partnering innovative startups and entrepreneurs	41	34
Partnering research centers and universities	6	6
KPN Ventures fund size	€100m	€70m
Contracted suppliers	1,327	1,348



Future-proof infrastructure and mobile spectrum

We connect the Netherlands through high quality networks and by strengthening the capacity of our network and IT infrastructure.



Skilled and motivated workforce

We create a more simple, effective and inclusive organization by acquiring, developing and retaining the right people and skills to become a stronger, more agile, profitable business and a great place to work.

	2022	2021
FttH households	3.56m	3.22m
Modernized mobile sites	5,072	4,000
Average 5G download speed	189 Mbps	207 Mbps ¹

	2022	2021
Full-time domestic personnel	9,452	9,699
Average training cost per FTE	€1,552	€1,499
Employee score for engagement	81%	82%

¹ Restated number due to improved calculation methodology

● Our valuable assets



Solid financial basis

We focus on sustainable service revenue growth and efficiency aiming to realize a return on investment for our capital providers that outperforms the cost of capital while solidifying our financial and competitive position.

	2022	2021
Return on capital employed	13.1%	11.0%
Market capitalization	€11.7bn	€11.5bn
Leverage ratio	2.3x	2.3x
Credit ratings (Moody's/S&P/Fitch)	Baa3/BBB/BBB	Baa3/BBB/BBB



Climate-neutral operations

We mitigate our adverse environmental impacts driven by our belief that a sustainable business is a better business, which is expressed through our climate-neutral operations, our commitment to become ~100% circular and our ambition to realize net-zero carbon emissions in our supply chain by 2040.

	2022	2021
Green electricity consumption	100%	100%
Energy consumption	2.036 PJ	2156 PJ ¹
Reduction of supply chain emissions compared to base year 2014	37%	30% ¹

¹ The 2021 figures have been restated, for details we refer to Appendix 11

● Our value for stakeholders: Customer value

Creating value for our customers

Our customer-centric approach means that in both Consumer and Business, we constantly listen to our customers to meet their needs and expectations, expand the variety and quality of our products and services, improve customer journeys, and focus on excellence.

KPI	Result 2022	Result 2021
NPS Consumer	15	16
NPS Business	2	4

Consumer

Customer experience

Providing our customers a good service remains one of our top priorities, and we made solid progress in 2022. The quality depends on our networks and its availability, this is described in the chapter on network infrastructure. Consumer NPS, the indicator of customer satisfaction with our products and services, was 15. The NPS is lower than previous year. The number of customer contacts with our service desk decreased in 2022 compared to 2021. Changing our customer service desk protocols helped reduce the need for support from engineers to resolve customer issues. Now more problems can be solved at a distance by the service desk agent. As a result, only the most complex problems required a home visit by an engineer.

We have several online self-service tools, helping customers fix many issues themselves. Despite decreasing annual customer calls, the service levels in our call centers were lower than we want due to the labor shortage in the market. In these difficult market circumstances, recruiting personnel remains an ongoing challenge. This is driving us to digitalize - even faster. In terms of digitalizing customer interactions, we also made progress in 2022, changing several back-end tools that will improve the customer experience in the future.

In 2022, we also sharpened our focus on the attention we give our existing customer base, strengthening our relationships with speed upgrades, content, and other attractive offers.

Improving the customer experience received a boost with our entertainment and sports content offering. We signed more

partnerships with content and entertainment providers, such as gaming and video streaming companies. Among these, we were the first to bring Disney and Microsoft Xbox games to the market. We have also started to introduce gaming propositions (Xbox Game Pass Ultimate and Go!Gaming) in our quest to build ownership of the entertainment landscape.

We are fully aware that to achieve operational excellence, solid partnerships and an excellent network are key, as well as the ability to digitalize existing processes. This means performing better and delivering the best for our customers. We have several grievance mechanisms in place for internal and external stakeholders. External stakeholders can communicate a complaint through various digital means (website, telephone, forum or chat) and non-digital means (letter).

CHALLENGE

Due to inflation in the market our customers are also facing a tough time. That is why we have given extra consideration to how to deal with an annual inflation adjustment. As we are also dealing with strong price increases on the purchasing side, we increased the price of our broadband line and implemented an inflation correction for mobile. To mitigate the impact of inflation on the customer, we have limited the correction for both internet and mobile.

● Our value for stakeholders: Customer value

Products and services

2022 was a successful year for mobile, with growth in our customer base. We attribute this to the switch towards selling more unlimited mobile data subscriptions, and our advertising campaign promoting this offer. Another successful driver was our focus on selling extra SIMs in households. This focus on selling extra products (deepselling), in addition to our fixed mobile convergence (FMC), has paid off. We also launched multi-SIMs on our KPN brand. This means customers can attach another SIM to their KPN subscription allowing an Apple Watch Cellular to have SIM-connectivity.

We successfully served the market on the low and high end, with a product and services combination that allows us to generate volumes without losing value. Our ARPU has been stable and volumes grew over the year.

For broadband, the base is still not at the level we would like, but we recognize we face a competitive market with limited opportunities for growth. The broadband copper base declines steadily due to conversion of services from copper to fiber. In 2022, the broadband fiber base shows clear growth, in line with previous years. In total the broadband base still decreases in 2022, however the Fixed ARPU is stable.

In 2022, we worked hard on our proposition to strengthen in-home WiFi networks, delivering and extending Super WiFi, a high quality WiFi solution. Customers are demanding stable, top-quality wireless internet access at home, especially with the trend of home working. We swapped old equipment for newer versions for tens of thousands of customers. Several thousands are still to be migrated, and we plan to continue replacing old modems and set-top boxes in 2023.

A significant success in 2022 was our strengthened position in the content market. Customers now have every reason to consider KPN for its content proposition. For example, we are now able to offer the leading sports content in the Dutch market, including Formula One, Dutch Eredivisie soccer and Premier League.

Our fiber deployment has a positive impact on our customer base on fiber and on average revenue per address. This reflects customer demand for fiber connectivity, and the understanding that fiber is the future of broadband.

These insights confirm that our push into fiber was the right strategy. It is answering a need from the customer, particularly in video, professional conversations (e.g. Zoom, Teams), and gaming, and it is generating financial and commercial benefits to the company.

We intend to continue expanding our entertainment services offering. We see opportunities to offer households secure online 'smart home' services, as we expect demand to shift from free-of-charge services to more secure cloud-based services for a modest fee.

In 2022, we introduced trade-ins, offering customers a compensation for trading in their old phones. Our customers support our sustainability goals, and this model fits our purpose perfectly, as well as the tough economic situation.

Flagship KPN Brand

With the aim of simplifying, streamlining and delivering better consumer value, we continued to focus on our strong flagship KPN brand. In 2022, we successfully completed the integration of XS4ALL into the KPN platforms. As of August 2022, we no longer have any customers on the XS4ALL platform. For our mobile offering we still have two brands, KPN and Simyo.

Simyo

As of 2022, Simyo is not just a SIM-only provider, it also offers subscriptions in combination with a handset. In Q3 2022, the Dutch consumer association Consumentenbond named Simyo the best mobile provider for the 27th time. The panel is independent and assesses our operations across many criteria, so this is a great recognition.

Innovations

In 2022, most of our innovations were in the back-end of our operations relating to customer intelligence. We enhanced our data analysis, giving us deeper and more valuable customer insights. For instance, we have developed more intelligent call routings and segmentation of customers. These will ultimately make consumers' lives simpler in several ways. We can be more intelligent and proactive in how we help customers to *not* have a problem, or make it possible to resolve it themselves, rather than worry about how many seconds it may take our call center to answer a call.

● Our value for stakeholders: Customer value

Business

In 2022, KPN Business-to-business (B2B) continued gearing its offering to customer needs. We focused on business outcomes, helping our customers interact with their customers and clients, and improving their organizational performance and employee productivity through digitalization. Cybersecurity is one of the priorities of our customers, as is the move to the cloud and hybrid working. We continued to help them in this journey by introducing new converged offerings that combine network, IT and security services. Key examples are Secure Connect, SD-WAN Premium, Elastic Interconnect, and Managed Workforce Security. We launched new Security add-ons like SASE (Secure Access Service Edge) and Managed Workforce Security, and showed thought leadership around security trends and developments. We saw a 52% opt in on EVI (Extra Veilig Internet) with our SME customers.

KPN's Business customers benefitted from the further roll-out of our fiber network. In areas where we provided access to fast fiber connections, we see a significant higher market share compared to the market share in copper areas.

CHALLENGE

To facilitate our strategy of Accelerate to Grow, we continued our efforts to digitize our own operations. For example, we replaced different invoicing systems, we used to bill our customers, with one single new and more efficient solution. In some areas, this internal digital transformation did not move as quickly as we would have liked due to the complexity of the transformation and due to a shortage of hardware and global supply chain disruptions we couldn't always take the steps we had planned to get customers off legacy solutions. As a result, we had to maintain several legacy systems for longer, side by side with their newer replacements, which lead to higher costs than anticipated.

Customer experience

Our NPS was 2, which is slightly lower than the previous year (2021: +4). This drop coincided with lower sentiment across the market due to fast-increasing inflation and the impact of the war in Ukraine. We act on customer feedback about our performance regarding speed of delivery and the quality of our products, seeking to make improvements where possible.

2022 was a year of growth, particularly in our SME segment. With all our customers migrated to the portfolio's KPN ÉÉN MKB and Kleinzakelijk and the introduction of relevant new services, we saw that number of customers grow. Together with our Business Partners we realized also a strong growth on workspace portfolio for SME companies. This resulted in strong service revenue growth. The customer request on service integration and supporting our customers on their cloud, workspace, data-exchange and cybersecurity journeys led to growth in Tailored Solutions service revenues. IoT revenues continued to grow in 2022, with accelerated demand fueled by customers facing increasing scarcity of resources and labor. For the near future, we expect an increasing demand for digitalization and data sharing to enable societal changes such as the energy transition.

KPN B2B has migrated customers to future-proof propositions such as KPN ÉÉN MKB, KPN Smart Combinations and KPN Smart Integration. We also made further strides in simplifying our product portfolio. In doing this, we once again guided many customers to a new digital world.

Besides the migrations, KPN B2B stepped-up from tailored offerings based on products and services towards customer journeys and a target IT infrastructure with generic sales- and delivery systems, which is significantly different, especially for the LCE segment. We also successfully continued to develop Data Services Hub (DSH) and Zero Trust solutions, resulting in an increase of product density and a foundation for future revenue growth.

Innovations

Driven by the rationalization of legacy portfolio and a strong focus on the business outcomes of our customers, KPN B2B developed a more modular and converged portfolio (e.g. KPN ÉÉN MKB, KPN Smart Combinations), resulting in a better customer experience and more cross- and upsell opportunities. This has been received well by independent research & advisory firms such as GlobalData and IDC. GlobalData has increased the rating for KPN's B2B portfolio to 'very strong' in its most recent company assessment.

Our Health Exchange, which makes information sharing between health organizations easier, was officially certified in 2022 with MedMij-label. This important step enables us to support the health sector accelerate its digital transformation. Using a SaaS (Software-as-a-Service) platform, KPN's Health Exchange helps connect various healthcare systems. The Dutch standard for sharing information between patients and healthcare providers, and eOverdracht, a similar system.

● Our value for stakeholders: Customer value

We see more opportunities for enhancing access to healthcare through digitalization in the near future. Home diagnostics, self-monitoring, early detection, and even remote treatment of patients who are at home could potentially make life easier for patients and healthcare professionals. We plan to further explore the development of new products and services in this area.

KPN joined the Green Deal for Sustainable Healthcare, an initiative that aims to help hospitals and other health organizations reduce their environmental footprint by providing smarter and more energy-efficient services, facilitating working from the cloud, and adopting circular business models where possible.

In 2022, we became Managed Services Partner of the Year by Cisco Nederland.

Other achievements

Companies that want to outsource their security can acquire managed security services from KPN Security. These range from protection and detection to response and prevention. Security solutions for large companies and the government are available as part of an integrated package of services within our Smart Integration offering.

With the KPN Data Services Hub, our platform-as-a-service for real-time information exchange, we enable our customers to analyze and share data with partners in a secure and controlled environment. We continued to develop and improve this hub, enabling users to connect and control data easier. The platform has customer implementations in the Energy Transition, Smart City and Security & IT monitoring.

We are on course to enhance circularity. It is one of our ambitions that, by 2025, all the KPN devices our customers use to access our services will be designed according to circular standards. We aim to collect all these devices at the end of their lifetime for reuse or recycling purposes.

We are also moving forward in helping our customers become more sustainable. In the Business Market, there are now four services with a circular design including our Premium WiFi and SD-WAN/SD-LAN services. This means we have mapped out the inflow and outflow, agreements have been made with suppliers about energy-efficient production and that all used equipment is taken in and reused. Where this is not possible, it is recycled.

Wholesale

Our Wholesale business segment provides third-party telecom providers access to our fixed and mobile networks. We apply an open wholesale policy. This means we offer access to our fixed networks to other parties on reasonable and non-discriminatory terms and based on our voluntary offer for Optical Distribution Frame (ODF), Wholesale Broadband Access (WBA) and Virtual Unbundled Local Access (VULA). Next to that, Wholesale together with KPN's subsidiary NL-ix provides a wide range of interconnect-, connectivity- and platform services including data peering to a variety of customers. By maximizing the value of KPN's assets and ecosystem and using the capacity of our networks as fully as possible, we create value for both KPN and our customers.

Third-party use of both our broadband and mobile networks grew in 2022. A major driver of broadband growth was the continued roll-out of our fiber network, which enables wholesale customers to provide better and faster connections to their end-consumers. Our growth in mobile was based mostly on the shift from pre-paid to post-paid mobile phone subscriptions by the end-customers of our third parties. Our fixed and mobile access business continued to grow to 1,128k broadband connections and 742k postpaid connections, respectively.

Our fiber portfolio continued to grow, offsetting the decline in legacy services on copper.

In 2021, the Netherlands Authority for Consumers and Markets (ACM) began investigating whether our open wholesale policy meets free and open competition requirements. KPN launched a voluntary offer to amend our fiber wholesale access tariffs in 2022. We committed to enabling access to high-speed internet for everyone in the Netherlands at lower prices for at least the next eight years, gaining the ACM's consent.

The fixed retail market remains competitive regarding rolling out fiber broadband access. We increased our broadband customer base, confirming the success of our open Wholesale policy and ensuring customers have abundant choice of service providers.

During the COVID-19 period, the Dutch government's vaccination programs, along with ongoing testing programs, led to peaks in voice calls and text messages from consumers arranging and confirming vaccination and test appointments. With our Wholesale business customers handling many of these calls and messages, we noticed intense use of our network capacity and increased sales of network capacity to third-party operators. As vaccinations and testing significantly decreased in the course of 2022, there was an anticipated drop in numbers of text messages.

● Our value for stakeholders: Customer value

However, the overall number of text messages remained higher than pre-COVID-19 period, due to the increased use of two-factor authorization, parcel sending alerts and appointment reminder messages. The use cases for our large account SMS services have been growing steadily in recent years, and especially during the pandemic, as consumers switched to using digitalized services even more.

KPN has been recognized as offering the best mobile network, which strengthens our roaming position. We compensate our European counterparts for use of their networks by Dutch customers in their countries, and make a margin on roaming outside Europe. Likewise, we are compensated for foreign travelers using our network while in the Netherlands.

Innovations

There are risks associated with doing business digitally. To offer services such as online booking and digital administration securely, KPN offers new products to help businesses minimize cybersecurity risks and at the same time protect the privacy of their customers.

We introduced Mobile Connect in 2022, in cooperation with other Netherlands-based telecom operators. It offers different verification and KYC (know your customer) solutions by checking general identity information, phone number or time and date of latest SIM swap during transactions, onboarding or continuous verification. These solutions help prevent money laundering, account takeovers and social engineering.

Our multi-cloud solution, Elastic Interconnect, has become a fixture in our B2B portfolio. It offers companies and their employees stable and secure connections to all the cloud applications they use, such as Microsoft Teams, and is particularly relevant to companies enabling their employees to work securely from home.

Several customers implemented our KPN PiM app for easy identification, which we introduced in 2021. This confirms its demand among our B2B customer base to provide end-customers with proof of identity in a simple way using their smartphone, while optimally protecting personal data.

Customer satisfaction

We ask our customers for feedback on our products and services, and this feedback reflected a high degree of satisfaction. Saying that, customers also pointed out where there is room for improvement, such as in the area of communication with customers, processing time and fulfilling customer demands. We are continuously working on enhancing the wholesale user experience.

CHALLENGE

Migrating existing wholesale customers from legacy technology to new technologies can be a challenge. In the mobile domain, the introduction of voice over LTE combined with the phasing out of legacy networks can have an impact on end-users. We support our wholesale customers with this challenge. In the fixed domain we support our customers with a smooth migration from copper to fiber. We announced that the ending of copper-based connections in regions where KPN rolled out fiber will be limited to addresses where the connection has been completed within the home.

● Our value for stakeholders: Customer value

The engine behind our broadband growth

“Customers who are already connected to fiber are generally more satisfied”

Bart Mulders - EVP Commercial Fiber

Claartje Mangert - EVP Customer Delivery

“With our team, we are responsible for all commercial fiber activities. For example, we help existing customers to migrate from copper to fiber and we connect new customers to the network of the future. It brings customers higher value and greater satisfaction. In 2022, we will have reached a special turning point in our customer base, because more than 50% of our customers now uses fiber. It is the growth engine behind our broadband growth, and makes KPN a fiber company.

Last year was all about our national campaign ‘100% glasvezel (100% fiber)’. The speed and stability of the network are central to communication. Consumers increasingly want to be able to rely on a good network. During the period of the COVID-19 pandemic in particular, we saw how important it was for an entire family to be online – both for the home workplace, when using streaming services, and for gaming. In our opinion, the in-home network and its quality are becoming increasingly relevant, partly due to the development of smart home devices that all run via the internet connection. We are visiting different parts of the country with our team to let customers experience the benefits of fiber. Last year, for example, we ran a campaign in Zeeland, which served as a model for our approach – local and focused on the wishes of the customers. We have always been the underdog in Zeeland, and have ensured that consumers have a choice.



The time for us to be commercially active is when excavation work is underway. We take extreme care around our customer communication, offering appropriate information at every moment in the customer journey. Good coordination with every layer in the construction process is essential, because with our national roll-out, dozens of construction flows are going at the same time. If we communicate early in the process, we have to stay sharp, because if the delivery date is uncertain, this requires us to clearly indicate to customers what they can expect and when.

We make the biggest difference if a customer’s connection was below par, and we can significantly improve it with fiber. This applies to both our consumers and business customers. A good example of this is the care farm ‘Ons Verlangen’ – a place where people with a special need for care or assistance can engage in a rewarding daytime activity. In terms of IT, the care farm has come a long way. Previously, employees would have time to get all residents out of bed and make them breakfast for the time it took for the system to log in. Now, everything works instantly and employees can easily collaborate anywhere, anytime.

Customers who are already connected to fiber are generally more satisfied than customers who had a copper connection. This is reflected in our figures, the feedback from our customers, and the accolades received from reputable organizations such as Tweakers and Consumentenbond. We have do-it-yourself opportunities for our customers, to simple and fast activate the fiber connection self. The step towards further digitalization and the use of artificial intelligence to prevent problems is in full development and makes us an increasingly better service provider.”

- Our value for stakeholders: Shareholder value

Providing attractive shareholder returns

2022 marked a year of further progress on our Accelerate to Grow strategy. We delivered on our upgraded 2022 outlook, with consistent Group service revenues and adjusted EBITDA AL growth, coupled with strong and improving free cash flow and a steadily increasing ROCE. Ultimately, this underpins the confidence in our ability to maintain healthy margins and growing free cash flow and together with our strong financial position, allows us to continue our progressive dividend policy and structurally return additional capital to shareholders.

KPI	Result 2022	Result 2021
Adjusted EBITDA after leases ¹	€ 2,404m	€ 2,347m
Capex	€ 1,206m	€ 1,216m
Free cash flow ¹	€ 862m	€ 784m
Dividend per share	€ 14.3ct	€ 13.6ct
Share buyback	€ 300m	€ 200m

¹ For definition see Appendices 2 and 15

Financial review

In 2022, we continued to make good progress against our strategic and financial ambitions. We continued to expand our fiber footprint, and together with Glaspoort we added a record number of fiber households. Jointly, we now cover more than 47% of the households in the Netherlands with fiber, and we are well on track to deliver 80% fiber coverage of Dutch households by 2026.

Throughout the year, we have consistently grown our Group service revenues, a clear proof point of the success of our strategy which is aimed at sustainable growth.

Whilst cost progress was affected by increased energy prices and one-off allowances to our staff, we achieved strong underlying

productivity growth. Together with improving service revenue trends, cost savings enabled us to protect our margins, deliver solid EBITDA growth and exceed our guidance in terms of free cash flow delivery.

Revenues and other income

Adjusted revenues increased 1.4% y-on-y, mainly driven by higher Group service revenues (+1.5% y-on-y). Mass-market service revenues increased 1.9% y-on-y, driven by continued growth in SME, Wholesale and Consumer mobile.

Adjusted Consumer revenues were flat y-on-y, as higher non-service & other revenues were offset by declining service revenues from KPN's copper and legacy portfolio. Adjusted Consumer service revenues decreased 0.2% y-on-y.

● Our value for stakeholders: Shareholder value

Mobile service revenues grew 2.6% y-on-y, driven by solid base developments and growing ARPU. Fixed service revenues decreased -1.3% y-on-y, impacted by a structural decline in legacy, lower voice traffic and increased competition, putting pressure on commercial performance. Within fixed, fiber broadband service revenues continue to grow strongly (+16% y-on-y), offsetting the decline in copper (-12% y-on-y). KPN's Fixed-mobile household base grew 29k to 1,525k and represents 56% of total Fixed households.

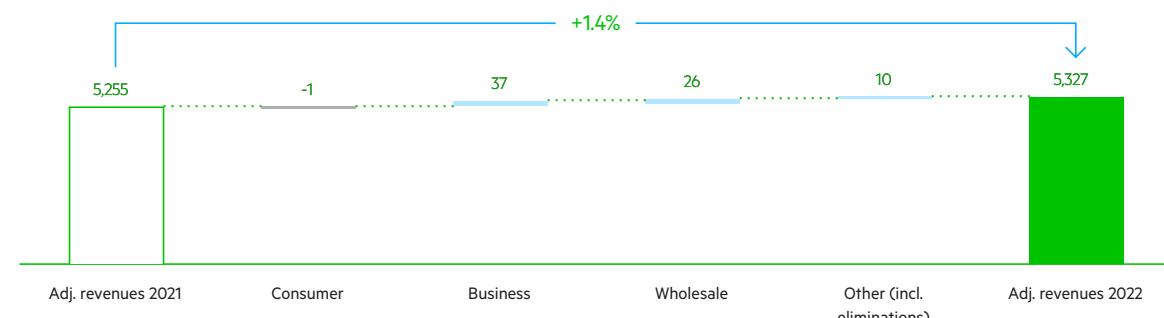
Adjusted Business revenues were up 2.1% y-on-y, supported by higher service and non-service revenues. B2B service revenue growth was mainly driven by strong and sustainable performance in SME (+8.8% y-on-y), driven by solid commercial momentum in both broadband and mobile. The LCE service revenue trend (-2.3% y-on-y), while still in decline over 2022, is moving in the right direction and showed progress throughout the year and even inflected to growth in the fourth quarter. Throughout the year, significant progress has been made in transforming the portfolio to future-proof solutions and the migration of LCE customers

with traditional voice and legacy broadband services to the Smart Combinations portfolio is close to completion, leading to enhanced cross- and upsell possibilities. Revenues from Tailored Solutions increased with 0.8% y-on-y. This business always remains subject to timing in projects and related hardware sales.

In Wholesale, KPN continues its open access policy to offer access to third-party operators. Fiber contributes to continued growth of broadband network penetration. Adjusted revenues in Wholesale increased 3.9% y-on-y, largely driven by growing broadband and mobile service revenues. Adjusted Wholesale service revenues increased 4.1% y-on-y, driven by higher mobile and broadband service revenues. Mobile service revenues increased 14% y-on-y, driven by a growing mobile base and increased data volumes. Broadband service revenues increased 8.7% y-on-y, mainly due to a higher base compared to last year. Other service revenues declined by 8.4%, mainly due to lower regulated tariffs leading to a decrease in low-margin interconnect revenues and less COVID-19 related traffic.

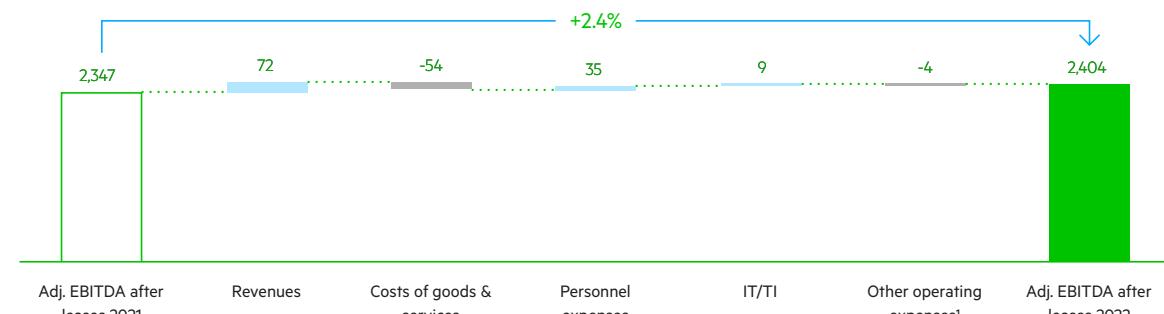
Adjusted revenues

In € million



Adjusted EBITDA AL

In € million

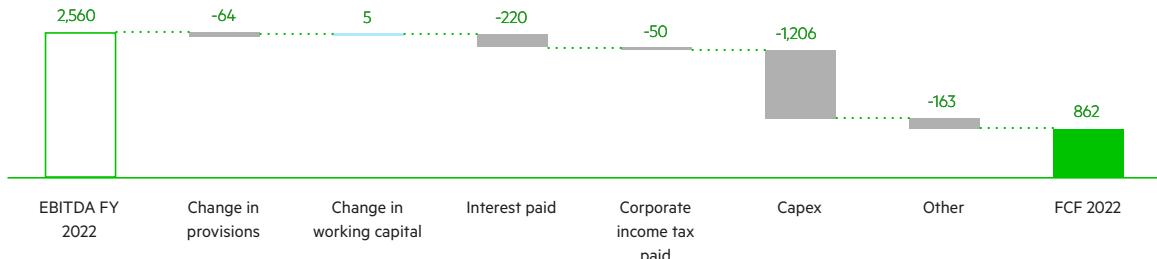


¹ Incl. lease-related expenses

● Our value for stakeholders: Shareholder value

Free cash flow

In € million



Adjusted EBITDA AL

Adjusted EBITDA AL grew 2.4% and yielded 45.1% of revenues, an increase of 48bps compared to last year, driven by service revenue growth and lower indirect costs, partly offset by EUR 54m higher direct costs. Factors for this increase were the impact of higher non-service revenues such as handsets and hardware sales, third-party access costs such as Glaspoort, and a change in service revenue mix in B2B. Our personnel expenses decreased by EUR 35m, despite one-off allowances to our staff. This reflects improved efficiencies from digitalization as well as natural attrition. Ongoing efficiency improvements also helped lower IT/TI expenses. This was partly offset by other Opex, which rose on higher energy costs. In 2022, our indirect cost savings were EUR 38m. Ongoing efficiency program gains were partly offset by industry-wide inflationary pressures on energy and labor costs.

For information on financial and operational performance per segment, see Note 3 to the Consolidated Financial Statements.

Operating profit

Operating profit (EBIT) of EUR 1,214m decreased EUR 649m or 35% y-on-y, impacted by a one-off EUR 845m book gain related to the 'Glaspoort' transaction in 2021 and a EUR 47m book gain related to the periodic sale of assets to Glaspoort in FY 2022. Excluding all these incidentals, operating profit would have increased by EUR 150m y-on-y, driven by lower depreciation and amortization.

Financial income and expenses

Net finance expenses decreased in 2022 by EUR 7m to EUR 227m, mainly driven by higher finance income and lower interest expenses on senior and hybrid debt and other interest expenses, partly offset by higher interest rates on floating rate debt.

Income taxes

In 2022, KPN recognized a tax expense of EUR 227m (2021 EUR 344m). KPN's effective tax rate for 2022 is 23.0% (2021: 21.1%). The difference in effective tax rate is predominantly due to tax law changes, settlements with tax authorities, tax benefit perpetual instrument and changes in estimates.

KPN continues to qualify as an innovative company and therefore benefits from the innovation box tax regime, a facility under Dutch corporate income tax law whereby profits attributable to innovation are taxed at an effective rate of 9%.

For 2023, the effective tax rate is expected to be ~23%, excluding one-off effects. See Consolidated Financial Statements Note 8 and Tax and regulations section for further information on KPN's tax position.

Net profit

Net profit of EUR 766m decreased 40% y-on-y to EUR 517m y-on-y, impacted by the net effects of EUR 638m related to the 'Glaspoort' transaction in 2021 and a EUR 47m book gain related to the periodic sale of assets to Glaspoort in 2022. Excluding these incidentals, net profit would have increased by EUR 101m or 16% y-on-y (net of tax), mainly driven by higher operating profit.

Free cash flow

Operational free cash flow of EUR 1,199m was 6.0% higher y-on-y due to higher EBITDA AL. Free cash flow of EUR 862m increased EUR 78m, or 9.9% y-on-y, driven by operational free cash flow generation, lower cash taxes paid and less cash restructuring costs.

● Our value for stakeholders: Shareholder value

Solid financial position

KPN had a strong balance sheet and liquidity position at the end of 2022. As at 31 December 2022, net debt amounted to EUR 5.4bn, EUR 128m higher compared to end of 2021. The movement in net debt is mainly related to various non-free cash flow items since the EUR 571m dividend payments and the EUR 300m share buyback program in 2022, were mostly offset by free cash flow generation during the year.

Nominal debt outstanding was EUR 6.4bn, including EUR 60m short-term commercial paper. KPN's committed liquidity consisted of EUR 499m cash & short-term investments and a EUR 1.0bn undrawn revolving credit facility which covers debt maturities through 2024.

KPN remains committed to an investment grade credit profile and aims for a leverage ratio of <2.5x in the medium term. At 31 December 2022, the net debt to EBITDA ratio was 2.3x (31 December 2021: 2.3x). KPN's interest cover ratio was 11.0x at the end of the fourth quarter (31 December 2021: 11.2x). At 31 December 2022, the weighted average cost of senior debt was 3.52%, 83bps higher y-on-y (31 December 2021: 2.69%), the increase is mainly driven by higher short-term interest rates on floating rate debt.

In March 2022, KPN redeemed a EUR 616m 4.25% bond. In the third quarter, KPN successfully issued a EUR 500m perpetual Green Hybrid Bond with a coupon of 6.00% per annum to replace the equity content of the 7.0% USD 600m hybrid bond with a first call date on 28 March 2023. This green hybrid bond further reinforces KPN's commitment to sustainability by aligning its ambitions into a core financing instrument. KPN also executed a tender offer for the USD 600m hybrid bond and has accepted a principal amount of USD 454m for purchase and cancellation. KPN will redeem the remaining outstanding principal amount (approximately USD 146m), first call date (28 March 2023) in accordance with the terms and conditions of this security.

At 31 December 2022, Group equity amounted to EUR 3,652m, EUR 422m higher compared to 31 December 2021 last year. This was mainly driven by the issuance of a EUR 500m perpetual hybrid bond and net profit generated during the year, partly offset by shareholder distributions.

Capital allocation and shareholder remuneration

KPN continuously invests in its network infrastructure, products, customers and employees, resulting in high-quality fixed and mobile networks. KPN focuses on improving the customer experience by further investing in the capacity, reliability and stability of its integrated network.

These initiatives require significant investments in capital expenditure, working capital, spectrum licenses and acquisition opportunities that may arise from time to time. KPN aims to provide a progressive dividend per share, paid semi-annually, that will grow over time supported by its growing free cash flow. KPN's successful execution of its strategy and multi-year cash generation perspective enables the company to complement its progressive regular dividend with a structural return of additional capital to its shareholders, subject to our actual and anticipated level of liquidity, leverage requirements and other relevant factors.

In 2022, KPN executed a share buyback of EUR 300m through which it repurchased approximately 92.8m shares at an average price of EUR 3.23 per share, 91.8m of the repurchased shares have been cancelled. KPN retained the remaining 1.0m shares to cover employee share plans. As per 31 December 2022, the total shares outstanding amounted to 4,037m, of which 3.6m Treasury shares.

KPN aims to grow its regular dividends by 3-5% annually. In respect of 2022, KPN intends to pay a regular dividend per share of EUR 14.3 ct. The final dividend of EUR 9.5ct per share is subject to shareholder approval at the Annual General Meeting of Shareholders on 12 April 2023. If approved, the provisional ex-dividend date is 14 April 2023, and the provisional payment date is 19 April 2023.

Outlook 2023

	Outlook 2022	Achievements 2022	Outlook 2023
Adj. EBITDA AL	>€ 2,400m	€ 2,404m	~€ 2,410m
Capex	€ 1.2bn	€ 1,206m	€ 1.2bn
Free cash flow	~€ 850m	>€ 862m	~€ 870m
Regular DPS	€ 14.3ct	€ 14.3ct +5.1% y-on-y ¹	€ 15.0ct +4.9% annual growth
Share buyback	€ 300m	€ 300m	€ 300m

¹ To be proposed at the AGM on 12 April 2023

The 2023 adjusted EBITDA AL outlook is set at approximately EUR 2,410m. Capex will stay stable at EUR 1.2bn. The FY 2023 free cash flow outlook is set at approximately EUR 870m. The expected dividend payout over 2023 is EUR 15.0 cents per share (+4.9% y-on-y). KPN's execution of its strategy and multi-year cash generation enables KPN to structurally return additional capital to its shareholders. In this respect, KPN announces a new share buyback program of EUR 300m in 2023; effectively distributing our free cash flow to our shareholders.

● Our value for stakeholders: Employee value

Driving growth with engaged and motivated staff

KPN's employees are crucial to accelerating business growth. Recruiting, developing, and retaining the right people and skills will make us a stronger, more agile, and more profitable business. We are shaping an inclusive and diverse organization and culture in which people make an impact.

KPI	Result 2022	Result 2021
Employee survey score for engagement	81%	82%
Overall women at KPN	22%	22%
Women on KPN Boards	43%	36%

Shaping a culture in which people make an impact

In our ongoing quest to promote and foster sustainable employability, we continue to invest in our people. Also we create and maintain a organization and structure we need for sustainable business growth. We intend to make a success of our strategy by shaping a culture built on our core values: trust, showing courage and aiming for growth. Together with our purpose, this forms our internal culture. We challenge our employees to develop themselves on our core values. Our culture is further described in our Code of Conduct. To safeguard the culture, there are consequences for breaking the Code of Conduct.

Several themes have emerged in 2022: the war for talent; efforts to develop our workforce to make sure it can facilitate KPN's growth; strengthening the 'growth mindset' among our people, and strengthening the leadership skills needed for growth.

In 2022, we again highlighted how important it is to talk about desirable and undesirable behavior - whether this concerns discrimination, sexual intimidation, aggression, bullying or other matters. We emphasized that if people come across any of these issues, KPN is always available to address these through our open culture supported by resources such as SpeakUp line and confidential advisers.

Our way of working encourages people to learn and be open about mistakes. Those who never make mistakes may be too risk averse. We also learn by pushing boundaries. However, if things go wrong, we must take the time to talk about it. The Pulse measurement in 2022 showed that engagement is positively influenced by 'Het Goede Gesprek', our internal employee performance management method. There was an increase in engagement of 9% for employees who conducted 'Het Goede Gesprek' one time compared to employees who had none.

Our sustainable employability strategy remained unaltered. Employee experience, business needs, and our role in society are paramount in this strategy. We strive to support, stimulate, and develop our people, so they make a positive impact on their colleagues, our customers, business and society at large. Our Chief People Officer is a Board of Management member. She leads the drive to shape the culture of KPN, engage employees, and manage both the 'hard' and 'soft' elements of performance.

Strengthening our 'growth mindset'

As integral part of our 'accelerate to grow' strategy, we have focussed on strengthening and nourishing a 'growth mindset' in our company. This means enhancing awareness about our purpose, and building on and strengthening our core values of courage, trust and growth. We wanted to give our leaders the tools to promote a growth-oriented corporate culture and attitude.

● Our value for stakeholders: Employee value

Firstly, our top 60 leaders gathered for a two-day training event to hone their skills in building and strengthening a culture conducive to business growth. We also organized sessions for KPN's top 300 leaders, with the same purpose. Our Network 300 is a platform for KPN's top 300 leaders to engage more in our strategy and changes. Over the course of the year, enhancing awareness of the need to strengthen the growth mindset became part of our leadership programs for all levels of management.

Mobility

In 2022, we continued our focus on KPN's internal mobility. Training and developing our employees improves their positions at both KPN and in the wider labor market. Given KPN's growth path and the increased need for talent, it has become more important than ever before to make sure that our people can hone their skills and develop new capabilities. Our internal recruitment tool, KPN Match, offered 1,518 vacancies and 2,093 colleagues applied for jobs using this tool.

We support employees who are or may be affected by a reorganization to find jobs externally. We continued our collaboration with the Dutch Ministry of Defense, which regularly has openings that suit employees leaving KPN. We are a member of Buitenboordmotor, a national project involving Dutch companies and organizations that help people make career changes and find jobs in a sector that suits them and where the need for talent is highest. This includes IT, technology, and the Dutch health sector.

CHALLENGE

Recruiting the staff we need is a challenge in the tight and competitive labor market. It takes longer than before to recruit new people. Vacancies also remain open longer, so our teams have to do the same work temporarily with fewer people. This can be detrimental to their workload and well-being. It can also lead to absenteeism, which further increases the workload of the remaining team members. For this reason, our labor market communication is a key focus, as are our initiatives to protect and promote the well-being and vitality of our people.

To facilitate growth, we stepped up efforts to recruit new staff externally. These initiatives are in addition to our existing and ongoing programs to help people internally develop themselves and gain the skills needed for a changing business and market environment.

We expanded our recruitment media campaigns, ramping up our effort to position KPN as an employer of choice. Recruiting more people externally became more relevant as we are needing new skills, and because attrition was higher than in previous years.

Nevertheless, it remained significantly lower than our industry's attrition benchmark. Although it took longer than in previous years to find the right people, we managed to attract about 350 new colleagues, twice as many as in the previous year. Despite this, our total number of employees decreased in 2022.

Also in 2022, we offer diverse tracks in this program to meet the needs of young talents who are keen to specialize in specific areas, such as finance and data and analytics. We also introduced a new Tech Talent Program (TTP), a two year program aiming to recruit and train developers from all over the world to strengthen the KPN tech workforce.

We also believe that sustainable employability is our responsibility as an employer. That is why we have set ourselves the target that more than 80% of employees will find a new job within one year of leaving KPN. In 2022, we scored 88% (2021: 79%).

Employee engagement

We are committed to engaging our employees and making them proud. We aspire to make KPN a great place to work. It is our vision that people should not only commit to a job because of what the job itself entails, but also because they can feel part of their teams and our company, and contribute to KPN's business and societal goals. We experienced a good example of team spirit and employee engagement in the summer months of 2022, when several dozen of our employees, including senior managers, volunteered to help in our KPN stores across the country. This gave store employees the opportunity to take a day off, something that would otherwise have not been possible.

Around 66% of staff participated in our employee engagement survey in 2022. The latest survey showed that 81% of respondents feel engaged at KPN. This is one percentage point lower compared to 2021, while higher than in the pre-COVID years. The survey revealed continued pride in the company, trust in the board's decision-making and employees' willingness to go the extra mile.

In this year's survey, employees in several parts of the business indicated that they had experienced unhealthy stress. This is mainly caused due to work pressure. There is higher attrition and unfilled vacancies, giving the current team members more work. The survey also showed that some employees found it more difficult to strike the right work-life balance. During the COVID-19 years, employees seemed to adjust to working from home smoothly. In 2022, some had issues around switching between free time and doing their work at home.

● Our value for stakeholders: Employee value

To help resolve some of these issues, we started offering employees training and courses via GoodHabitz, an online learning platform with a wide range of various courses and useful tips when it comes to well-being, including mental well-being. Also, we partnered with OpenUp – a platform where KPN employees can manage their mental well-being in an accessible way. This is done by courses, health checks, interviews and one-on-one conversations with a psychologist via chat, telephone or video calling.

Absenteeism at KPN remained in line with the nationwide trend in the Netherlands, which was still associated with the number of COVID-19 infections and the effects of 'long COVID'. While the length of absence is decreasing, we see an increase in reporting frequency which also reflects the increase in short-term absenteeism. Part of the longer-lasting absenteeism is mental health challenges, which poses a dilemma for us. It is difficult to assess to what extent these mental conditions are linked to work pressure – something we as a company would need to address and reduce – or to developments in wider society. As it is hard to assess causes, it is also challenging to assess what a solution could be. We continue to explore if and how we can address mental causes of absenteeism.

To help employees cope with the rising costs of living resulting from inflation, we gave employees a one-time cost of living compensation of net EUR 350 for the lower half of our salary spectrum and EUR 150 for the higher salary segment. In December we also gave employees a compensation of net EUR 400 for employees and EUR 675 gross payment for temporary workers in relation to our new collective labor agreement. This financial support was very well received. Also we offer employees confronted with financial difficulties, KPN debt counseling. Whilst this is not new, it has become more relevant.

All employees are responsible for their own vitality and health. As an employer, we support our employees by giving them a healthy working environment and opportunities that enable them to take that responsibility. In 2022, we continued to offer our employees a budget of EUR 1,500 to spend on personal development. Besides this, we have an additional budget of EUR 1,000 available for technical craftsmanship for our employees with a technical background. In 2022, our employees used this budget and spent on average EUR 1,552 (2021: EUR 1,499) on training per FTE.

Despite our efforts to be a safe and inclusive workplace, there were 229 (2021: 248) reported incidents concerning discrimination or aggression involving employees. These reported incidents were mainly resulting from the behavior of customers. Also, we developed a toolkit for managers with conversation starters about undesirable behavior including how you deal with each other, what you do in bad situations, and how to prevent those situations.

Hybrid working

Offering hybrid working has become a prerequisite to attracting new talent in the competitive labor market. Also, our current staff expects to be able to combine remote and on-site working. At KPN, we want to accommodate hybrid working where possible. It fits with our commitment to helping people maintain a healthy work-life balance. Our 'How we work' initiative offers ways to experiment with different models of hybrid working and finding the right work-life balance.

After the COVID-19 pandemic subsided and most COVID-19 related restrictions had disappeared, people were allowed to come back to the office, starting in April 2022. We continued exploring the best split between remote and on-site working, taking different employee categories into account. We believe that working on-site for at least a significant part of the working week is crucial for maintaining a good and productive team spirit and sense of belonging at KPN.

Adopting a hybrid way of working is complex and requires us all to be adaptive to the new situation. Both managers and employees will have to find their way regarding trust, initiative and organizing the work in a manner that fits to the needs of all parties and the work at hand.

Our office ratio showed that we work 70% from home and 30% at the office. As of April 2022, all COVID-19 measures for KPN personnel were lifted. Employees spent more time at the office, moving to the expected balance of 40% working at the office. In line with the new way of working and our ambitions on energy reduction we have announced to leave our office in The Hague.

● Our value for stakeholders: Employee value

Diversity and inclusivity

Our ambition is to be best-in-class when it comes to diversity and inclusion in our sector. We want to be an appealing, safe and inclusive workplace where every person can be themselves. It is our belief that we, as a company at the heart of Dutch society, perform better if we are a true representation of Dutch society. We also believe that all people are entitled to participate in the labor market, and as a large employer we feel a responsibility to facilitate this. We provide equal opportunities for successful careers and strive to create a sustainable culture where people's differences are valued and put to good use, bringing out the best in our people and company. If our employees can safely and proudly be themselves, it will help them, and our company, grow.

Due to regulations surrounding the recording of personal data, it is difficult to get accurate insights about diversity categories other than gender. In 2023, we are considering asking employees more about their cultural background and/or identity, on a voluntary basis. This data will help us determine the workforce composition in terms of cultural background. Although we would like to analyze other components, such as pay-gap and performance evaluation, for example, we currently cannot oversee the possibility of connecting the right data in order to provide such insights.

Gender diversity

In 2022, we set up new targets for gender diversity, with a specific focus on different job levels. These targets are part of our action plan according to the new growth-quota legislation that applies to us. The targets for sub top and personal labour agreement (PLA) are part of the LTI (2022-2024) for senior leaders, as non-financial KPI (weight 15%). We ensure accountability and continuous steering on these important measures.

With a score of 22% (all workforce), we just fell short of the target of 23%. We attribute this mainly to the fact that we have many technical positions. Of all people working in ICT, only about 20% are women. We score in line with the market.

Women in KPN's workforce

	Target 2022	Realization 2022	Target 2023	Target 2024
Supervisory Board ¹	33.3%	50%	33.3%	33.3%
Sub Top ²	32.5%	29%	33.5%	35%
PLA	27.5%	27%	29.9%	34%
≥ scale 12	25%	18%	30%	t.b.d.
All workforce	23%	22%	24%	24%

1 The targets for the Supervisory Board are according to the Gender Balance Act, which

prescribes at least 1/3rd woman and 1/3rd man in Supervisory Boards

2 Direct reports to the Board of Management in management positions

To increase diversity in our senior management (top 60), we installed a new approach, the so called Team compositions. Supported by data we review the team on several aspects, such as gender, age, and years of service. It is our policy to have no more than 70% of one of the diversity dimensions in one team. During a period of 1.5 year we agree to adhere to this policy. The SER recognized this as an innovative and best practice approach and, in recognition nominated KPN for the Diversity Awards 2022.

We run activities such as mentoring and talent programs, and leadership events with a focus on diversity. We also post a range of communications on the intranet to inform, inspire and create awareness on this topic. KPN believes that investing in diversity in IT and technical jobs is important, so we have a specific focus on attracting women to the technical departments of our company. We do this through our internal women's network and organizing inspiring in-house events.

LGBTQIA+ and cultural diversity

We are committed to creating a workplace where lesbian, gay, bisexual, transgender, queer, intersex, asexual people and people with other sexual and/or gender identities (LGBTQIA+) are valued and can be themselves. Our KPN Pride platform addresses LGBTQIA+ issues directly related to working at KPN.

During Amsterdam Pride in the summer, we launched 'Loud & Proud', a major campaign to make Dutch citizens more aware of the role we play in supporting the LGBTQIA+ community. For the Pride boat procession on the Amsterdam canals, we invited three DJs from LGBTQIA+-hostile countries onto our boat to give them a stage in the Netherlands as well as globally through a livestream on the DJMag platform. We reached more than eight million people with this campaign.

Our internal network Kleurrijk KPN works to increase understanding and respect for each other by talking about different cultural backgrounds and sharing which rituals, preferences, interests, and customs belong to these backgrounds. Despite everything we already do, we will continue to work for the inclusiveness of our employees and customers.

People at a disadvantage in the labor market

In an effort to help people find sustainable employment, we hire people who are at a disadvantage in the labor market since 2015. We do this in our apprenticeship company, where we provide work experience in the customer service field, combined with vocational education on MBO 3 level. In 2022, 4 people joined the program; 86% graduated and 57% found a paid job within three months in or outside of KPN.

● Our value for stakeholders: Employee value

Also, we work proactively to make our workplace more accessible for employees who are sight or hearing impaired. In 2022, we included Speaksee in our workplace solutions - a tool that helps people with strong hearing impairments to join group meetings again. Speaksee captures speech and transcribes it into text. Every office has one so called Hub and four employees have a private hub.

Collective Labor Agreement

The new collective labor agreement for 2023 has been finalized before the end-date of the CLA 2022. The CLA for 2023 contains several aspects that benefit our employees in unprecedented times. This includes an increase in the minimum gross hourly wage, a collective raise based on function level and a one-time net payment of EUR 400 for all employees (and EUR 675 gross payment for temporary workers).

We are very aware that we need to become more diverse from a cultural and socio-economic point of view since we want to represent the Dutch society as it is. To give employees more flexibility in celebrating holidays that are important for them, we introduced the opportunity within our CLA to exchange Ascension Day for a holiday of choice.

Pension

The Dutch government, unions and employers reached an agreement in 2020 on a new pension system, which brought changes affecting employees, former employees and retirees. The implementation of this new pension system was postponed until 1 July 2023. Companies will have until 1 January 2027 to adjust their pension schemes to the new regulations. We will implement this on the basis of the new regulations.

Travel and lease cars

As part of our ambition to reduce our ecological footprint, we reduced our fleet of company leased cars by 360 in 2022. For 2025, our target is that our inflow of fossil fuel free cars to company fleet is 98%. As a result our fleet, including engineer cars, will be close to 100% fossil fuel free per 2030. We offer our employees a mobility package, allowing them to travel by train, lease bicycle or, if necessary, to use one of the cars in our company car-sharing program to visit clients or company facilities located in remote regions.

We consider ourselves a company that invests in sustainability and cherishes its societal role as crucial to recruiting and retaining of talented people. Our social initiatives, such as promoting digital inclusion or supporting people with debt problems, create a sense of belonging, which we see as an important element of sustainable employability. We want to be open to what comes our way in the near future and respond to it flexibly. We keep listening to the voice of our employees.

● Our value for stakeholders: Impact on society

Connecting the Netherlands to a sustainable future

ICT is key to solving societal challenges

The many challenges that take place simultaneously, like climate change, extreme inflation, geopolitical tension and labor shortage change the context for our lives and businesses. Telecommunication services can have a positive impact and contribute to solutions. We provide services like teleworking which saves travel time and emissions, our innovations help businesses to be more efficient, and we improve our networks to use less energy and materials. We have a strong focus on security and we aim to connect as many people as possible, ranging from deploying nationwide telecommunications networks to providing inclusive, products and services and put in extra effort to support customers with payment difficulties by committing to the additional declaration of intent from the Dutch Association for Public Credit (NVVK). Also we are combatting loneliness through our foundation.

We continue our strong support of the UN SDGs as a shared ambition for peace and prosperity for people and the planet. We have identified three SDGs we believe we can contribute to most, as an employer, business partner, and telecommunication-services provider.

Each of these SDGs presents an opportunity to provide solutions while reminding us to act in a responsible way. We have tied our strategy to each of the SDGs summarized on the next page. We work to embed ESG themes in our organization through a secure future-proof infrastructure and by focusing on social and digital inclusion, energy efficiency, and circularity. All three topics are discussed throughout our Integrated Annual Report.

KPN Mooiste Contact Fonds connects lonely people

Loneliness is a major issue in Dutch society. The most recent Adult and Elderly Health Monitor survey by GGD's, CBS and RIVM (measurement year 2020) shows that 47% of the adults feel lonely. Of the people aged over 75 years, even 56% stated they feel lonely. Since 2007, KPN Mooiste Contact Fonds has supported vulnerable groups by financing several large projects in partnership with NGOs. The foundation is supported by KPN employees, our IT resources and financial assistance. We had 1,889 participants and 1,059 volunteers at our events and received 1,478 voluntary contributions to our fund in 2022.

Through our most important and longest-running KlasseContact project, we connect housebound chronically ill children to their classroom via an IT device, the KPN Klasgenoot. We connected 691 chronically ill children to KlasseContact.

In March we launched a new initiative together with the KNVB: 'FC Mooiste Contact'. FC Mooiste Contact connects lonely people through soccer. During the match of the Dutch national team against Germany, we invited 500 guests guided by 250 KPN volunteers. This was the start of 'FC Mooiste Contact': a club that plays in a different composition every match. In the coming years, the club will 'select' thousands of lonely people to attend the home games of the Orange Lions and Lionesses.

The Oranje Fonds and the KPN Mooiste Contact Fonds have joined forces. Together, they offer 18 social entrepreneurs a three-year trajectory in the program Entrepreneurship against Loneliness. Our foundation helps The Oranje Fonds further turning their businesses into successful ventures. Not only by providing financial support but also with knowledge-sharing in workshops, coaching, access to a relevant network and national visibility. In this way, we are aiming to make a structural contribution to the reduction of loneliness in the Netherlands.

Despite the fact that the world has opened up again, post-COVID, many elderly people remain anxious about becoming infected. This means, that despite needing social contact, they go out less. Last year, we made many elderly people happy with a virtual visit to the Rijksmuseum. Due to this success, we started a new series of virtual reality tours in April 2022, in which 4,000 elderly people were able to experience a virtual-reality museum visit.

● Our value for stakeholders: Impact on society



Innovative Secure, future-proof infrastructure

9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Inclusive Social and digital inclusion

11 SUSTAINABLE CITIES
AND COMMUNITIES



Sustainable Environmental impact

12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Approach

Innovation gives meaning to technology. Our aim is to keep Internet secure and our customers must be able to trust that our services are safe. We serve customers in the field of public security, defense, industry, transport, and the maritime sector.

Ambitions

Networks:

- 2026: ~80% coverage of households with FttH (Together with joint venture Glaspoort)
- 2023: 98% 5G population coverage

Security:

- 2023: 95% of technical employees are SecurX certified¹
- 2025: 75% SME KPN EEN customers that activates safe Internet

Key results

Networks:

- 2022: 3.56m households covered with FttH

Security:

- 2022: 69% of Dutch people that believe their data is safe with KPN
- 2022: 52% SME KPN EEN customers that activated safe Internet

Healthcare:

- 2022: 100,019 professionals had secure digital access to healthcare information

Approach

Our technology contributes to a connected society. We want to be an appealing, safe and inclusive workplace. We provide internet access for everyone and promote social and digital inclusion by making our services accessible for all.

Ambitions

Social and digital inclusion:

- 2025: 60% of participants apprenticeship company found a paid job within 3 months
- 2025: PSO certification Tier 1
- 2023: KPN MCF provides 100% of eligible chronically ill children with a KPN Klasgenoot

Diversity:

- 2025: 25% of women at KPN
- 2025: 35 % Women in sub top KPN²

Key results

Social and digital inclusion:

- 2022: 10,830 clients and patients used healthcare facilities to live with more autonomy
- 2022: 100% of eligible chronically ill children provided with a KPN Klasgenoot
- 2022: Telefolk carried out 32,165 mediations and 261,924 calling minutes
- 2022: More than >30,000 customers with problematic debts received support in line with the NVVK covenant
- 2022: More than 2,300 customers successfully guided to the NSR (Dutch Debt Relief Route) to aid them with their financial situation
- 2022: Speaksee, a microphone system able to transcribe group conversations, available for Business Market and in 10 KPN offices
- 2022: MijnKPN app and iTV made more accessible for people with visual impairment

Diversity:

- 2022: 22% women at KPN
- 2022: 4 people employed and 86% graduated with poor labor market prospects

Key initiatives

- We support innovators by forming partnerships with technology partners that operate globally, finding new potential partners like scale-ups and start-ups in the European ecosystem and by investing in scale-ups to make use of their know-how and product
- We expand our business with new growth areas on our network services and by enabling the energy transition via Secure Data Exchange Services

Approach

We deploy our infrastructure and networks to co-create solutions for a more sustainable use of the environment. We reduce negative environmental impact by the way we produce, use and recycle our equipment.

Ambitions

Energy:

- 2025: Scope 1: 98% fossil fuel free cars added to company fleet in reporting year
- 2030: Scope 2: Electricity consumption by KPN Group reduced to < 400GWh compared to 2010
- 2040: Scope 3: Net zero CO₂e emissions

Circularity:

- 2023: Reuse and recycling: 85%

Key results

Energy:

- 2022: Energy consumption by KPN Group reduced by 4.8% compared to 2010
- 2022: CO₂e reduction of 37% in the value chain compared to 2014
- 2022: 100% climate-neutral (scope 1 + 2)

Circularity:

- 2022: 86% reuse and recycling

Helping customers to save energy:

- 2022: Customers saved as much energy as 170% of KPN's energy consumption and saved around 311 kiloton of CO₂e emissions, 964 tons of PM10 (particulate matter), and EUR 170m in energy costs by using KPN services and products

Biodiversity:

- Cooperation with Groene Netten and Naturalis to integrate biodiversity into our operations

Key initiatives

- We intensify supplier engagement on carbon reductions in value chain (90% coverage in 2024)
- We work on circular services based on hardware owned by KPN & Partners
- We will apply frameworks SBTIN, TNFD nature inclusive infra/offices/services/value chain in 2025
- We steer on realized improvements based on Corrective Action Plans JAC-audits (80% in 2023)

¹ In TDO (Networks, B2B Solutions & CISO)

² Direct reports to the Board of Management in management positions

● Our value for stakeholders: Impact on society

Sponsorship

For many years, KPN has been a sponsor in the world of sports (Dutch Eredivisie, KNVB, E-sports, gaming and TEAMKPN Sportfonds), in the arts and culture sector (Rijksmuseum, Boijmans van Beuningen, the Royal Concertgebouw) and in society in general (KPN Mooiste Contact Fonds). All our sponsorship activations contribute to our strong brand image, reputation and business goals. Since March 2022, most COVID-19 restrictions were lifted. As a sponsor, KPN was able to go all out again to support our partners and connect fans throughout the Netherlands with our sponsorships, campaigns and events. In 2022, we spent EUR 3.5m on donations, sponsoring and community projects.

Sports

Soccer

KPN has been the main sponsor of the Eredivisie and partner of the KNVB since 2017. In July, the KNVB, together with KPN as one of the partners, organized "Camping of Orange" at the KNVB Campus in Zeist, where customers and employees were invited to experience the European Championship Women's Soccer. They watched the matches of our Orange Lionesses and spent the night in tents with their families at the campsite.

For the FIFA World Cup Qatar 2022™, KPN decided not to travel to Qatar but to focus on creating an 'Orange atmosphere' in the Netherlands instead. Together with the KNVB and partners, we transformed the Johan Cruijff ArenA into the House of Orange, the official Orange fan event of the KNVB in the Netherlands. About 100,000 fans were able to enjoy four performances by various artists, World Cup matches of the Dutch national team on mega-screens, inspired commentary and spectacular halftime shows.

E-sports and gaming

KPN is a sponsor of E-sports and gaming, with a focus on e-soccer, and brings together the best e-gamers in the popular game FIFA. We are naming partner of the KPN eDivisie and partner of E_Oranje, the official national team that represents the Netherlands during E-interlands. In June, KPN was naming partner of the GG22 festival in Maastricht, the largest sports gaming festival in Europe with the KPN eDivisie Finals as participating E-sports competition. At the event, we introduced the KPN Gaming Truck to promote our fiber and 5G capabilities among gamers for the ultimate gaming experience. KPN partnered with Team5pm (The Youtube Agency) for the Legend of Gaming campaign. For this partnership we, together with Team5pm, won a DIGIDAY and Lovie award.

TEAMKPN Sportfonds

Through the TEAMKPN Sportfonds, KPN supports sports teams representing the Netherlands at top sporting events such as the European Championship, the World Cup or the Olympics. Every year, the fund assists one or more Dutch national sports teams financially. In 2022, to help teams realize their ambitions, we supported beach tennis, wheelchair rugby, basketball and canoe sprint.

Art and culture

Rijksmuseum

Since 2013, as main sponsor of the Rijksmuseum, it is our mission to make its internationally renowned art collection accessible to everyone in the Netherlands and across the globe, both in the actual museum and online. To ensure that art remains accessible and appealing to younger and future generations, KPN supports the Rijksmuseum in making the museum's artworks available to view online for free in high resolution, for instance through the Rijksmuseum app. In March and October, we organized a livestreamed tour through the museum for thousands of customers and employees. And we invited more than 10,000 customers to the Rijksmuseum during the KPN Klantmaand. Together with the museum, we started a new program among primary schools where children can experience the museum with a special VR tour.

Depot Boijmans van Beuningen

KPN is sponsor of the Depot Boijmans Van Beuningen in Rotterdam. Not only is this building storing the Museum Boijmans Van Beuningen's artwork collection during the renovation of the museum building, but visitors can also view the artworks there. The best works from KPN's own art collection are displayed in this unique building.

Royal Concertgebouw

Music connects people, which is why we support the Royal Concertgebouw in Amsterdam with our ICT and telecom solutions and a yearly financial contribution.

● Our value for stakeholders: Impact on society

Reputation and recognition

Being rooted in and firmly connected to the Netherlands, we value our reputation dearly. Although KPN provides vital services to society, businesses and consumers we are well aware that our reputation is based not merely based on the quality of our networks or products. People also base their view of KPN on the perception they have about the way we do business, how we act as a corporate citizen and how we behave as a large employer in the Netherlands. The overall perception that is shaped around KPN by stakeholders and society, both online and offline, determines to a large extent our license to operate and hence our potential to grow.

KPN continued to show strong results in RepTrak, the international standard to measure reputation, in 2022. KPN leads the benchmark in the telecom industry and widened the gap to the combined average of the top 30 largest Dutch companies that continuously track their reputation score. Ending with an overall reputation score of 73.6 in the last quarter of 2022, we witnessed a small drop of 0.8 points compared to the last quarter of 2021(74.4). All underlying reputation drivers remains in the 'strong' zone, and with a consistent lead in the benchmark, we maintained our track record as a company with a strong reputation.

Over the past few years, the way in which businesses act on ESG-related (Environmental, Social, and Governance) matters has become more important in terms of public perception. These matters continue to feature highly on the agenda of our Board of Management and we regularly monitor our ambitions to have a positive influence on society. As a result of our ESG-efforts, KPN was awarded the number one spot in the telecom sector on the Dutch Sustainable Brand Index, a perception-based ranking that reflects the public's view of how sustainable they believe a company is.

● Our performance: Network infrastructure

Continuing our digital transformation and offering the best networks

We made solid progress with our fiber roll-out strategy by covering 3.56m households in 2022. We continued to upgrade our mobile network, reaching 5G population coverage of 96%. Our efforts in both network domains have been recognized as best in class by external benchmarks.

KPI	Result 2022	Result 2021
FttH households	3.56m	3.22m
Sites 5G ready	5,072	4,000
Average 5G download speed at year-end	189 Mbps	207 Mbps ¹

¹ Restated number due to improved calculation methodology

Infrastructure is one of the key strategic elements – and one on which we continue to deliver solid progress. The Netherlands is building a high-quality, future-proof digital infrastructure based on fiber and 5G, enabling a first-class internet experience. And with our strategy, we are playing a leading role in this. To this end, 2022 was a year of growth and achievement. We remained firmly on course with the strategy we have set – making some tweaks to reflect our focus, continuing to expand our fiber footprint, further upgrading our mobile network, shutting down legacy systems and planning to shutdown copper.

Sharpening network strategy

Our plans to expand and modernize our networks rest on three pillars:

- 1) The best converged smart infrastructure
- 2) Accelerate digital transformation
- 3) Security & robustness first

In 2022, we sharpened two of these pillars to reflect areas of renewed focus. We changed 'Enable digital transformation' to 'Accelerate digital transformation' to emphasize our progress and the importance and speed of digital transformation. We laid the groundwork for this acceleration in 2021, and 2022 was about delivering on it.

For the third pillar, we switched from 'Intelligent and efficient operation' to 'Security & robustness first', which underlines the importance of security. Security has to be part of everyday work and is everyone's responsibility. In 2022, we made security ownership part of the DNA of the organization. We also have a universal pillar, calling it 'operational excellence'. Emphasizing that operational excellence goes across all departments and strategic priorities.

● Our performance: Network infrastructure

Expanded footprint

We made solid progress on our 5G coverage target in 2022, ending the year on around 5,072 sites, which is close to 100%. This resulted in us being named the best mobile network by benchmarking experts.

Thanks in part to 5G, mobile gaming and e-sports became even more popular in 2022. Subscriptions are now available that support gaming via the cloud and KPN's network meets the needs of even the most demanding gamers.

For fiber roll-out, we expanded our footprint to 3.56m households. This year, we ended our own fiber roll-out with 348k homes passed. Together with Glaspoort, our joint venture, we rolled out more fiber than in 2021.

Roll-out shortfalls can be attributed to several factors: an increasingly competitive environment and a shortage in labor capacity caused by the macro-economic situation.

CHALLENGE

It was a year marked by many crises, including inflation and energy challenges. We were somewhat protected as around 88% of our energy consumption for 2022 was bought before 2022, but in other respects we felt the impact of market disruptions like all other players in our industry.

Mobile network improvements

We worked to make our mobile network faster and more energy efficient to ensure we can continue to provide our best-in-class network to businesses and consumers. We continued to invest heavily in the complete modernization of our mobile network, with more capacity and coverage being made available to KPN customers.

In 2022, we upgraded 1,072 sites by fitting the latest mobile equipment, resulting in 5,072 sites modernized by year-end 2022. With an average maximum download speed of 189 Megabits per second (Mbps) for 5G at the end of year. Our current population coverage for 5G is 96%. Our modernized network also improves our service to 4G users, giving them faster speeds and more capacity. At the same time, we took actions to make our mobile network more energy efficient.

In March 2022, we marked a milestone event, finally phasing out our third-generation mobile network. 3G was launched in the Netherlands in 2003 and served its purpose for almost 20 years, ensuring the breakthrough of the smartphone and mobile internet. But now its mobile technology is obsolete. Since the data needs of customers are only increasing, KPN will use the

frequencies and capacity of 3G for our 4G and 5G services. This also delivers an energy saving.

Rationalizing and simplifying

As we introduce new technologies and infrastructure, we are also rationalizing, simplifying, and, making our current network more efficient, underscoring our commitment to operational excellence. This rationalization also means we need much less physical space for our networks and associated equipment.

KPN completed its move to an all-IP network in 2022, shutting down legacy systems such as the transport networks TDM, SDH/STM. Not only did we switch off technologically, but we offered our customers more IP-based product sets. We also expect to start the phase-out of copper in various regions in the beginning of 2023. Also, we achieved a new milestone in our fixed network mid-2022, with our fiber retail broadband base surpassing copper.

We focus strongly on operational excellence to make sure the operational stability of our network is better than the previous year, and that there are ongoing improvements in terms of rationalization, simplification, and operational efficiency.

Maintaining our network

With many customers preferring to work from home the need for a stable network is high. In 2022, there were no nationwide outages of KPN's mobile and fixed networks.

We were able to resolve issues with minimal impact on our network stability. Our service availability on fixed internet was 99.99% (2021: 99.99%) and for mobile 99.98% (2021: 99.99%).

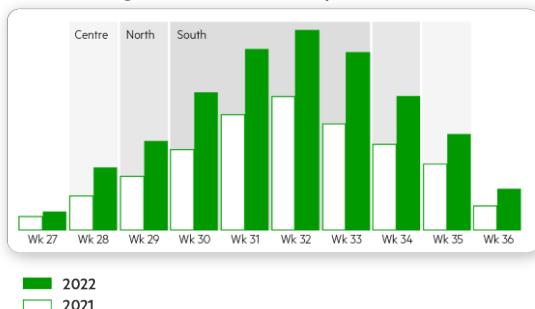
Maintaining the stability of our network is a constant priority. To ensure our service availability, we have designed our network to be robust with back-ups and redundancies. KPN Service Quality Centre and its teams have mitigating procedures in place and are quick to respond to possible network performance issues.

Going hand in hand with stability is security. With technology so much part of our lives, secure internet and protection of data and personal details are becoming increasingly important. Cybersecurity was very much top of our agenda in 2022. It was a year of change in how we structured and organized security at KPN. We directed time and effort into developing the governance aspect of security throughout the year, as well as embedding security throughout the entire organization.

● Our performance: Network infrastructure

Together with foreign telecom operators, KPN processed record amounts of data traffic from Dutch people during the summer holidays. Around 60% more data was consumed from holiday addresses compared to last summer. This shows that the Dutch are more eager to travel than in the summer of 2021.

Mobile Roaming data traffic from holiday countries (GB)



CHALLENGE

We are constantly working to balance the energy consumption of our network with sustainability concerns. We want to give our customers the best possible solutions and experience, but we also need to weigh this up against energy usage. For instance, each mobile site has seven frequency bands and each of these bands allows carrier aggregation – an effective tool to extend the coverage of mid and high-band that also leads to an increased capacity. Higher bandwidth means more users, more speed. But each of these bandwidths use more power. We are already managing this by, for example, shutting down bands in some areas at certain times. But, we are looking at pushing this further, and working towards finding just the right balance between performance and energy usage.

Recognition

KPN further expanded its lead as the best and fastest mobile network in the Netherlands, according to a benchmark by Ookla. Once again, users of the KPN network have on average the highest upload and download speeds and the best coverage. In recognition, KPN was named the best mobile network in the Netherlands for the fifth time in a row by Ookla.

Since the introduction of 5G two years ago, KPN has been offering its mobile subscribers the fastest 5G experience in the Netherlands. KPN now sees more than one million active users on the 5G network every day and that number is increasing.

KPN's mobile network was also awarded the best in the Netherlands by the respected benchmarking expert 'umlaut'. And with a score of 976 out of 1,000 points, KPN has the highest score worldwide achieved in umlaut's 2022 network tests.

KPN has received two awards at the annual presentation of the Tweakers Awards. KPN won the award for best internet provider in the Netherlands and for best mobile provider in the Netherlands. KPN got the highest rating in both categories based on votes by the Tweakers community. According to MT/Sprout we are also the best provider of ICT networks and mobile data and telephony in 2022.

Fostering safety¹

We are implementing the 5G network with the utmost care as the safety of our networks for people and the environment is paramount.

Although there is no scientific evidence that the electromagnetic radiation of mobile equipment or base stations pose any health risks, we take concerns around 5G very seriously. We strive to be transparent about our 5G initiatives and technology. We monitor developments in scientific research into mobile technology and its effects and provide data for further scientific research. Like all mobile providers, we have signed an agreement with the government regarding maximum radiation levels. The basis for exposure limits has been determined by an international group of independent scientists, the International Commission on Non-Ionizing Radiation Protection (ICNIRP). KPN always adheres to the ICNIRP standards for electromagnetic fields.

¹ More information on this topic could be found on our website <https://www.overons.kpn/en/kpn-in-the-netherlands/our-network/health>



● Our performance: Network infrastructure

Looking ahead

We continue to implement innovative technologies to support and improve our network.

In 2022, as part of our future vision, we demonstrated trials with 25G-PON, in collaboration with Nokia. This is in the experimental phase and is not yet available to customers for testing.

We also continued to equip our fiber network with future-proof technology. We use G-PON, which enables 1 Gbps connections, and XGS-PON technology, which allows for 10 Gbps connections to homes. The 10 Gbps connections are not yet in use, but installing the required equipment prepares us for future demand. We installed 1 Gbps PON connections for 263k fiber to the home (FttH) households, compared to 332k in 2021 and 188k in 2020. About 89% of mobile sites that support our mobile network were upgraded to 10 Gbps by the end of 2022.

The 5G auction of capacity in the 3.5 Ghz bandwidth was further delayed and is now expected to take place in 2023, with usage only expected to be turned on in 2024. However, we continue to roll-out our 5G network, building on the bandwidths we acquired in earlier 5G capacity auctions.

Going forward, KPN will adjust its fiber homes passed definition. KPN is further optimizing the way it rolls out and connects households. On top of traditionally reported homes passed numbers, KPN covers additional households by fiber through street presence which it also uses in its commercial approach. As per Q1 2023, KPN will start to report according to this definition; using this, the number of fiber homes passed was 3,710k at the end of 2022 and the increase in its fiber homes passed base was 373k in 2022.

● Our performance: Network infrastructure

Rapidly efficient due to accelerated fiber roll-out

“If we roll-out in one area, preparations are already taking place in the areas that follow”

Kiona Brusse – Head of People Fixed Access Network
Joost Steltenpool – Head of Fixed Access Network

“Our team is responsible for managing and optimizing the fixed network. The aim is to offer internet services via fiber to 80% of Dutch households by 2026.

We have been providing KPN's network with fiber since 2005. This has partly been done by means of Reggefiber, through FttH roll-out, and partly through the roll-out of VDSL. With VDSL, we rolled out fiber to every neighborhood in the Netherlands to increase the speed on the last piece of copper. We completed the VDSL program in 2019, making it immediately possible for almost every person living in the Netherlands to get speeds well above 100 Mbps.

The completion of the VDSL program was the starting point for scaling up the fiber roll-out to the home. In order to be able to realize this scale-up of fiber roll-out, we have built an organization with extra attention for the well-being and development of the employees. We have increased our production considerably in recent years. That's quite an operation in which the number of employees remained the same.

We have concluded long-term contracts with contractors and we plan at least three years in advance to guarantee the large production numbers. That turned out to be a formula for success.

With the roll-out of fiber, more and more Dutch households are opting for KPN's services and churn on fiber is lower compared to copper. In order to properly prioritize, we have developed a model with which we can provide insight into the value (growth) of the roll-out for KPN. And we are proud of that. Our long-term planning is based on that model.



If we roll out in one area, preparations are already taking place in the areas that follow. This is possible because our contractors work with almost 50 construction flows. This is a collective of several small companies that roll out fiber for KPN. Sometimes there are as many as 60 people working in one area at the same time. It is important to us that they are all working, because if one link has no work, the construction flow can fall apart and the roll-out will come to a halt.

Over time, the market has become more competitive and the roll-out is moving to larger cities because, relatively, the least fiber has been rolled out there. Also the current labor market was a challenge for us. These factors sometimes make the roll-out a bit more challenging. More consultation is needed with governments to properly plan the roll-out of all parties. In addition, good preparation is essential because there is simply less space underground in urban areas. Traffic measures and other above-ground obstacles must also be taken into account, and it is technically more challenging to connect high-rise buildings.

The goal for 2026 is to provide 80% of the Netherlands with fiber. By the end of the year, we will have almost reached 4 million households. The pace will remain high until 2026, after which we will dot the i's and cross the t's to really phase out the copper network completely. With our fiber strategy and the accelerated roll-out as a game changer, we are taking a big step towards super-efficient management and are offering the Netherlands a super-fast network."

- Our performance: Focused innovation and digitalization

Innovation to spur sustainable growth

Innovation is crucial to KPN's future business growth and our innovation themes are paying off. These themes give us the opportunity to bring focus, and enable us to meet new customer demands. Also, within our innovations, security and privacy are key themes to help our society.

KPI	Result 2022	Result 2021
Machine-to-machine (M2M) subscribers (#SIMs)	10.1m	8.7m
Patent families in KPN portfolio	331	331

Our approach to innovation, introduced in 2021 to support our Accelerate to Grow strategy, led to its first concrete results in 2022. Several projects from our innovation pipeline made it to the product portfolio. Cybersecurity, cloud gaming, platform as a service, and hybrid working were important areas of focus for our innovation efforts in 2022.

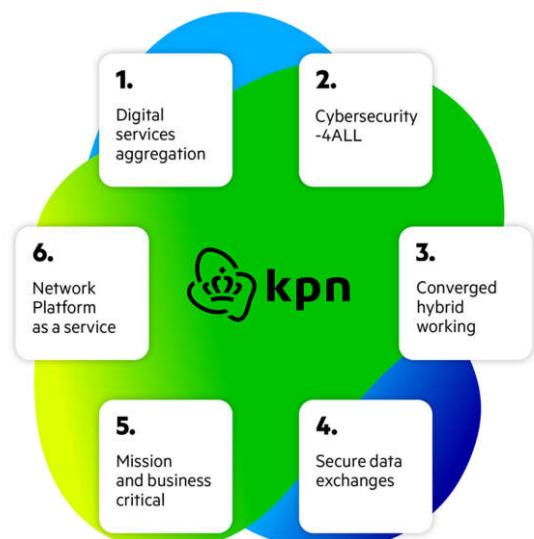
Innovation areas

Based on customer demand analysis, global industry, technology and societal trends, we identified six areas where we seek innovative products and solutions. We made progress toward developing and introducing new products and services in almost all these areas in 2022.

New innovation approach

We have defined three categories of innovation, each with its own time horizon.

- Horizon 1 innovations are simple improvements, close to our core activities, achievable in the short term. For instance, adjusting the price of a product or adding a new service to our product portfolio. Our business units decide on and execute these innovations.
- Horizon 2 innovations typically take three to five years to explore, test and – if deemed feasible – implement. They are based on available technologies but are further away from our current core activities.
- Horizon 3 innovations are linked to new technologies that are still at an early stage of development or new to the world, such as photonics and quantum technology. These may take years to materialize.



● Our performance: Focused innovation and digitalization

- Digital services aggregation:** KPN is in a good position to develop new partner services through our B2C and SME platforms such as content streaming, cloud gaming and smart home & office.

KPN Consumer sees good opportunities for offering additional cloud products, and in 2022 shared strategic ideas with our innovators. We implemented some innovations, for instance making it easier to add new channels and streaming services to our consumer television package. Our innovation team also worked on additional features of our smart home products as well as our cloud gaming offering. We began offering Microsoft's Game Pass Ultimate cloud gaming product. KPN Ventures has made an investment in Perlego, an education platform for students, to cater to the needs of its B2C customers.

- Cybersecurity-4ALL:** We explore new opportunities to offer embedded security platforms for big corporates, small businesses and retail customers, by providing security consulting and security as a service to our customers.

Our businesses notice increased demand for cybersecurity services, which has guided some of our product development efforts in this area. We expect to be able to launch new security products in 2023. Security solutions developed by Censornet, the cybersecurity start-up KPN Ventures invested in, were integrated into our product platform for our SME customers, offering them more security features for the products and services they use to work from home as well as providing security awareness training to their employees. Next to that, KPN Ventures has invested in Cequence, a unified Application Programming Interface (API) protection solution, and RangeForce, a team cyber-readiness platform, that are expected to strengthen the security offerings to KPN's customers.

- Converged hybrid working:** This is a potentially promising innovation area in the post COVID-19 era and we explore how we can secure hybrid working solutions combining B2C and B2B access services, including new remote communication and collaboration solutions.

Our first offering, Secure Connect, was launched in 2022. Also, KPN Ventures invested in Lendis, an innovative B2B software solution that makes it easy for companies to select, manage, and administer their work equipment through a simple rental model. A promising partnership is in progress. Other innovations were still under development by year-end in the area of WiFi slicing and WiFi motion.

- Secure data exchanges:** As the amount of data created, captured, copied, and consumed continues to grow, customers and companies more and more are rethinking the relation to their data. Both business objectives and European legislation is driving a need for Secure Data Exchanges which offers data owners full control, flexibility, safety and integrity over their shared data, aligning with European data norms and values. Today KPN is already facilitating the secure exchange of medical data with the KPN Health Exchange platform and is able to exchange vast quantities of streaming data with its Data Services Hub platform. The Secure Data Exchanges will aim to facilitate the Secure Data Exchange by combining these two platforms alongside of other existing capabilities of KPN to offer a solution where customers are enabled to share their data in a secure and trustworthy manner.

Based on the aforementioned principles; a cloud edge infrastructure based on open source and open standard technology will be support to our goal of that is increasing the interoperability and portability of the our customers data of our customers. KPN is actively contributing in efforts to create de-facto standards which are secure and compliant with EU and the Netherlands data norms and values. The resulting de-facto standards to exchange data will be implemented first in the Health, Energy and Mobility ecosystems.

- Mission and business critical:** Businesses increasingly create private 5G converged grids within their company to enhance flexibility and security. Building on our expertise and experience with highly secure networks, such as for emergency services, we see opportunities for innovative private network products and services.

We continued our field-lab initiative in Eindhoven, where we work on edge computing solutions enabling secure semi-private network for selected partners in the Netherlands. We are well-positioned to provide these crucial and sensitive services, thanks to our reputation as a reliable partner offering high-quality services.

As robotics and drones are also part of our mission and business-critical services portfolio, we launched the KPN drone network coverage checker in 2022. This checker locates the best network coverage and defines the optimal flight path upfront for a drone mission (pre-flight). It will enable the drone to instantly adjust its route by signaling any in-flight network hiccups. This was introduced as a value-add service on top of connectivity. KPN also offers Application Priority as a value-add for our customers in this domain.

- Network Platform as a service:** Make our network open as a platform to deliver connectivity solutions, standard telco services, and compute and storage through easily accessible

● Our performance: Focused innovation and digitalization

and secure APIs. This will enrich our portfolio by third-party solutions and will fill our network with extra traffic. We also aim to sell third-party solutions of our business partners and vendors on our platform related to for example IoT, Hardware, Security, Workspace.

CHALLENGE

As in other areas of our business, a shortage of skilled staff, due to the tight labor market, began to impact our innovation initiatives. It became more difficult to find the talent and resources to support our innovation initiatives. For example, we needed to source some of our innovation-related IT-support from further abroad, in countries where more IT professionals were available.

Innovations supported by start-ups and venturing

Our ongoing innovation programs at KPN Ventures, KPN Technology Office and KPN Field Labs have aligned their activities with the new approach and the six focus themes. KPN Ventures is our venture capital investment fund. It invests directly and indirectly in innovative European technology companies to build value-creating partnerships. KPN Liaison Management Scaleups supports startups, scaleups and other partners to connect with KPN. It provides a joint platform where our partners and customers can share expertise and seek financial support, based on the open-innovation concept. KPN won a Corporate Startup Star for our results in open innovation.

The Liaison Management team regularly activated KPN's scaleup ecosystem - consisting of external corporate partners, investors, scaleups and internal KPN teams – over four scaleup afternoons. The aim was to offer scaleups access to markets and capital. We organized these events in the summer together with Up! Rotterdam. And in the autumn, together with Phi factory and PIM Noord-Holland, we organized an event focused on four SDG goals.

In 2022, we realized several achievements based on innovations initiated by these programs. We made progress, for instance, with our pilot project to enable autonomous barge transport in Belgian and Dutch ports with access to the Western Scheldt estuary. This pilot has been developed together with the 5G Blueprint consortium and is aimed at making logistical transport at sea and on rivers more efficient and sustainable.

In the Dutch province of Noord-Holland, one of our multi-year KPN field-lab programs tested 5G-critical communications in ambulances successfully. This enables the staff in the trauma center / emergency room to room to have eyes and ears in the ambulance and follow through video the condition of the patient. Benefits already confirmed less loss of crucial information,

smoother (dynamic) transfer of the patient and the occurrence of a shared mental model between staff at the traumacenter.

KPN continued its partnerships with several Dutch universities. The goal of these partnerships is to enable thought leadership and positioning in relevant research areas. We do this by collaborating with top universities in strategic areas. We engage with data and network science talents through Master's and PhD thesis projects. Subjects vary from what a future network will look like to how KPN can continue to be a frontrunner in emerging digital ecosystems.

KPN's intellectual property portfolio is an indicator for our innovative strength. In 2022, it consisted of 302 registered trademarks relating to our core brands and 331 patent families. Around 63 of the patent families we own are deemed essential for the commercial use of telecommunications technology and services, including in 5G and virtual/augmented reality, in total corresponding to 129 telecommunication standards.

Innovation outlook

Based on ongoing analysis and monitoring of our six focus areas, we decide which potential new products or services we consider worth exploring further in the next few years. In addition to working on the six focus areas, we explore topics we consider relevant for the longer term, such as Web 3.0 and Metaverse, and what these developments mean for KPN. We will continue developing partnerships, and intensifying our cooperation with Microsoft, Google and Amazon Web Services (AWS), Amazon's subsidiary offering cloud computing and APIs. We have established an effective innovation process at KPN, consisting of clearly defined steps: explore, validate, create proof of concept, and scale up. At the same time, we seek to continue to provide room for experiments outside of this well-established process, to ensure that we remain flexible in our innovation and don't miss out on opportunities.

CHALLENGE

High inflation posed dilemmas in 2022. We had to find a new balance between our short-term and long-term interests. Innovation usually requires time, which means medium- or long-term investments. The issues surrounding high inflation, especially the ensuing cost increases, called for reconsidering the deployment of resources. As a result, some longer-term innovation trajectories may be spread over more years than originally anticipated.

● Our performance: Focused innovation and digitalization

Fiber enables the digital future of consumers and businesses

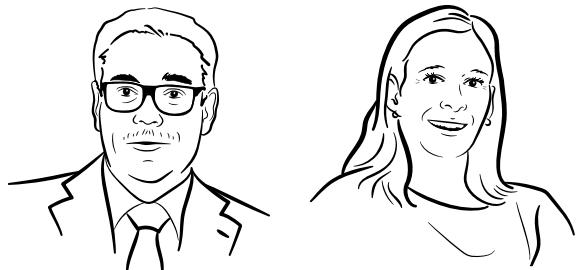
“New applications drive the progress of society and meet customer needs”

Jacob Groote - EVP Innovation & Partnerships

Ellen Aartsen - Theme Lead Ecosystems

“With the roll-out of fiber we are creating a future-proof network. KPN's entire core network is already made of fiberglass and is therefore maintenance-friendly and efficient in power consumption. In practice, fiber mainly means high bandwidth for both consumers and business clients, enabling for optimal and fast-streaming experiences.

The robust fiber network makes innovative services possible. It becomes particularly interesting in combination with other techniques and third-party services. Think of fiber with Edge Computing. A good example of this is the Dutch company Dimenco, in which KPN Ventures has invested. The Dimenco screens make it possible to view 3D images without the use of special glasses. The screen is made in such a way that you can rotate a 3D model of, for example, a shoe or a house under construction via the screen. This literally and figuratively gives an extra dimension to computer use. To make this possible, you could use local Edge Computing data centers in the future, because a lot of processing power is involved. In effect, the graphics card is brought to the cloud. KPN helps Dimenco to optimize its service by deploying the servers close to the data user. The fiber network is essential for them in image processing, as minimal latency is required.



Another combination of technology is that of 5G and fiber, which makes the difference in the gaming world and in particular cloud gaming. By linking the two techniques, it becomes possible to effortlessly continue a game that you started on your fiber network on 5G for mobile, for outdoors or on the road. This gives gamers a competitive advantage and the speed of networking increases the chance of winning.

Fiber has clearly taken the lead over the copper network. With a lot of effort you could also get by with a copper connection, but in practice you will soon get stuck due to a lack of capacity. For example, when all members of a family are online at the same time, it can be particularly challenging. The IoT applications will continue to grow and the entertainment options, which require both high download and upload speeds, will continue to grow. For the households of the future, a fast and stable network will be a real necessity of life.

For broader social applications, it is expected that there will also be an increasing dependence on fast internet. Think of safe and stable video calling for students who follow online lectures and for family doctors who desire to conduct initial screenings remotely, with patients in their own homes. This is an unstoppable trend that will undoubtedly drive business growth in the Netherlands. To this end, KPN will increasingly be looking to facilitate the infrastructure. We are ready.”

● Our performance: Safeguarded privacy and security

Security First and fostering customer privacy

We want everyone to enjoy the benefits of connectivity without having to worry, so, we strive for security first at KPN. Security is one of our most material topics and we work with security by design. By creating employee awareness, we are able to create the right security and privacy mindset.

KPI	Result 2022	Result 2021
Dutch people who believe their data is safe with KPN	69%	66%
Opt in Extra Veilig Internet (EVI)	52%	N/a

Security

As the scale and complexity of cybersecurity attacks grow globally, we are working to reduce cybersecurity risks and vulnerabilities, to protect our systems and data and those of our customers. 2022 was a year of change in how we structured and organized security at KPN, and embedded it across the organization.

We directed time and effort into developing the governance aspect of security throughout the year. This was triggered by increasing regulation and legislation resulting from the Dutch government's Ministerial Decree regarding network security. Published in 2021, the decree required telecom operators to adopt additional security measures by the end of 2022. For our CISO department, this meant a full year of working to implement the Ministerial Decree.

To comply with these controls and bring security to the next level, we needed to engage the entire organization. To this end, we carried out a company-wide security awareness program.

Threat landscape

Ransomware is an increasing problem worldwide, so awareness of cybersecurity risk remains an important matter throughout the entire organization—any employee can be a potential target. Although we have systems in place to detect malicious (phishing/malware) links, potential attackers have more and more resources and money to carry out highly sophisticated cybersecurity attacks.

According to the Dutch government, vital infrastructure such as our data network is an interesting target for state actors.

In response to the Ukraine war, we took actions to improve our situational awareness and response readiness. We increased information sharing with national and supranational authorities, as well as with other national critical infrastructure partners in the EU. As a preventive measure, we started a security crisis-communication group to keep senior management and specialists updated on emerging threats and to prepare for a possible cybersecurity incident.

● Our performance: Safeguarded privacy and security

Vulnerabilities

No cybersecurity incidents were identified in 2022 that resulted in significant operational downtime. There were some minor incidents but nothing that triggered a major incident.

We had around six DDoS attacks a day, but these had minimal impact as we managed these successfully. We also supported some customers in defending themselves against DDoS attack.

We believe we have a strong first line of defense. Our security operation center monitors our network 24/7, 365 days a year – using AI to analyze billion events. About 13,000 a year are checked by our security operations center (SOC) engineers, and a handful need in-depth investigation by the Computer Emergency Response Team (CERT).

CHALLENGE

Embedding security at KPN presents some challenges. On the one hand, there is a significant amount of work to be done throughout the organization on security processes, removing vulnerabilities, putting in place end-point protection, etc. On the other hand, the business is already dealing with a multitude of tasks with its core deliverables. We need to get the balance right between prioritizing security and managing our risk profile, while embedding security in a seamless way.

Security First

In 2022, we operationalized the Board of Management's 'security first' position, putting a security roadmap in place that outlines how security works in practice at KPN.

As part of this roadmap, we created target groups, highlighting the cybersecurity threats relevant to different segments. We began running continuous content on our intranet illustrating potential threats in the outside world, as well as what we are doing internally to improve our security position. We developed basic mandatory cybersecurity training for all our employees, and hosted cybersecurity events. To continuously increase the level of awareness, employees had to take the mandatory security online Spot-On training every other year.

We ran regular mock phishing exercises for our employees, including specific high-risk groups. The aim of these exercises was to make employees realize how cybercriminals operate and how easy it is to be tempted to click on a link or open attachments.

Security organization

Our Chief Information Security Office (CISO) is organized into five teams. Together with the operational security officers throughout the company, they work according to the KPN Security Lifecycle, which is based on the National Institute of Standards and Technology (NIST) cybersecurity framework: identify, protect, detect, respond and recover. CISO Office sets a KPN Security Policy to prevent vulnerabilities and incidents. The CISO Red Team of ethical hackers conducts security testing of new products and proactively identifies vulnerabilities across the organization. The CISO Blue Team is responsible for continuously monitoring our networks and infrastructures, and detecting security threats and vulnerabilities in a timely manner from within our Security Operations Center (SOC). As part of the Blue Team, the KPN Computer Emergency Response Team (KPN-CERT) provides rapid incident response, while the CISO Monitoring & Reporting team is responsible for security compliance monitoring and security analytics and reporting.

In 2022, we worked to strengthen and enhance security within the organization. This included appointing a new CISO, and changes to cybersecurity governance at KPN, under the umbrella of 'security first'. We worked to integrate this message of 'security first' into the company, which includes a new roadmap and security awareness program.

We created a dedicated Ministerial Decree team, and appointed a head of our Ministerial Decree program. This team was tasked with implementing required actions throughout the organization.

We established a new Monitoring & Reporting team in CISO, that fulfills two functions. Firstly, it leads the security compliance activities, which include the continuous monitoring and evaluation of the implemented security compliance controls. Secondly, it has a reporting role – on a weekly and monthly basis – providing insight in the security posture to support senior management in keeping up to date on the status of cybersecurity controls, risks and issues within the company. Among other things, we identify external threat actors and threats, security risks and issues in our operations, and the performance of our security processes and the enterprise security risk profile.

We made structural improvements in how we manage security processes, especially in vulnerability management, endpoint protection and security monitoring. This involves using new technologies to improve insights on vulnerabilities and malware threats, and adding more detection capabilities. We have embedded this in five strategic ambitions for our security organization.

● Our performance: Safeguarded privacy and security

Pushing KPN CISO's evolution forward

Aligning roles and capabilities with strategic ambitions



Focus on
core duties



Invest
in people,
recalibrate
roles,
invest in
education



Adopt
**NIST
framework**
and **aim for
tier 4
implementation**



Strengthen
**security
governance**
with
leadership
& interplay
with KPN
units



Acquire and
invest in the
**best security
technology**
to predict
threats and
prepare for
incidents

Collaborations

KPN joined the Foundation NL CISO Circle of Trust (CCoT) with nine other major companies. The CCoT has been set up to contribute to enhance collaboration, information and knowledge sharing between partners in the Netherlands.

This partnership was announced on the eve of the ONE Conference, Europe's foremost cybersecurity event. The National Cyber Security Center (NCSC) may, from its legal task, share information on threats and incidents with this grouping which has an objective role to inform other organizations or the public. This allows NCSC and CCoT to exchange timely, up-to-date and relevant threat information among themselves and, where appropriate, with their suppliers.

Awards

CISO participated in Cybernet, the annual Capture the Flag exercise organized by the Ministry of Defense, and reached fourth place. We also took part in a hackathon with the police at KPN's Service Quality Center in Hilversum. Here, teams competed non-stop for 12 hours to come up with new insights and solutions to actual police cases. This year's hackathon was a public-private partnership. A breakthrough led to several arrests, showing how effective public-private cooperation can be.

Privacy

We take our role of keeping the Netherlands safe very seriously. By definition, anyone who chooses KPN must be able to rely on secure services and products. This includes the privacy of our customers. For this we continuously assess how we can improve the data protection of our systems to keep our customers' data safe. We also see respect for privacy as a crucial component of the trustworthiness and reliability we want to offer our customers. To ensure compliance with rules and regulations regarding privacy and data protection, KPN has a Privacy Office. The Privacy Office serves to strengthen awareness in the organization, draw up policies, and provides specific training to business units in close cooperation with, and as a part of, the Compliance Office.

In 2022, the Dutch Authority for Digital Infrastructure started an inspection following various signals about the processing of traffic data by providers of mobile electronic communication networks for the purpose of mobility information. Based on information provided by KPN and after further investigation, AT concluded that KPN does not process or has not processed any traffic data for this purpose.

● Our performance: Safeguarded privacy and security

We think it is important that customers know that KPN protects their privacy to the best of its ability. To measure this, we conduct an annual survey in which we ask the Dutch population to choose 3 companies of which they think their data is safe with. In 2022, 69% of Dutch people said they believe their information is safe with KPN (2021: 66%). With this score, KPN is ahead of the competition when it comes to the security of privacy and personal data.

New initiatives

In 2022, KPN signed a covenant with the police to participate in the 'No More Leaks' project. This initiative aims to keep society digitally safe, make companies more resilient, and reduce the abuse of customer accounts and resulting crime. This will be done by sharing hashes of stolen passwords and usernames encountered during police investigations with companies.

To help our customers better protect their own data, we have taken many measures to improve the security of the MijnKPN website which contains a set of customers' personal data. For instance, we stimulate them to use the two-factor authentication (2FA) method for the log in procedure. With the adjusted measures, we decrease the risk of abuse like fraud, social engineering, phishing- and SPAM attacks.

Privacy awareness

All employees must abide by the KPN Code of Conduct, which provides clear privacy guidance, including how to deal with customer information. They must also perform our privacy awareness e-learning training every two years. The rules regarding the use of employee data is laid down in the Human Resource Privacy Statement.

Our business is guided by the principle of 'privacy by design'. This means we consider privacy and security risk from the earliest stage when developing new products and services. Several Data Protection Impact Assessments have been performed in the case of high risk processing of personal data and the results are submitted to the data protection officer for a decision.

In 2022, we received 266 incidents concerning privacy and reported 66 data leaks concerning personal data to the Dutch Data Protection Authority (AP). We informed customers about the leak and the measures we took to resolve any issues. Following an inspection in 2021 on a KPN report that unauthorized persons gained access to servers of the subsidiary company of KPN, Internedservices, the AP closed the investigation in 2022 without enforcement.

Artificial Intelligence

The risks associated with the use of AI include the lack of explainability - the concept that a machine learning model and its output can be explained in a way that 'makes sense' to a human being -, bias or unintended social impact. To address these risks, we started to implement the KPN Responsible AI framework within KPN to ensure responsible, safe and compliant AI. This framework enforces accountability and provides guidance on how to work with AI.

Lawful intercept

We respect our customers' right to privacy. At the same time, we are legally obliged to disclose certain information, obtained by intercept, to national investigation agencies. Our infrastructure must facilitate this, and we are obliged to cooperate with law-enforcement agencies as specified in the Dutch Telecommunications Act.

To help achieve this, a KPN liaison officer is available 24/7 to facilitate interaction with law-enforcement authorities for all KPN brands. We assess incoming warrants and carry out checks to filter out any uncertainties. If we find discrepancies, we reject the warrant, inform the agency involved, and follow the relevant procedures. In 2022, a mismatch was found in 1.1% of warrants received.

In the context of the Notice and Take Down Code of Conduct, KPN received 2 complaints in 2022. These complaints regarded copyright and intellectual property disputes. In none of the cases did KPN provide the identity information.

In 2021, Dutch Authority for Digital Infrastructure investigated the security of our legal intercept facilities, with KPN cooperating fully in the investigation. In August 2022, AT published the results of this investigation. The investigation revealed that KPN manages the systems concerned itself and that the lawful intercept chain is well protected against unwanted access by outsiders. KPN complied with the legal security requirements in most respects, although shortcomings were found in the registration of its system administrators. Consequently, the Dutch Authority for Digital Infrastructure imposed a EUR 450,000 fine. The shortcoming was repaired immediately, and the lawful intercept chain now meets all legal requirements. AT has checked and confirmed this.

● Our performance: Safeguarded privacy and security

The network of the future requires excellent safety and security

“In this playing field, we want to keep up the pace”

Nathan Versnel – Manager KPN FAN S&D Continuity & Safety
Paul Slootmaker – VP Monitoring & Reporting

“People and devices are increasingly connected, and security is becoming ever-more important. When we think of security, we tend first to think of a safe internet and the protection of data and personal data. For KPN, however, the basis lies in the protection of our network and safety during construction. Safety and security in all their facets therefore have the highest priority.

Due to the accelerated roll-out of fiber, extra measures have been taken to ensure that work can take place safely. This concerns, among other things, the physical safety of the operational staff at our contractors, a safe environment for residents in those areas where we roll out fiber, and of course also the safety of our network itself under construction. We deal with multiple parties during the roll-out, so we need to pay attention to prevent possible damage to existing infrastructure caused by our roll-out activities. In the Program of Requirements (PvE), we have described in detail how our contractors must install fiber safely. The Continuity & Safety team is specifically responsible for guaranteeing agreements with regard to careful construction in the ground. Clear agreements in advance about certifications, agreements with third parties, health & safety, and the environment during the work are essential to enable our contractors to carry out the work safely. In a playing field with fierce competition, we naturally want to keep up the pace. And if the business wants to speed up, quality and safe working are often quickly under pressure. At the same time, we must continue to monitor our processes surrounding the roll-out and keep a close eye on compliance with, among other things, working conditions legislation and the Center for Regulations and Research in Ground, Water and Road Construction and Traffic Engineering (CROW) guidelines.



Next to that, we also continue to innovate. A good example of this is KPN's long-term investment in a so-called ZOARG initiative (Careful Construction and Reduction of Excavation Damage). This initiative is a collaboration with the University of Twente to roll out our network even smarter and safer with healthy ambitions.

Fiber connections make the fixed network of the future, but this network will also have to be resilient against cyber threats, due to technological innovations and geopolitical and social developments. The more dependent our digital society becomes on technology and telecommunications, the more we need to be aware of the security risks we run as a result. Public networks and network services, no matter how modern, are vulnerable to espionage, sabotage, failures and (large-scale) disruption. This is also apparent from the Cyber Security Assessment Netherlands and the Dutch Cyber Security Strategy, the latest versions of which the government published last year. The KPN CISO team is working to identify and mitigate security risks in KPN's current network. The CISO professionals do not only focus on today, but also look ahead to tomorrow. This includes, for example, the opportunities and risks of new technologies, such as the Quantum Internet and Quantum Key Distribution (QKD), subjects that KPN is already experimenting with in test setups – using the new fiber network – together with partners such as TNO and TU Delft.”

- Our performance: Environmental performance and responsible supply chain

Collaborating towards a sustainable value chain

KPN is already one of the world's most sustainable telecom companies, every day is a chance to do better. This includes playing our part in tackling climate issues as part of our transition to sustainable growth. Supplier and customer engagement play an important role across the value chain to create the solutions we need to achieve our ambitious agenda towards zero waste and zero emissions.

KPI	Result 2022	Result 2021
Reduction in KPN Group energy consumption compared to base year 2010	48%	44% ¹
Reduction of value chain CO ₂ e (scope 3) compared to base year 2014	37%	30% ¹
Products with improved design for circularity	15	12
Reuse and recycling	86%	85% ¹

¹ The 2021 figures have been restated, for details we refer to Appendix 11

Collaborating towards zero waste and zero emissions

Through our approach to sustainability, we aim to influence the environmental impact of our total supply chain, from suppliers to customers. This includes our procurement process, operations, and the impact of our products and services before, during and after use.

We aim to be close to 100% circular by 2025. We use a roadmap to plan and track our progress in reducing the impact of our products

and materials. For inflow of materials, we have set a target to redesign for circularity at least 15 typical KPN products by 2022, for example by using recycled material. For outflow of waste and materials, we aim to maximize reuse and recycling, and avoid incineration and landfill to work towards zero waste. For KPN-owned customer equipment, our circular ambition is a closed-loop supply chain. For the business market, our ambition is to have 12 circular services by 2025. We are implementing a framework to measure our circular transition in an integrative manner.

● Our performance: Environmental performance and responsible supply chain



**Inflow of cars close to
100% fossil fuel free**

**Close to
100% circular**

**-48% electricity
consumption v.s. 2010**

**Net-zero CO₂e emissions
in the value chain**

With regard to our own direct emissions (scope 1), we will reduce CO₂e emissions from our company-car fleet by limiting our inflow to fossil fuel-free vehicles by 2025. By 2030, we aim to have our electricity consumption reduced by 48% compared to 2010.

In addition, KPN intends to reduce its scope 3 emissions by 39% by 2025 and 45% by 2030 compared to a 2014 base year. We have committed to becoming net-zero by 2040. The targets cover our GHG emissions (scope 1, 2 and 3) and are consistent with reductions required to keep global warming to 1.5°C, in line with the Paris Agreement. We are in the process of re-validating the net zero targets with the Science Based Targets initiative. KPN intends to align the sustainability performance target for its outstanding Sustainability Linked Bond with the revised ambitions.

As KPN's own operations are already climate-neutral, all our services are low-carbon services. By using our cloud services, video conferencing and audio conferencing, our business customers can meet online, reducing the need to commute or use office space. In addition, we want to enable the energy transition via smart energy systems through secure data exchange services. For this, we are building eco-systems with partners for enabling connectivity, data processing and cloud applications.

In 2022, we also integrated biodiversity in our sustainability strategy. We aim for nature-inclusive concepts for our infrastructure, offices, and services. We also signed Business for Nature's Call to Action that urges governments to adopt policies to reverse nature loss this decade. We are exploring to implement a recognised framework on biodiversity to align with upcoming standards like TNFD.

Our sustainability targets also feed into sustainable financing. In September 2022, KPN issued a EUR 500m Green Hybrid Bond. This was issued under KPN's Green Finance Framework and, with the proceeds, KPN will finance or refinance projects with positive environmental impact in three areas: energy efficiency (network transformation including roll-out of fiber and modernization of KPN's mobile network), circular economy (investments that extend product life and reduce impact of waste on the environment) and clean transportation (reducing emissions by shifting to electric vehicles).

Our sustainability performance was recognized by a good performance in the S&P Global ESG rating (82 overall, 87 on the environmental dimension). KPN was also included in the Carbon Disclosure Project (CDP) list in 2022 with a score of A. The following sections report on our performance in relation to the objectives above. Detailed environmental figures, including intensity figures, targets and avoided energy consumption by our customers can be found in Appendix 11: Environmental figures. An overview of major KPIs is available in Appendix 4: Non-financial information, calculation methods in Appendix 11: Environmental figures and GRI application in Appendix 13: GRI index.

● Our performance: Environmental performance and responsible supply chain

CO₂e emissions and energy management

CO₂e emissions own operations scope 1 and 2 (in kTon)

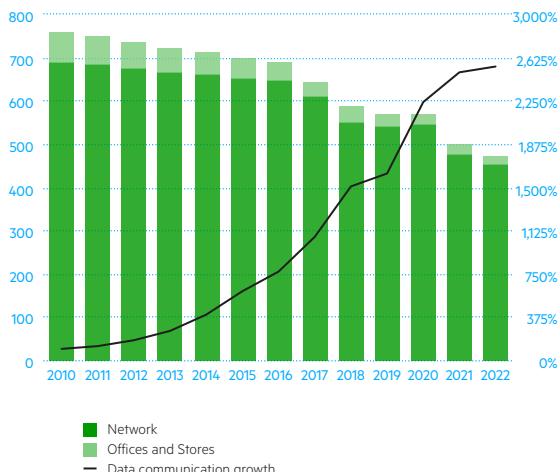
	2022	2021 ¹	2010 base year	2022	2021	2010 base year
	Gross scope 1 and scope 2 location based				Net scope 1 and scope 2 market based	
Scope 1 NL (direct own emissions)	11.9	13.1	58.8	-	-	58.8
Scope 2 NL (indirect own emissions)	207.0	241.2	347.0	-	-	35.9
KPN NL	218.9	254.3	405.7	-	-	94.7
KPN non-NL entities	-	-	25.0	-	-	25.0
KPN Group	218.9	254.3	430.7	-	-	119.8

1 2021 figure of scope 2 has been restated, see for details Appendix 11

KPN's operations are climate-neutral. We use 100% green electricity generated by local and European wind farms. Other CO₂e emissions (6%) from gas (buildings), gasoline and petrol (cars) and emergency power are compensated by REDD+ forest compensation projects. Without compensation, our gross scope 1 and scope 2 location-based CO₂e emissions would be 218.9 ton CO₂e.

Relating to scope 1 emissions, our savings on car fuel compared to 2010 was 81% in 2022. We added 484 electric cars and 29 HVO100 fueled cars as part of our fleet transformation, which equates to an inflow of 95% fossil fuel-free cars (lease and engineers). We exceeded our 2022 target on inflow of 80% fossil fuel-free.

Electricity consumption (GWh) compared to data communication growth (%)



Relating to scope 2 emissions, our electricity consumption in 2022 was 478 GWh, which is a decrease of 24 GWh compared to 2021. Compared to base year 2010, this amounts to a reduction of 38%, while the data communication volume has increased 24-fold in the same period. We are on track to achieve the electricity reduction targets for 2023 (40%) and 2030 (48%) compared to 2010.

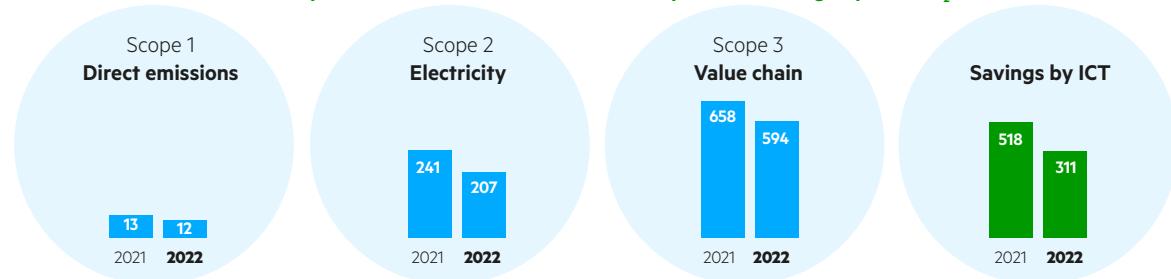
From our electricity consumption, 95% is consumed in the mobile and fixed networks. The network consists of ~22,000 sites with an electric grid connection. The total electricity consumption of the network in 2022 was 456 GWh, which is a decrease of 5% compared to 2021. The electricity savings mainly result from network rationalization. Our offices and shops have saved 70% in electricity consumption compared to 2010. The total energy consumption of KPN has decreased 48% compared to 2010. Due to external factors, we face sharp increases of market prices for energy. This stretched our search for further reduction of energy consumption which will help us mitigate the impact of price increases. Our energy-saving program is subject to a monthly management review and has our continuous focus.

More than 50% of the electricity that KPN will consume from 2027 will come from the wind farm Hollandse Kust (west) VI, the new wind farm in the North Sea that will be built in the coming years. KPN has signed a 15-year agreement with Eneco, which won the tender for the wind farm together with Shell in the Ecowende joint venture.

Our emissions in the value chain (scope 3 emissions) are 593.9kTon CO₂e. Our value chain emissions decreased compared to 2021 by 10%, see Appendix 11 for details. We engage with suppliers on carbon-reduction in the value chain, among others via the CDP Supplier Engagement program and as part of our International Organization for Standardization (ISO) 14001 program which includes carbon reduction management as per 2021. In addition, we joined forces on reducing scope 3 emissions with other telecom companies via the Joint Audit Cooperation (JAC).

● Our performance: Environmental performance and responsible supply chain

Overview of own emissions (scope 1 and 2), value chain emissions (scope 3) and savings by ICT (CO₂e in kTon)¹



CHALLENGE

Both stakeholders' demand for non financial KPI's and quality requirements for these KPI's is ever increasing. Due to the integration of our scope 3 emissions into certain finance arrangements, the importance of accurate and consistent reporting on these KPI's has increased as well. Besides the fact that upcoming legislation, such as the CSRD (Corporate Sustainability Reporting Directive), will require a lot of efforts implementing, it also enforces more focus. These developments do improve our insights, resulting in amending our calculations with the purpose to increase accuracy. This year we corrected our scope 3 emissions calculation on inflation and refined our calculation with impacts from customer premise equipment (taking into account WiFi repeaters and ONTs). Also, we adjusted our mid- and long-term targets taking into account future cost trends and refinements e.g. measurement of energy of B2B equipment. The complexity of these calculations and some degree of uncertainty remains since they are still somewhat based on assumptions. For details regarding to our restatement on the scope 3 emissions we refer to Appendix 11 Environmental figures.

Energy and CO₂e savings for customers from using our ICT services helped our customers avoid around 311 tons of CO₂e emissions and 964 tons of PM₁₀ emissions. Most of these savings were due to reduced teleworkers, less traveling with the car, and electrification of car fleet. We measure this avoided energy consumption by calculating the impact on our Consumer and Business customers for specific products and services. We realized 170% savings as compared to our own energy usage in 2022. See Appendix 11 for further information on our methodology

to measure direct emissions (scope 1), electricity (scope 2), value chain emissions (scope 3) and savings by ICT. Scope 1, 2 and 3 are reported in line with the GHG Protocol.

Becoming circular in our operations

KPN is committed to the principles of a circular economy, by using fewer materials, enhancing product lifespans and taking measures to reduce our waste production to zero.

For inflow of materials, we have introduced 15 products with improved circular design to date. In 2022, a completely new sustainable clothing line was designed for KPN. In the new clothes for our mechanics and shop employees we use recycled polyester and organic cotton and reuse and recycle via a return system. Furthermore, we have introduced Ecoducts with 100% recycled HDPE microducts for application in our fiber roll-out in 2023. Finally, an optical network terminal was developed for KPN, with 60% post-consumer recycled plastic applied in the housing.

For outflow of waste and materials, we collaborate with third parties in our value chain to improve waste reduction and separation, and optimize reuse and recycling rates. Our reuse and recycling rate improved from 85% in 2021 to 86% in 2022. In an effort to close the loops in our supply chain, we kept our return rate for modems and TV set-top boxes stable on 90%. See Appendix 3 for further details. Next to offering refurbished phones and repair services, we also launched a trade-in service for mobile phones this year.

In our Business segment, we aim to offer circular services. The focus is set to services where KPN owns the hardware or a third party on behalf of KPN does so. We set a target of having 12 circular services by 2025.

¹ Scope 1: Gross emissions, mainly relating to our fleet. Our net emissions are zero with compensation of fossil fuel cars

Scope 2: Location based emissions, relating to our usage of electricity. Our market based emissions are zero

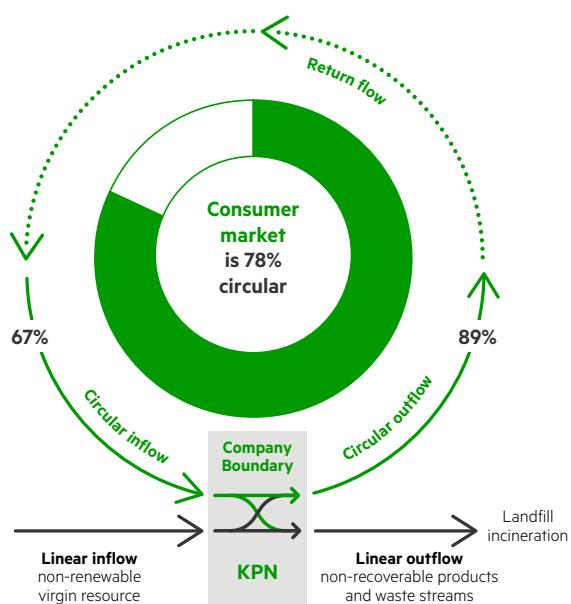
Scope 3: Upstream and downstream emissions in our value chain

2021 figure for scope 2 and 3 have been restated (for details see Appendix 11)

Savings by ICT reflect carbon emission savings realized through services used by our customers

● Our performance: Environmental performance and responsible supply chain

Circular Transition Indicator¹



To measure circularity in an even more integrated manner for the company as a whole, we are implementing a framework based on the Circular Transition Indicator (CTI) metrics from the World Business Council for Sustainable Development (WBCSD). In 2022, we report on a selected scope of our consumer market segment, see Appendix 11 for details. For this scope, our consumer market segment is 78% circular (compared to 76% in 2021). This figure is compiled from a circular inflow of 67% and a circular outflow percentage of 89%.

We collaborate with the JAC to build up and share knowledge on the circular economy. KPN is the chair of the working group on circular economy and participates in the working group on human rights. With suppliers, we continued to collaborate via circular product passports and life cycle analysis to assess product sustainability and improve product design.

Biodiversity

Our actions towards zero waste and zero carbon will help us mitigating negative impacts on biodiversity. To foster a positive impact on biodiversity, we aim for nature inclusive infrastructure, offices and services. We are building a vision and roadmap for biodiversity and cooperate with the "Groene Netten" coalition of eight large Dutch infrastructure parties, Leiden University and Naturalis Biodiversity Center.

Assessment of climate change related risks and opportunities

Our risk and opportunity assessment related to climate change and legislative changes are incorporated in our risk management and control systems. Please see chapter Compliance and risk (p. 67) and Appendix 8 for an overview of our top risks. We have taken into account the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which include matters such as governance, climate strategy, risk and opportunity assessment, and key performance indicators (see overview in Appendix 5).

EU taxonomy

As of 2021, we have started applying the EU taxonomy to our business. We concluded that KPN's turnover and Opex are not eligible under the economic activities currently in scope of the EU taxonomy regarding climate change mitigation and adaptation. In 2022, ~5% of our Capex activities qualifies as eligible, and ~3% we also concluded to be aligned. Alignment implies that these economic activities make a substantial contribution to at least one of the climate and environmental objectives, while also doing no significant harm to the remaining objectives and meeting minimum standards on human rights and labour standards. For further details, see Appendix 7.

¹ The scope of the KPN Circularity Indicator for 2022 for consumer market is described in Appendix 11

● Our performance: Environmental performance and responsible supply chain

Procurement and suppliers

Procurement policy, selecting and contracting suppliers

Suppliers have a direct impact on the extent to which we can operate as a circular company and a direct influence on the communities and areas in which they carry out their activities. As such, we have integrated ESG criteria into our procurement process. The business relationships with our suppliers are maintained by the procurement office. They see to it that we give proper fulfillment to all our material topics.

KPN's procurement policy guides us in sourcing, contracting and managing our suppliers, and our suppliers' sustainable performance plays a role in this. Our procurement process is based on a competitive comparison of suppliers and it applies economic and technical criteria, as well as the following ESG criteria:

- Compliance with the KPN Supplier Code of Conduct
- EcoVadis assessment, further described in next paragraph
- Conflict minerals: we expect our suppliers have a clear policy and procedures in place to avoid purchasing conflict minerals or unsustainable mined minerals at high environmental and social costs. Suppliers to undertake reasonable due diligence within their supply chains to assure that the conflict minerals are being sourced from responsible and conflict-free sources
- Promoting circular economy principles:
 - Design for environment and reduce the use of virgin raw materials;
 - Extend and optimize product use;
 - Increase reuse, recycling, minimize incineration and landfill of waste;
 - Energy efficiency.

This set of ESG criteria for products and services forms part of the decision-making in our sourcing process.

Once we have selected a supplier, we expect them to comply with the KPN Supplier Code of Conduct. As a large company purchasing many products and services, we strive to do business only with suppliers who comply with our Supplier Code of Conduct. This code sets out social and environmental requirements for suppliers. It is inspired by the Charter of the United Nations and based on the core conventions of the International Labor Organization (ILO). The code contains conditions relating to human rights, labor conditions, safety, environment, bribery and corruption. It forms part of our general terms and conditions of purchase and has been updated in 2022. We work with strategic suppliers on a structural basis, setting out specific terms and conditions for products and services to improve their sustainable performance.

Risk management

Once we have selected a supplier, we determine the impact it may have on the environment in the communities where it operates and on the working conditions of their staff. We categorize suppliers based on the potential social and environmental risk of their operations, products and services. We assess this risk based on three parameters:

- Geographical areas
- Spend
- Potential environmental impact of a supplier's operations, products or services

We use this assessment to determine the degree in which we subject our suppliers to regular sustainability checks.

In 2022, we contracted a total of 1,327 unique suppliers, of which 29 were classified as high-risk.

Sustainability checks

Applying sustainability criteria

EcoVadis assesses our strategic suppliers, which represent a large amount of spend, verifying whether they have integrated the principles of ESG into their business and management systems. These EcoVadis ESG criteria cover four areas:

- Environment
- Labor and human rights (which include health and safety, working conditions, social dialogue, child labor, forced labor and human trafficking, diversity, equity & inclusion and external stakeholder human rights)
- Ethics
- Sustainable procurement

In our master framework agreement (MFA), we determined a minimum level and require our suppliers to score above this level. If the outcome of the assessment is lower, then the supplier has to draw up a plan to improve its score by mitigating identified risks or shortfalls. The overall average EcoVadis sustainability rating of our suppliers is significantly higher than the overall average score of the tens of thousands of suppliers EcoVadis assesses.



● Our performance: Environmental performance and responsible supply chain

Social audits

Suppliers classified as high-risk are subject to social audits carried out by an independent third-party auditor. These audits are repeated periodically to monitor whether suppliers and subcontractors comply with the sustainable guidelines set by the JAC. This association of telecom operators aims to verify, assess and develop corporate social responsibility implementation across manufacturing sites. JAC members, including KPN, share best practices on topics such as the circular economy, climate change and human rights to help embed long-term corporate social responsibility implementation in the different layers of the supply chain.

Thanks to the increase in the number of JAC members, 86% of our high-risk suppliers were audited between 2014 and 2022. All audits were carried out in production plants (suppliers and sub-suppliers) located in Asia, North America, Latin America, Eastern and Western Europe and Oceania. During 2022, audits were conducted in Brazil, Cambodja, China, India, Italy, Mexico, Nigeria, Poland, Romania, Russia, South-Africa, Sweden, Taiwan, United States and Vietnam. The audits were carried out by international specialist companies. The suppliers included in the audit campaign were from the sectors for user devices and appliances, network appliances and IT equipment production.

Fixing shortcomings through corrective action plans

The table below shows the numbers of non-conformities recorded during on-site audits conducted by KPN on behalf of JAC in 2015-2022.

For all the non-conformities we encountered, we drew up specific corrective action plans (CAPs) that include resolution procedures and timetables. Suppliers and production plants are responsible for following up on these corrective actions. JAC members constantly monitor the implementation of these plans.

CAPs set clear deadlines to complete all corrective actions within 12 months. Although all our suppliers are committed to completing all corrective action plans, we have found that some issues are hard to resolve within one year. In 2022, we closed 94% of all non-conformities raised between 2019 and 2021.

Promoting human rights in the supply chain

The goal of the JAC Human Rights Workstream is to act as one voice for human rights, living wage and conflict minerals. In February 2022, the European Commission launched a proposal for a directive on corporate sustainability due diligence. The aim of this directive is to foster sustainable and responsible corporate behavior and to anchor human rights and environmental considerations in companies' operations and corporate governance. The new rules will ensure that businesses address adverse impacts of their actions, including in their value chains inside and outside Europe. In the Human Right Workstream, KPN has discussed this upcoming law in order to identify common practices and discrepancies, and to come up with viable options for an industry-wide approach.

	2022	2021	2020	2019	2018	2017	2016	2015
Business ethics	2	-	2	3	4	11	7	19
Discrimination	-	-	-	2	-	1	-	-
Disciplinary practices	-	-	-	-	1	-	2	-
Environment	3	3	8	17	8	12	18	15
Freedom of association	-	-	-	1	1	1	1	2
Health & safety	6	4	10	39	23	27	31	45
Labor	-	-	-	-	4	-	2	5
Unlawful labor	-	-	-	-	5	1	-	8
Wages & compensation	1	-	-	3	4	3	6	5
Working hours	3	3	1	6	7	15	16	9
Other	-	-	-	-	-	1	-	-
Total	15	10	21	71	57	72	83	108

- Our performance: Environmental performance and responsible supply chain

Big steps towards a sustainable network

“This transformation makes KPN even more efficient”

Jeroen Cox - Strategic Lead Energy & Environment
Jikke op de Weegh - Lead Sustainability & Support

"KPN's fixed and mobile networks have been running on green electricity since 2011 and KPN has been climate-neutral since 2015. In recent years, KPN has also taken significant steps to reduce energy consumption. For example, KPN's absolute energy consumption has decreased by 35% since 2010, while data consumption increased around 24x in the same period. Until 2030, KPN wants to save at least another 8%. At the same time, KPN has formulated circular ambitions and set a goal to reduce emissions throughout the value chain to net zero by 2040. In this way, we are working in generations towards a sustainable and energy-efficient network."

In addition to these achievements and ambitions, an important decision was taken last year to obtain, from 2027, more than 50% of the electricity that KPN consumes from a wind farm. KPN will then purchase more than 200 GWh (gigawatt hours) of electricity on an annual basis from the new Hollandse Kust West wind farm, which is being built more than 50 km off the coast near IJmuiden. 2027 will be a very important year anyway, because by then almost all our customers will be using the internet via the fiber network that we are now rolling out at great speed. Because the power consumption of the new core network is significantly lower than the current copper network, less power supply and less cooling in the technical buildings is needed. In addition, the cabling consists of recycled materials by design, and the fiber network ensures less maintenance, which means fewer kilometers for engineers to travel.



With the migration from copper to fiber, 'Fiber on, copper off', we are making it possible to switch off the copper network in phases. KPN has a total of 1,300 technical buildings as part of our copper network. In the long-term, they will be turned off and reduced to approximately 160 future-proof technical buildings as part of the fiber network. This switch-off has already taken place in six test areas, with which we have gained experience on a larger scale for places where fiber is available from 2023.

Technical buildings take up more space and also consume more electricity. The related energy savings amount to almost 490 MWh per year – this is equivalent to the power consumption of around 200 households. Whereas in the past a large telephone exchange was needed in a village or district, a small building or street cabinet is often sufficient now, as much less space is needed for network equipment, power supply, and cooling. This results in significant savings in space and maintenance costs. For example, a large plant of around 550 square meters can now be reduced to a floor space between two and 15 square meters. Converted, we are going from a total of around 192,000 square meters to around 10,000 square meters. This transformation makes KPN even more efficient and improves the sustainability of our network."

● Corporate governance

Steering the company

KPN's corporate governance framework is in line with the requirements of the Dutch Civil Code, the Dutch Corporate Governance Code and applicable laws and regulations, including securities laws, and is aligned with our strategy. The company is governed by its Articles of Association and internal procedures, such as the by-laws of the Board of Management and Supervisory Board.

Legal structure of the company

Royal KPN N.V. is a public limited liability company established under the laws of the Netherlands, with ordinary shares listed on Euronext Amsterdam. Its Articles of Association were last amended on 20 April 2018. KPN has a two-tier management structure with a Board of Management and a Supervisory Board. KPN qualifies as a 'large company' (*structuurvennootschap*) within the meaning of the Dutch Civil Code and applies the relevant rules of Dutch corporate law. The Board of Management is entrusted with the management of the company. The Supervisory Board oversees strategic and commercial policymaking by the Board of Management and the way in which it manages and directs KPN's operations. In the performance of their duties, the members of the Board of Management and the Supervisory Board are guided by the interests of the company and the enterprise connected with it, and take the relevant stakeholder interests into account. The Board of Management is accountable to the General Meeting of Shareholders in accordance with Dutch legislation. See Note 24 to the Consolidated Financial Statements for details of KPN's legal structure.

Shareholders

Share capital, listings and indices

KPN's authorized share capital totals EUR 720m, divided into 9bn ordinary shares of EUR 4ct each and nine billion preference shares B of EUR 4ct each. As of 31 December 2022, a total of 4,037,319,593 ordinary shares were outstanding. Since 13 June 1994, KPN's ordinary shares have been listed on Euronext Amsterdam (ticker: KPN). KPN has a Level I American Depository Receipt (ADR) program, which allows investors to trade KPN ADRs in the United States on the over-the-counter market (ticker symbol: KKP NY). KPN shares are included in a number of leading indices, including the AEX, the EURO STOXX Telecommunications Index and the STOXX Europe 600 Telecommunications Index.

General Meeting of Shareholders

The General Meeting of Shareholders holds all powers that have not been granted to other company bodies. It is authorized to appoint members of the Supervisory Board upon binding nomination by the Supervisory Board and to dismiss the Supervisory Board. The General Meeting of Shareholders also adopts the Financial Statements, releases the members of the Board of Management and Supervisory Board from liability, determines the dividend, determines the remuneration for members of the Supervisory Board and approves the remuneration policy and share (option) plans for the Board of Management. In addition, certain decisions are subject to the approval of the General Meeting of Shareholders, including decisions entailing a significant change in the identity or character of the company or its business and corporate matters, such as amendments to the company's Articles of Association, a (de)merger or the dissolution of the company, and the issuance of shares or reduction of the issued capital of the company.

Within four months of the end of every fiscal year, the Board of Management prepares Financial Statements, accompanied by an Integrated Annual Report. The Financial Statements are submitted to the Supervisory Board for approval, and subsequently (within six months of the end of the fiscal year) to the Annual General Meeting of Shareholders (AGM) for adoption, and to the Central Works Council for information purposes. Adoption of the Financial Statements does not automatically discharge the Board of Management or the Supervisory Board from liability. This requires a separate resolution by the AGM. Further General Meetings of Shareholders are held as often as the Supervisory Board or Board of Management deem necessary. The Board of Management and the Supervisory Board set the agenda of the General Meetings of Shareholders. Shareholders who individually or collectively represent at least 1% of the issued capital or who, according to the Official Price List of Euronext Amsterdam, represent at least a value of EUR 50m are entitled to propose items for the agenda, within the boundaries of the law. Every shareholder is entitled to attend a General Meeting of Shareholders, by default in person or through written proxy, to address the meeting and to exercise voting rights. In 2022, KPN's

● Corporate governance

AGM could be attended either in person or virtually, both enabling full exercise of meeting rights.

Obligations to disclose holdings

Pursuant to the Dutch Financial Supervision Act (*Wft, Wet op het financieel toezicht*), legal entities as well as natural persons must immediately notify the Netherlands Authority for the Financial Markets (AFM) when a shareholding reaches, exceeds or falls below certain thresholds of the issued capital. The AFM incorporates these notifications in the public register, which is available on its website. See Note 23 to the Financial Statements for notified KPN shareholdings as at 31 December 2022. Please see 'Composition of the boards' (page 77) for information on insider transactions and share ownership by the members of the Board of Management and Supervisory Board.

Purchase of shares in the company's own capital and issuance of new shares

With the general aim of flexibility in financing of the company, the AGM authorized the Board of Management to purchase shares in the company's own capital and also decided to reduce the issued capital through cancellation of own shares held by the company by a number that could be determined by the Board of Management. The AGM also designated the Board of Management as the body authorized to issue ordinary shares and to grant rights to subscribe for ordinary shares and to restrict or exclude statutory pre-emptive rights of existing shareholders upon such issuance or granting of rights. The above authorities and decisions are limited to a maximum of 10% of the issued capital as of 13 April 2022 and are applicable until 13 October 2023. Resolutions by the Board of Management implementing the above are subject to the approval of the Supervisory Board. In 2022, based on these authorities, KPN completed a EUR 300m share buyback program, repurchasing 92,840,654 shares equal to 2.2% of outstanding shares. 91,840,654 of the repurchased shares have been cancelled to reduce the share capital. KPN retained the remaining 1,000,000 repurchased shares to cover employee share plans.

Supervisory Board

The Supervisory Board supervises and advises the Board of Management, guided by the interests of the company and the enterprise connected with it, and taking into account the interests of the stakeholders. It is closely involved in setting the strategy, including any ESG related elements, and monitors the implementation of that strategy, including the operational and financial results thereof. Major investments, acquisitions and various corporate matters are subject to Supervisory Board approval.

Members of the Supervisory Board are appointed by the General Meeting of Shareholders upon binding nomination by the Supervisory Board. The Central Works Council has an enhanced right to recommend persons for nomination to the Supervisory Board for up to one-third of its members. The Supervisory Board must nominate the so recommended person unless it is of the opinion that the person would be unsuitable to fulfill the duties of a Supervisory Board member or such appointment would cause the Supervisory Board to be improperly composed. Pursuant to a specific arrangement with América Móvil, América Móvil is entitled, as long as it holds more than 10% of the shares in KPN, to designate one person to be nominated by the Supervisory Board for appointment as a member of the Supervisory Board.

According to the Articles of Association, the Supervisory Board must comprise at least five and not more than nine members. Supervisory Board members are appointed for an initial term of four years, which ends at the first AGM after that term expires. They can be reappointed once for a four-year term and thereafter for a maximum of two terms of two years, provided specific reasons for such further reappointments are given. The Supervisory Board has determined its 'profile', defining the basic principles for its composition. All nominees for election to the Supervisory Board must fit this profile. According to this profile, the Supervisory Board must be composed in such a way that members of the Supervisory Board are able to operate independently of each other and of the Board of Management and that it is composed in a diverse manner on relevant aspects, including gender, background and expertise. The profile has lastly been revised in 2022 and is available on KPN's website.

The by-laws of the Supervisory Board comprise, among other things, rules regarding the members' duties, powers, working methods and decision-making, what decisions by the Board of Management it must approve, training and conflict handling. The by-laws are available on KPN's website.

Committees of the Supervisory Board

The Supervisory Board has four committees: the Audit Committee, the Remuneration Committee, the Nominating & Corporate Governance Committee and the Strategy & Organization Committee. These committees assist the Supervisory Board in its decision-making and report their findings to the Supervisory Board. Their tasks are laid down in terms of reference, which are available on KPN's website.

Further information on the activities of the Supervisory Board and its committees in 2022 can be found in the Report by the Supervisory Board.

● Corporate governance

Board of Management

The Board of Management is responsible for setting KPN's strategy and for managing KPN's strategic, commercial, financial, operational, ESG and organizational matters. The Board of Management is accountable for its performance to the Supervisory Board and to the shareholders of the company. In performing its duties, the Board of Management focuses on long-term value creation for the company and the enterprise connected with it, taking into account stakeholder interests.

The members of the Board of Management are appointed and dismissed by the Supervisory Board. Members of the Board of Management are appointed for a four-year term, ending at the first AGM after that term expires. The by-laws of the Board of Management contain, among other things, rules regarding members' duties, powers, working methods, decision-making and conflict-handling. The by-laws are available on KPN's website.

Environmental, Social and Governance (ESG)

ESG criteria are embedded in KPN's strategy and organizational structure. ESG themes are defined and approved by the Board of Management, including their ambitions. Every ESG theme is assigned to a member of the senior management team who, as theme owner, is responsible for stakeholder dialogue, targets, progress and results. Each theme owner heads a committee, consisting of management of the key departments involved in this theme. The theme owners report to KPN's corporate social responsibility (CSR) Manager, who is responsible for the overall reporting, approach and cohesion. The CSR Manager reports to the Director of Corporate Communication & CSR, who in turn reports to the CEO. Four times a year, ESG data is included in the overall set of business KPIs that is reported to and discussed with the Board of Management. To obtain sufficient outside reflection, stakeholder dialogues are held with external experts to advise KPN on its approach to ESG in general and more in-depth on the ESG themes. Climate-related risks and opportunities are considered integral to the governance of operations and ESG themes. Further details on governance and risk can be found in chapter Compliance and risk.

Compliance with the Dutch Corporate Governance Code

KPN complies with all best practices of the Dutch Corporate Governance Code (version 2016). For reporting of the pay ratio as referred to in best practice provision 3.4.i.v, KPN uses a slightly different definition than guided by the monitoring committee. The average costs of external personnel are not part of the calculated pay ratio as no comparable headcount definitions are available within KPN to act as a solid reference. An overview of all principles and best practices of the Dutch Corporate Governance Code as well as KPN's application of these in accordance with the 'comply or explain' principle is available on KPN's website. On 20 December 2022 an updated version of the Dutch Corporate Governance Code was published, applicable as of financial year 2023. KPN will report on its compliance with the updated code in its Integrated Annual Report over 2023.

Conflict of interest

The handling of conflicts of interest between the company and members of the Board of Management or Supervisory Board is governed by Dutch law, the relevant provisions of the Dutch Corporate Governance Code and the by-laws of the respective boards. A board member is required to immediately report any (potential) conflict of interest that is of material significance to the company and/or to the member concerned, to the chairman of the Supervisory Board (or, in the case of the chairman, to the vice-chairman of the Supervisory Board). That board member shall not take part in discussions or decision-making on a subject in which they have a conflict of interest. Decisions to enter into transactions in which there are conflicts of interest with members of each of these company bodies that are of material significance to the company or such member require the approval of the Supervisory Board.

There were no conflicts of interest in 2022.

For the Statement by the Board of Management and Responsibility Statement, see p. 76.

● Corporate governance

Employee participation

KPN has implemented employee participation in accordance with the provisions of the Dutch Works Councils Act. Constructive employee participation is an integral part of our organization and allows employees to be involved in organizational matters in various ways and to have a say in their work. Employee participation is an important value for KPN and a part of its culture. To align employee participation processes with KPN's practices, we have established several works councils specific to different business segments. These works councils are all represented in the Central Works Council, which is competent for subjects of common interest or subjects that concern a majority of the works councils. The Central Works Council interacts with the CEO, whereas individual works councils for each business segment interact with the director of that segment.

External auditor

The external auditor is responsible for auditing the Financial Statements. The AGM appoints the external auditor on a yearly basis, upon a proposal by the Supervisory Board. The external auditor reports to the Board of Management, the Audit Committee and the Supervisory Board to discuss findings pertaining to its agreed procedures for the quarterly financial results and audit of the annual financial results. The external auditor attends the AGM to answer questions pertaining to the Combined Independent Auditor's Report, as included in the Integrated Annual Report. The Audit Committee approves every engagement of the external auditor, after pre-approval by the internal auditor, to ensure the external auditor's independence. All Audit Committee meetings are attended by the external auditor. For the role of the internal auditor, see p. 74.

Foundation Preference Shares B KPN (Stichting Preferente Aandelen B KPN)

KPN has granted a call option, which is not limited in time, to the Foundation Preference Shares B KPN (the Foundation), to acquire a number of preference shares B in KPN, which have the same voting rights as ordinary shares, not exceeding the total issued number of ordinary shares, minus one share and minus any shares already issued to the Foundation. Upon exercise of the call option, 25% of the nominal value of EUR 4ct per Class B preference share needs to be paid by the Foundation. The statutory goal of the Foundation is to protect KPN's interests (which includes the interests of stakeholders, such as customers, shareholders and employees), by, among others, protecting KPN from influences that may threaten its continuity, independence and identity. Consequently, in the event of any circumstances where the company is subject to influences as described above and taking public security considerations into account, the board of the Foundation may decide to exercise the call option, with a view to enabling the company to determine its position in relation to the circumstances as referred to above, and seek alternatives. The board of the Foundation is of the opinion that under normal circumstances it should not exercise its voting rights for longer than a limited period. The members of the board of the Foundation are A.P. Aris (Chair), F. van der Wel, P.N. Wakkie and C.F.H. Vogelzang. The Board of Management has concluded that the board of the Foundation is independent from KPN in accordance with parts c and d of the first subsection of article 5:71 of the Dutch Financial Supervision Act.

The views of the board of the Foundation, summarized above, are published on the Foundation's website.

● Tax and regulations

Monitoring tax and regulations proactively

KPN is subject to taxation, as well as to sector specific regulation. We apply an open and proactive approach to authorities and regulators on these topics, aiming for fair and transparent taxation and regulation, enabling us to be in control of compliance.

Tax profile and current tax position

Tax profile

KPN's tax strategy and principles¹ are inspired by KPN's Code of Conduct and the Tax Governance Code (published by VNO-NCW)². KPN follows a tax approach in which principles of mutual trust, understanding and transparency are elementary.

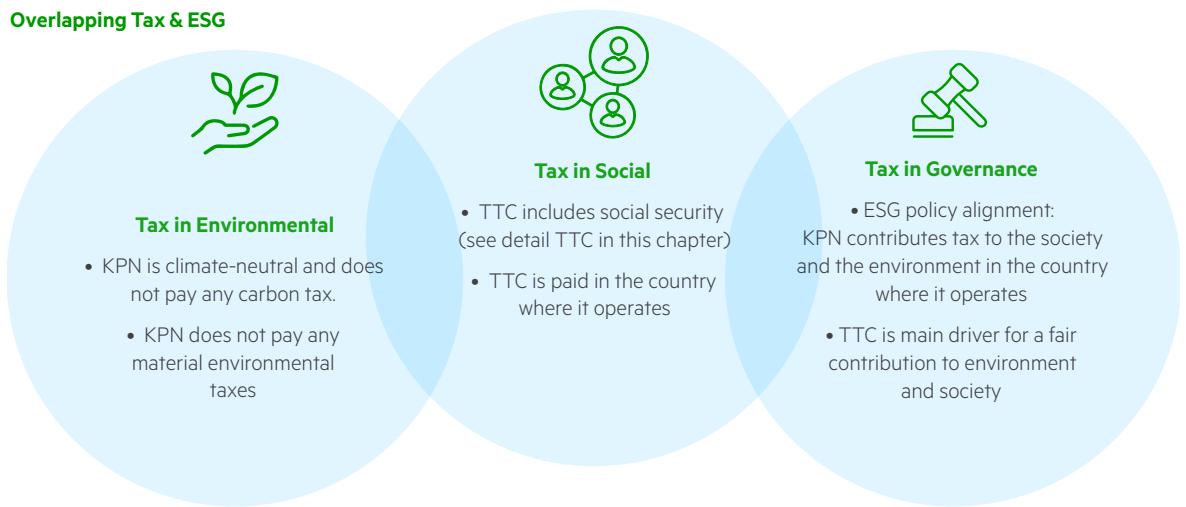
KPN's Total Tax Contribution (TTC) is considered as the main and material driver for KPN's tax governance and fair tax contribution to environment and society. KPN's corporate tax department does not have a particular focus on SDGs (see Our value for

stakeholders: Impact on society for KPN's efforts on society and environment) and within that framework tax follows the business.

As KPN is mainly operating from the Netherlands, the TTC is almost exclusively paid to the authorities of the Netherlands. We refer to our list of legal entities³ for an overview of our existing Dutch investments and investments (mainly legacy) in countries outside the Netherlands. As a result, KPN's impact on society and environment, is limited to these Dutch operations.

The following ESG figure provides an overview of KPN's impact to the community:

Overlapping Tax & ESG



As part of KPN's control environment as described in chapter Compliance and risk, a detailed tax risk appetite dashboard is defined for the tax objective in line with the prudent risk appetite KPN has in general. KPN's tax objective is covered in its tax strategy and principles. Inspired by best practice around tax governance and compliance, KPN's Corporate Tax department manages all relevant taxes and secures optimal use of subsidy opportunities, whereby KPN adheres to its tax strategy

and principles. It is important to KPN to create sufficient tax awareness throughout the organization. Therefore, KPN regularly organizes meetings, knowledge updates and training, to ensure employees act with integrity and adhere to KPN's tax strategy and principles. The whistleblower policy⁴ therefore also applies to tax. Misconduct or suspicion thereof relating to tax must be reported.

¹ See for more information https://ir.kpn.com/websites/kpn/English/7070/tax-strategy_-_policy.html

² See for more information https://www.vno-ncw.nl/sites/default/files/25580_20220219_vno-ncw_tax_governance_code_eng_-1.v4.pdf

³ See for complete list Appendix 1 About this report

⁴ See for more information Compliance and risk paragraph

● Tax and regulations

An important pillar in its tax strategy and principles is KPN's Tax Control Framework (TCF). The function of the TCF is to determine, monitor and mitigate tax risks and to ensure complete, accurate and timely tax reporting including compliance. The TCF is an integrated part of KPN's control environment and subject to the three lines of defense¹. KPN's Corporate Tax department is responsible for effectively identifying, assessing and managing the main tax risks of the company and an effective and operational TCF. Identified tax risks and the TCF effectiveness is monitored and evaluated every quarter with the CFO, as the responsible representative of the Board of Management. KPN's tax strategy and principles are confirmed by the Board of Management annually (see Statement by the Board of Management and Responsibility Statement). Major identified tax risks (including countermeasures) are explained in Appendix 8 List of top risks. The effectiveness of the TCF is audited by the Internal Audit department once a year to ensure a dynamic and up-to-date tax-control environment.

With regard to the involvement of third-party expertise, KPN applies the principles as set in its tax strategy and principles and expects the relevant experts involved to take into account these guiding principles when providing the requested tax expertise.

We refer to the tax section Appendix 13 GRI index for references to other sections for further details on the role of tax within KPN.

Current tax position

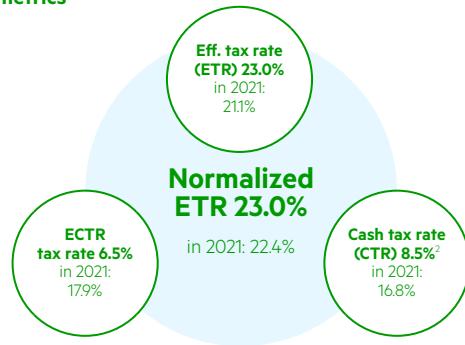
In 2022, the following main developments and projects were relevant to KPN from a tax perspective:

- The realization of previously unrealized liquidation losses. As a result, KPN paid significantly less tax in 2022 compared to 2021.
- Monitoring the tax consequences of KPN's investment in the joint venture Glaspoort (see also Note 12).
- Determine and implement tax (reporting) consequences of several treasury events (share buyback program, issue of a green hybrid bond and the tender offer of USD capital securities - see Note 7 and Note 13 for further details).
- The German Tax Authorities finalized their tax audit of the remaining/former E-Plus companies. The overall net impact is zero. As all relevant tax years have been audited, KPN will now proceed to dissolve the respective legal entities. (see also Note 8 and Appendix 8).
- Court procedure on VAT calculation methodology regarding the introduction of new mobile consumer propositions in August 2016. For further details see forward looking in this chapter, Note 20 and Appendix 8.
- Tax credit on Research and Development: KPN is continuously monitoring its innovation activities to substantiate the R&D tax credit on labor costs (Research and Development Promotion Act, further in this report abbreviated as WBSO).

- The tax figures reported in this section of the chapter is part of an external assurance review by the independent auditor as from this year.

Tax contribution report

Tax metrics



The differences between the different tax metrics can be explained as follows:

- the statutory and normalized effective tax rate is the result of the tax benefit realized on the innovation box facility.
- the effective tax rate (as explained in more detail in Note 8 Taxation) is equal to the normalized tax rate as the one-off items off set to nil.
- the effective tax rate and the effective *current* tax rate (ECTR) deviate due to the impact of available tax losses (carry forward), temporary differences (between the tax basis of assets and liabilities and their carrying values) and updates based on prior year tax returns filed in 2022.
- the effective current tax rate and the cash tax rate is mainly caused by cash taxes paid on prior taxable years (mainly 2021).

Due to the expected carry back of 2022 realized losses to the 2021 taxable profit, the 2021 ECTR of 17.9% would have been 13.3% (see the paragraph 'Forward-looking' in this chapter for more details).

¹ See for more information Compliance and risk paragraph

² Of which investing activities 3.5% (2021: 12.1%)

● Tax and regulations

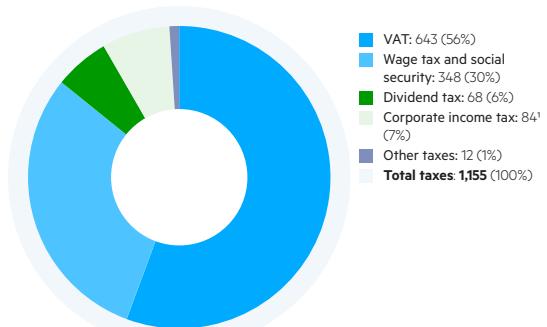
Total tax contribution

Taxes paid by KPN include:

- Taxes paid by KPN - Corporate income taxes and other taxes (e.g. real estate tax)
- Taxes collected and paid by KPN as outcome of its activities - VAT, wage tax and social security, dividend tax and other taxes (e.g. energy tax)

2022

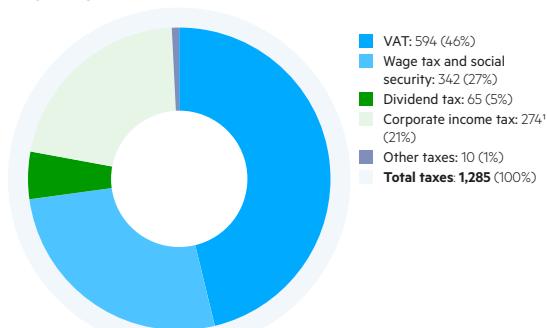
In € million



1 Of which related to investing activities EUR 34m, see Note 21

2021

In € million

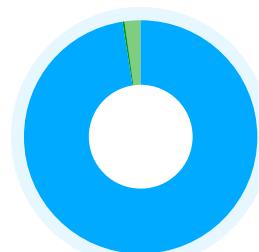


1 Of which related to investing activities EUR 197m, see Note 21

Government allowances

Government allowances include:

- Tax deduction on current year innovation box facility ("iBox")
- Tax credits on research and development ("WBSO")
- Other: European and national government grants



The WBSO for 2022 is to be received in 2023 (2021: 2021). The tax deduction on the innovation box facility for 2021 includes a EUR 19m one-off related to the realization of the Glaspoort joint venture and the transaction with Glaspoort and APG to extend the fiber roll-out.

● Tax and regulations

Stakeholder engagement and forward looking

Stakeholder engagement

The relationship with the Dutch tax authorities is based on the principles of mutual trust, understanding and transparency. KPN is self-assessing and discusses in a pro-active and transparent manner current and potential future tax issues with the Dutch tax authorities. In line with their policy, that applies to the 100 largest and most complex organizations, the Dutch tax authorities prepared an Individual Monitoring Plan ("Individueel Toezichtsplan") based on the aforementioned principles with KPN.

Although KPN acknowledges today's high standard for multinationals to operate in a world on a fair tax principle, KPN is not always in the position to require the same standard from other parties that KPN does business with.

KPN continues active participation in representative associations, including public-policy advocacy on tax, that seek to develop best practice around tax-related disclosures (see Appendix 3 Materiality assessment). KPN liaises with tax departments of other companies through (in)formal consultative bodies to exchange views. It also uses NGOs and benchmark studies, like the Dutch Association of Investors for Sustainable Development (VBDO), to receive feedback on (tax) items that are important in the current and future environment to operate in a transparent and responsible manner. KPN's tax department actively participates at (tax) seminars and courses to keep up to date with developments on taxation, including its effects on the environment and society.

Forward-looking

KPN's unrealized losses as per 2021 were realized in 2022, resulting in a carry back to a part of the 2021 taxable profit. As such, after filing of the 2022 corporate income tax return in 2023 a refund of approximately EUR 75m tax paid over 2021 is expected. As the realized loss can only be offset against 50% of the taxable profit in 2023 and following years, KPN's income tax payments will likely be higher in 2023 compared to 2022. Due to the fiscal unity loss compensation rules, certain profits within the KPN Group are not eligible to be offset against these (future) available losses. Based on current projections, KPN will utilize all losses in the foreseeable future for which a deferred tax asset is recognized.

In Q4 2022, the Dutch Ministry of Finance published draft legislation for domestic implementation of the Organization for Economic Cooperation and Development (OECD) initiative to implement a global minimum tax, known as "Pillar II" and simultaneously started a public consultation on the same. It is anticipated to apply the legislation for FY 2024 and onwards. If implemented, impact on KPN is expected to be limited to additional compliance and administrative activities. KPN closely monitors the developments in this respect.

KPN continuously monitors potential developments in the tax environment that may affect its tax position, including:

- EU/OECD harmonization of corporate income taxes
- Potential reform of the Dutch Corporate Income Tax Act
- Environmental and energy taxes

KPN will continue to extend and optimize its tax control framework, and as part of KPN's total IT landscape, by simplifying, automating and integrating administrative processes, controls and systems in the near future.

The introduction of new mobile consumer propositions in August 2016 caused a change in the VAT calculation methodology which resulted in a lower remittance of VAT from August 2016 until December 2018. KPN's view is not shared by the Dutch tax authorities. KPN concluded, based on the applicable regulations, that a positive outcome of this dispute is not highly probable and therefore recorded a contract liability for the VAT amount. Additionally, an amount for the corresponding interest amount has been accounted for. A potential final negative outcome of the current court procedure will lead to a negative cash flow in future years. Court procedures are pending. For further details, see also Note 20 Contract liabilities, trade and other payables and Appendix 8 List of top risks.

● Tax and regulations

Regulation affects our business

KPN is subject to sector-specific regulation and enforcement thereof by regulatory authorities, such as the Netherlands Authority for Consumers & Markets (ACM) and the Dutch Authority for Digital Infrastructure. As outlined in the chapter 'Compliance and risk', KPN's internal risk management and control systems are designed to minimize the risk of non-compliance with such regulation.

European developments

Regulation of the electronic communications markets is largely based on European legislation. The EU's roaming and open internet-access regulations are directly applicable in all member states. An updated Roaming Regulation entered into force by July 2022, reconfirming the 'roam-like-at-home' principle. In addition to sector-specific regulation, KPN is subject to general regulations, such as privacy law, content-related law and consumer protection law.

Regulation regarding electronic markets, the Digital Markets Act and the Digital Services Act entered into force in November 2022. In addition, to strengthen cybersecurity in Europe, the Network and Information Security Directive (NIS2) was adopted by the European Parliament in November 2022. The directive now has to be finally approved by the Council, after which this legislation has to be implemented in Dutch law.

Various legislative instruments that may have impact on KPN in the future are still being discussed by EU institutions e.g. the draft AI act, the Data Act and the Cyber Resilience Act.

Security concerns based on geopolitical developments

Stakeholders at both a European and a national level are paying greater attention to security concerns in relation to control over telecom operators via investment and to potential security risks in networks. In the Netherlands, legislation has limited operators in their use of equipment from non-Western vendors in specifically designated (critical) parts of mobile networks. Additionally, specific security requirements for mobile networks have been published in a Ministerial Decree.

Spectrum licenses

The auction of the 3.5 GHz band has been postponed until after the summer of 2023. At the request of Inmarsat (telecommunications company specializing in satellites), who also uses the spectrum, the courts have suspended the necessary reallocation of the spectrum. The ministry has embraced a solution offered by an advisory committee in May 2022 that protects Inmarsat's emergency communications while allowing the band to be deployed for Inmarsat as soon as possible. Currently, the finalization of the band plan is on hold as the ministry is studying input from various stakeholders on the optimal location of the private networks versus the public mobile networks. The minister has announced a new bandplan where spectrum is reserved for these local private networks at the band edges. This new and final bandplan is due to be published in February 2023, shortly after which the auction regulations will be published for consultation.

The 26 GHz band is the last priority 5G band to be made available in the Netherlands. The government intends to proceed with its assignment after the 3.5 GHz auction, while also taking into consideration advice from the Dutch Health Council in relation to health and safety (*Gezondheidsraad*).

Market analysis decisions in the Netherlands

In August 2022, the ACM took a decision to declare binding commitments from KPN to improve the conditions to access KPN's fiber networks. The commitments are binding until 2030. This reduces uncertainty for KPN and other market players for the coming years. The binding decision may be challenged in court. However, based on ACM's communications, KPN sees only a small chance that traditional ex ante regulation will be implemented in the near future.

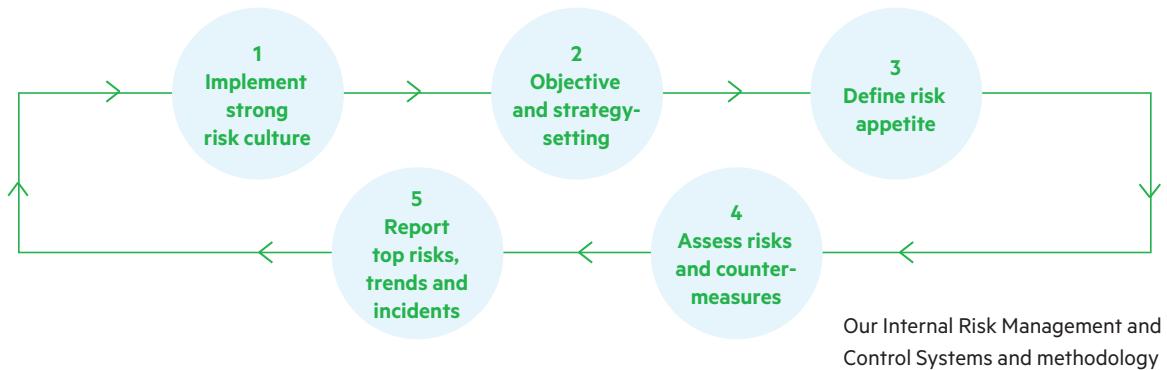
ACM will monitor regularly whether Dutch telecommunication markets are competitive. Most markets were already liberalized in the past.

There is still a discussion about 'symmetric access' obligations (without the need for significant market power findings), which have been introduced in the European Electronic Communications Code (this was implemented in Dutch law by December 2020). This is about wholesale access to non-replicable cable infrastructure to (local) customer premises. What this obligation amounts to in the Netherlands has not yet been defined. The ACM may – on request of operators – define a broader application of the provision than the rather local scope of the obligation that KPN currently foresees.

● **Compliance and risk**

Maintaining effective risk management

Deploying effective risk management is a key success factor for realizing our company's objectives. For this reason, KPN has implemented robust Internal Risk Management and Control Systems.



Maintaining effective Internal Risk Management and Control Systems requires a continuous and iterative process involving several steps. A strong risk culture and control environment form an important foundation of our control systems. After setting the strategy, the Board of Management defines its willingness to accept risks (risk appetite) in the pursuit of strategic objectives. Management subsequently assesses the main risks that could hinder the realization of the strategic objectives and defines and implements countermeasures to mitigate such risks, taking the risk appetite into account.

At least annually, KPN's performance, top risks, countermeasures, trends and incidents are reported to and discussed with the Board of Management, which defines further remedial actions if necessary.

1. Implement strong risk culture (control environment)

KPN strives for a business culture in which compliance and integrity are self-evident for all employees. We realize this through several actions including the following:

- The KPN Code of Conduct (the Code) applies to all KPN employees, including the Board of Management, the Supervisory Board, subsidiaries and temporary staff. The KPN Company Code describes how we fulfill our objectives. Based on eight principles, we explain how we deal with people, resources

and environment. It describes KPN's values (trust, courage and growth) and how we work in an open, transparent, honest and socially responsible way. We communicate the Code on our corporate website (ir.kpn.com), our intranet, via mandatory e-learning training for all employees, and online learning interventions ('workouts') that target specific segments of the employee population. We have a stringent approach to bribery and corruption, fraud and all other forms of (illegal) misconduct, including facilitation payments. The effectiveness of, and compliance with, the Code is structurally assessed by:

1. Actively detecting and investigating any alleged misconduct and taking appropriate disciplinary action if misconduct is substantiated
2. Monitoring that all staff (both internal and external) have completed the e-learning training for the Code
3. Structural reporting of incidents to the Board of Management and to the Supervisory Board
- To strengthen awareness and the tone at the top and at other management levels, we conduct fraud risk assessments, including a risk assessment on attitude and behavior, and provide integrity training.
- To emphasize our desired company culture and behavior and to create awareness in the business, we have implemented a communication and training program on compliance and integrity subjects. Information that is important to share because of (changes to) applicable policies, laws or regulations or because of a necessity or demand in business (risk-

● Compliance and risk

or need-based) is shared through e-learning, workshop or classroom training.

- The Business Control Framework (BCF) comprises all corporate policies and guidelines that are mandatory for all of KPN's segments and entities. Every other year, senior management receive an e-learning course on the main principles and policies of the (revised) BCF.
- KPN requires all employees, and encourages external parties, to report (anonymously, if desired) any misconduct by KPN employees (or suspicion of this). Our whistleblower policy complies with the Dutch Whistleblower Act.
- We periodically measure the state of our organizational culture, compliance and integrity as perceived by our employees and report results as well as plans for improvement to a large part of senior management, and initiate responses, if deemed necessary. In chapter Driving growth with engaged and motivated staff (p. 27), we describe how we create a culture that contributes to our growth strategy.

2. Objective and strategy-setting

KPN's objectives and strategy are described on p9. During the objective and strategy-setting process, senior management takes into account the company's known risks and opportunities, and its risk appetite (see next step). The objectives and strategy are discussed with the Supervisory Board.

3. Define risk appetite

Pursuing any business objective inevitably leads to taking risks. Risks can jeopardize achieving those objectives in various ways. Each type of risk encountered is dealt with in a manner that matches the risk appetite of the Board of Management. The risk appetite is the total residual impact of risks that KPN is willing to accept in the pursuit of its strategic objectives. The risk appetite per strategic objective or risk area is determined by the Board of Management every year. These risk areas include financial, operational, strategic, compliance and (information) security themes.

Risk areas with a low-risk appetite, and hence a low acceptable residual risk, require strong risk management and strong internal controls. Risk areas with a high-risk appetite require relatively less risk management and internal control effort.

KPN has a prudent risk appetite, which can be described as follows per risk category:

- Strategic risks: in the pursuit of our strategic objectives, KPN is willing to accept reasonable risks in a responsible way, taking into account our stakeholders' interests.
- Operational risks: KPN is committed to a high quality of customer service, which is reflected in a high NPS. We aim to limit the number of interruptions to our networks, services, and systems as much as possible. We implement strict policies to keep our networks and customer data private, safe and secure.
- Financial risks: we strive for the right balance between a prudent financing policy, sufficient investments in the business and fair shareholder remuneration. KPN is committed to an investment-grade credit profile. See Note 13 to the Financial Statements.
- Tax risks: KPN's overall risk appetite for tax (including tax compliance) is to respect the text and spirit of the law at all times. KPN defined a separate tax risk appetite dashboard in order to keep the number of tax errors to a minimum and prevent any tax exposures. Where alternative routes exist to achieve the same commercial results, KPN will pursue the most tax efficient and responsible approach in the interest of all stakeholders.
- Compliance risks: we are committed to fully complying with relevant laws and regulations and have a zero tolerance approach to bribery and corruption, fraud and all other forms of (illegal) misconduct.
- Financial reporting risks: we aim to minimize the risk of material misstatements and errors in our Financial Statements.

● Compliance and risk

4. Assess risks and countermeasures

KPN has implemented effective Internal Risk Management and Control Systems to manage its main risks. The main part of these systems comprises seven KPN Internal Control Systems, which cover the most relevant risk areas for KPN, as summarized in the table below:

KPN Control System	Control System objective
Liquidity Management & Financial Framework	To maintain sufficient liquidity for continuity purposes and maintaining financial flexibility
Year Plan & Year Outlook	To create value
Network Service Levels	To maintain customer service delivery levels
RFR GRIP Framework	To maintain investor trust
Compliance Frameworks	To maintain licenses to operate
Main Non-Financial KPIs	To measure strategic success and integrated reporting
IT Security & Continuity	To mitigate cybersecurity threats

For each category of objectives (strategic, operational, sustainability, financial, compliance and reliable financial reporting), KPN has defined different control systems.

Strategic objectives

Every year, we assess the top risks at group (top-down approach) and segment level (bottom-up approach), and, if necessary, we implement countermeasures to mitigate them within the defined risk appetite. We conducted risk assessments with our Consumer, Business, Wholesale and Operations segments, as well as with selected staff functions in the Corporate Center in 2022. The business objectives are detailed in a strategic business plan. Every quarter, segments perform a 'most likely' forecast four to six quarters ahead on their main financials and key performance indicators (the rolling forecast). Segments update the main risks and opportunities, resulting in a bandwidth of outcomes around expected performance. Each month, segment management discusses their actual performance with the Board of Management.

Scenario analyses and stress testing

In 2022 we performed scenario analyses to test the impact of several extreme events on KPN's financial health. Scenarios that were tested related to different extreme instances of supply chain issues, inflation, cyber attacks, climate change leading to high water levels and the entrance of a new mobile provider. For a selection of these events, KPN is investigating preventive and reactive countermeasures to mitigate the likelihood and/or consequences if such extreme events arise.

Operational objectives

KPN has business continuity plans in place to safeguard the continuity of services to customers and critical systems and processes. To manage our information security and privacy risks, we have implemented the KPN Security Policy as part of the BCF. For more details, see chapter Privacy and security (p. 45).

We have implemented ISO standards in designated areas to certify operational processes. Additionally, we continuously simplify and digitalize services and processes. We have implemented quality improvement plans where necessary. Compliance with environmental law is covered by our ISO 14001 certificate.

All our suppliers comply with our Supplier Code of Conduct. Through this code, suppliers confirm that they support and respect the protection of internationally proclaimed human rights and operate in the spirit of the Charter of the United Nations (e.g. by preventing discrimination, child labor or forced labor, and by recognizing and respecting the environment in their business operations).

For information about the investigation into the security of our legal intercept facilities, please refer to p48.

Sustainability objectives

Risks related to climate change and compliance with new environmental legislation are managed in line with our Risk Management and Control Systems. For example, flooding risks (caused by heavy rainfall or rising sea levels) or continuing drought and heat could damage our networks and systems. As such, these risks are managed in KPN's business continuity strategy. With our climate-neutral performance for our own operations and continued focus on absolute energy reduction, we are in a very good position to meet new regulations and customers' expectations –see chapter Environmental performance and responsible supply chain (p. 50). Read more in Appendix 3: Transparency, materiality and stakeholder engagement on our alignment in our reporting with the Task Force on Climate-Related Financial Disclosures (TCFD) framework. In 2020, KPN performed scenario analyses for climate risks to analyze the vulnerability of our critical infrastructure to changing climate effects. For more information on these analyses, see our Integrated Annual Report 2020 (p. 75-76). In 2021, we added further details to these climate scenario analyses, raising senior management's awareness of climate and flooding risks as a result. Information from the scenario analyses also helped protect and repair telecom infrastructure and services in Limburg during the July 2021 floods. In 2022, we updated and extended the climate scenario analyses (for extreme precipitation, flooding and heatwaves) to all technical buildings (including points of presence) and street cabinets.

● Compliance and risk

In terms of climate adaptation, we ran a pilot in Arnhem and gave the roof of a technical building a green roof – a move that is also in line with our efforts on biodiversity. Together with other network operators in the Groene Netten coalition, we jointly improve biodiversity within the ecological areas around our infrastructure.

We have also noticed the importance of having a leading sustainable strategy to attract and retain talent.

Circularity

The circular economy aims to reduce the impact of the materials used in our products and services. This strategy not only reduces risks concerning the availability of the future availability of materials and the risk of price volatility, but also prepares our company for future market demands, given that society aims to become more sustainable and reduce its carbon footprint. At the same time, circular business models mean rethinking our business and coming up with new innovations. For more information, see chapter Environmental performance and responsible supply chain.

Sustainable employability

For more information, see chapter Sustainable employability (p. 27).

Financial objectives

KPN's Corporate Treasury department manages risks related to cash and debt positions, finance agreements, credit ratings, currency and interest exposures, counterparty risks, and non-life insurance (see Note 13 to the Financial Statements). Corporate Treasury has defined policies with clear boundaries for these risks. Compliance with these policies is monitored frequently.

Tax objectives

KPN's tax objective, including tax compliance, is covered in KPN's tax strategy and principles. As a core part of corporate responsibility and governance, with respect to society and environment, the Corporate Tax department recommends the most tax-efficient and responsible approach in the interest of all stakeholders, while adhering to KPN's tax policy and complying with all relevant tax laws and regulations. This determines KPN's overall tax-risk appetite. As KPN proactively engages with Dutch and other tax authorities, tax exposures, if any, are contained and under control. Besides potential tax exposure, reputational risk is always part of the consideration to apply particular tax planning. See also the separate chapter Tax and regulations (p. 62).

Compliance objectives

Our compliance risk assessment (CRA) framework comprises an integrated framework that oversees risks mainly related to compliance with telecommunications, competition, consumer, financial services (e.g. credit) and privacy legislation. We also monitor compliance with Solvency II requirements (KPN

Insurance). For compliance risks, we have implemented relevant processes and controls that are continuously monitored. For most of our key controls, compliance controls are tested by dedicated staff throughout the year.

Reliable financial reporting objectives

Our internal controls for Reliable Financial Reporting (also known as RFR GRIP Framework) ensure that material misstatements in KPN's Financial Statements are prevented or detected in a timely manner. Each quarter, Risk Management and KPN Audit assess the overall effectiveness of the controls before publication of the quarterly figures. The Quarterly Reporting Review Team (with members from Corporate Reporting, General Counsel Office, Treasury, Corporate Communications, Tax, Internal Audit and Investor Relations) examines all reports and documents containing financial information that are intended for external publication, to ensure that these fairly represent KPN's financial position and results.

5. Report top risks, trends and incidents

Segment management provides the Board of Management with a quarterly letter of representation regarding the reliability of their financial reporting, the effectiveness of their internal controls over financial reporting, risk management and compliance with telecommunication laws, internal policies and other laws and regulations. Twice a year, Corporate Control reports top risks and countermeasures to the Board of Management, including any of the main improvement actions.

Critical concerns are communicated on a quarterly basis to both the Board of Management and the Supervisory Board. This communication consists of a GRIP report, a Compliance report, an external audit report and an internal audit report. The GRIP report is most comprehensive and includes all risks for KPN communicated by risk managers. The Compliance report comprises mostly risks on new regulations and incidents. The external audit report comprises mostly financial risks for KPN whereas the internal audit report reports financial and IT security risks. The Board of Management closely monitors all risks and defines procedures and working methods for critical risks. All risks are reviewed by the Audit Committee.

Summary of main risks and countermeasures

The table on p72 provides a summary of KPN's main risks and countermeasures, including the expected trends and impact. It also lists a selection of KPIs that are used to monitor the development of the risks and the realization of our risk appetite. The KPIs are frequently monitored in KPN's planning and control cycle, and discussed in the Board of Management's business reviews with segment management, including improvement

● Compliance and risk

actions where necessary. This is important as the risks might directly affect our external stakeholders and the value we create.

For a more extensive list of our risks and countermeasures, see Appendix 8, which is also part of this Report by the Board of Management. Appendix 8 includes risks that are emerging, for example relating to:

- KPN's dependence on suppliers and the (international) supply chain, the scarcity of equipment, raw materials, and energy
- Inflation and rising prices (e.g. for energy)
- KPN's ability to attract and retain qualified and diverse staff members as the war for talent increases
- Pandemics (including possible unforeseen developments around COVID-19)
- Geopolitical volatility, driven by rising international tensions, protectionism and security concerns, may impact our ability to do business in any part of the world. These concerns could lead to international bans and other sanctions on hardware and software suppliers.
- The increase in new entrants offering alternative or private networks, e.g. for telecom or IoT services. Because of these alternative networks, customers are no longer dependent on the networks of existing providers, which could lead to higher churn in the longer run and lower cash flows to finance new

investments. KPN addresses this upcoming risk by continuing large-scale fiber roll-out at a high pace and offering distinctive 5G services for B2B customers.

- Continued climate changes in the future could lead to rising sea levels, extreme rainfall or extreme heat and drought. These weather conditions could disrupt our systems and networks and consequently, could negatively affect the quality of our services and customer satisfaction. KPN addresses this emerging risk by investing in the high-quality and resilient design of our networks, and by performing scenario analyses for climate risks. KPN also has a strong Business Continuity Management program, with adequate back-up and recovery plans in case of emergencies.

As stated in section 3 sub 1.c of the Non-financial Information Disclosure Decree (*Besluit bekendmaking niet-financiële informatie*) of 14 March 2017, KPN has identified and assessed its main risks regarding environmental, social and personnel matters, human rights and anti-bribery and corruption.

The table in Appendix 3 provides an overview of parties for whom we consider ourselves responsible for the implementation of our non-financial policy.

Compliance and risk

Main risks

Risk	Risk has impact on Strategic objective:	Risk category and risk appetite	Main countermeasures (summary)	Impact
Strong competition from current competitors or new market entrants (including big tech), or new emerging disruptive technologies	Grow & strengthen customer footprint	Strategic risk KPN is willing to accept reasonable risks in a responsible way.	<ul style="list-style-type: none"> Offer converged services such as KPN ÉÉN MKB, KPN Smart Combinations and KPN Hussel. Implement a superior network by rolling out fiber at a fast pace and full modernization of mobile network and improving in-home WiFi coverage. Improve customer experience by optimizing and digitalizing customer journeys. Offer high-quality service to customers. Develop new additional services for customers, such as super WiFi or security. 	High: the described risk could lead to lower profitability as well as lower market shares. In the longer run, it could impact our continuity. Monitoring KPI: Market shares Service revenues # Fiber homes passed
Trend: ↗ ¹				
Damage, service interruptions, operational issues in KPN's technical infrastructure and IT	Leverage & expand superior networks; Simplify & streamline operating model	Operational risk KPN is committed to high quality of customer services and to limiting disruptions as much as possible.	<ul style="list-style-type: none"> Implement a superior network by rolling out fiber at a fast pace and full modernization of mobile network, moving to All-IP. Operations stability program to ensure availability of our (critical) services. Business Continuity Management, back-up and recovery plans in case of emergencies. Implement lean operating model, including digitalization, and rationalization of networks, IT, processes and portfolio. 	Medium-high: the incidents could negatively impact KPN's customer satisfaction, reputation and profitability. This risk could impact our continuity. Monitoring KPI: NPS Network availability # major incidents # Fiber homes passed
Insufficient transformation progress due to complexity, and legacy in KPN's operations				
Trend: ➔ ²				
Cybersecurity attacks or terrorism: threats by malicious actors to the security of KPN's networks, IT and (customer) data	Leverage & expand superior networks	Operational risk KPN is committed to limiting incidents as much as possible and implements strict policies to keep our networks and customer data private, safe and secure.	<ul style="list-style-type: none"> Implementation of baseline security measures according to the KPN Security Policy. Continuous improvement of security according to the KPN Security Lifecycle. Enhanced risk intelligence and increased network visibility. Continuous development of security capabilities (people, processes and technologies). Execution of strategic security actions, e.g. Permanent Vulnerability Management. 	High: the incidents could lead to loss/theft of customer data, higher costs, penalties and reputational damage. This risk could impact our continuity. Monitoring KPI: Severity and # of security incidents # data leakages
Trend: ↗ ¹				
Geopolitical developments for high-risk vendors, which could trigger security, business continuity and reputational risks. New regulations or bans could lead to higher investment costs in future.	Leverage & expand superior networks	Strategic/Operational/Compliance risks KPN is committed to a high quality of customer services and to keep our networks and customer data private, safe and secure. KPN is committed to full compliance with relevant laws and regulations.	<ul style="list-style-type: none"> Conduct frequent threat and risk analyses and closely monitor latest global and political developments. Perform scenario analyses during network design to assess potential implications of geopolitical developments. Prepare fallback scenarios and policies if KPN can no longer acquire or use hardware and software from specific suppliers and avoid dependence on single vendors or countries for critical or vital services. Maintain and continuously update the KPN Security Policy and monitor continuous compliance with security requirements. 	High: the risk could lead to a higher number of business continuity incidents, security incidents, reputation damage and higher investments and costs. Monitoring KPI: N/a
Trend: ➔ ²				
New regulatory decisions in the EU and the Netherlands. Non-compliance with regulation, including privacy regulations	Generic	Compliance risk KPN is committed to full compliance with relevant laws and regulations.	<ul style="list-style-type: none"> Proactive stakeholder and reputation management including dialogue with regulators. Strengthening effectiveness of the compliance organization and internal controls. Proactive internal compliance investigations. Dedicated program to implement Ministerial Decree regulations in a structured and effective manner. 	Medium-High: the risk could affect KPN's license to operate and profitability and cause reputational damage Monitoring KPI: Fines # incidents reported to regulators
Trend: ➔ ²				

¹ ↗ Risk is increasing

² ➔ Risk is stable

● Compliance and risk

Risk	Risk has impact on Strategic objective:	Risk category and risk appetite	Main countermeasures (summary)	Impact
Energy availability Trend: ↗ ¹	Leverage & expand superior networks	Operational risks KPN is committed to a high quality of customer services and to limiting disruptions as much as possible	<ul style="list-style-type: none"> Use alternative energy sources, e.g. via solar panels on technical buildings and wind farms on sea. Reduce energy to the max: <ul style="list-style-type: none"> Migrate customers from copper network to energy-efficient fiber network Optimize mobile network as much as possible Rationalize data centers and optimize virtualization Optimize energy use in metro core locations (e.g. reduce cooling systems) Reduce number of office and technical buildings where possible 	High: if energy is not sufficiently available at a reasonable price, it could lead to service interruptions and lower quality of services. This risk could impact our continuity. Monitoring KPI: Energy prices and availability Energy reduction
KPN may not be able to attract or retain talents and skilled staff Trend: ↛ ²	Generic	Strategic/ Operational risks KPN is willing to accept reasonable risks in a responsible way. KPN is committed to a high quality of customer services and to limiting disruptions as much as possible	<ul style="list-style-type: none"> Innovative and inspiring talent-management programs to attract and maintain qualified staff (both from the Netherlands and abroad). Promote technical education initiatives at highschools and universities to attract new and diverse workforce. 	Medium: lack of talents and skills could negatively impact our quality of services, innovation and improvement of our operations. Monitoring KPI: Ranking KPN in 'attractive employer' benchmarks
Inflation Trend: ↛ ²	Generic	Financial risk KPN strives for the right balance between a prudent financing policy, sufficient investments in the business, fair shareholder remuneration and an investment-grade credit profile.	<ul style="list-style-type: none"> Close long-term contracts with suppliers with fixed price agreements. Close hedge and other forward contracts for energy and other materials where possible. Increase breadth of supplier base, renegotiate terms and conditions with existing suppliers. Implement cost-saving and efficiency programs to limit costs where possible. Implement Consumer Price Index (CPI) related price increases for own customer base to mitigate impact of higher cost levels. 	Medium: high inflation could lead to lower results of operation and lower cash flows. Monitoring KPI: Consumer Prices Indices Opex and Capex levels EBITDA AL and FCF

1 ↗ Risk is increasing

2 ↛ Risk is stable

Reference table on bribery and corruption

Our policy and outcomes	Risks and mitigation measures	Risks and mitigating measures
Customers and employees	The bribery and corruption chapter below describes our policy and the outcome of our policy. For more details, see Subcode 2 - How we interact with third parties: https://ir.kpn.com/websites/kpn/English/7050/code-of-conduct.html	See Compliance and risk, Appendix 8 and the GRI Index
Supply chain	The outcome of our policy is described in Environmental performance and responsible supply chain' (p. 50). For more details on the policy, see: https://www.overons.kpn/downloads/KPN_Supplier_Code_of_Conduct_2022.pdf , art 51, 5.2	See Appendix 4 and Appendix 8

Bribery and corruption

We expect our employees to report any suspicion of non-compliance with the Code of Conduct. Following a report, an expert from the KPN Corporate Security Office and/or KPN Compliance, Privacy & Ethics Office investigates the potential violation. The outcome may lead to disciplinary action. The

severity of the disciplinary action is determined by the nature and circumstances of the incident, and may include termination of employment.

In addition to internal reporting options, employees can also use the SpeakUp Line, an anonymous reporting procedure managed by an independent organization.

● Compliance and risk

In 2022, we evaluated the effectiveness of most controls for fraud in the control framework and raised fraud risk awareness among management and staff.

In 2022, we identified 197 internal fraud cases (2021: 232). These concerned such things as the theft of goods, theft of access passes and keys, damaging of property and breaches of internal incentive regulations. To prevent similar issues in the future, we imposed sanctions and took action to repair the shortcomings in procedures and systems. As a result, 9 employees had their contracts terminated. In 39 cases, we prematurely terminated the contracts of temporary staff. Our KPN Security Policy on Incident Management describes how we deal with incidents if they occur. The KPN Corporate Security Office has a procedure in place to investigate reported incidents of internal fraud by employees.

Our stringent approach to bribery and corruption is based on multiple policies, as listed in the table above. We distinguish between bribery and corruption in the supply chain and bribery and corruption among customers and employees (which includes e.g. fraud, verbal abuse or transgressive behavior). We had 10,135 employees trained to detect and prevent corruption in 2022.

In 2022, 4,482 reports have been made to the helpdesk. However, KPN only registers reports on violations of the Code of Conduct and the subcodes (which include all company policy on ethical and lawful behavior) including the results of formal investigation and follow-up in terms of corrective measures. The system is not yet designed to be able to register requests for advice separately.

Governance of risk management and compliance

Three lines of defense

Although the Board of Management is ultimately responsible for risk management and compliance, it is the business management's duty to effectively identify, assess and manage the main risks of the company, in line with the steps discussed in the previous paragraphs (first line of defense). The Risk Management and Compliance departments (second line) are responsible for the design of the risk management and compliance policies. They are also responsible for supporting and challenging business management in their assessment and management of top risks. KPN Audit (third line) performs, where necessary, independent reviews of the design and operational effectiveness of the Internal Risk Management and Control Systems. The main results of both the risk assessments and the evaluation of the Internal Risk Management and Control Systems are shared with the Audit Committee of the Supervisory Board and discussed with the external auditor.

Internal Audit

KPN's internal audit function (KPN Audit) assesses, in line with Dutch Corporate Governance requirements, the design and effectiveness of the Internal Risk Management and Control Systems and provides assurance to both the Board of Management and the Audit Committee concerning the 'in control status' of KPN's organization and processes. Moreover, KPN Audit conducts ad-hoc financial, information technology (IT), strategic and operational audits, and special investigations. KPN Audit conducts its activities in a manner based on continuous evaluation of perceived business risks. It has full and unrestricted access to all activities, documents, records, properties and staff. The Chief Auditor reports to KPN's CEO, and quarterly KPN Audit reports are submitted to and discussed with both the Board of Management and the Audit Committee. KPN Audit liaises extensively with the external auditor, based on International Standard on Auditing 610.

Description and evaluation of the Internal Risk Management and Control Systems

As stated in principle 1.2 of the Dutch Corporate Governance Code and related best-practice provisions, KPN has designed and implemented Internal Risk Management and Control Systems to identify and manage the risks associated with the company's strategy and activities. In 2022, KPN Audit systematically assessed the effectiveness of these systems. A summary of the main Internal Risk Management and Control Systems is provided in the preceding paragraphs.

During the assessment of the design and operating effectiveness of the systems, certain weaknesses, deficiencies and improvement actions were identified and implemented. If deemed appropriate, alternative procedures were conducted to obtain the required assurance. None of these weaknesses or deficiencies were classified as a major failing, as referred to in best practice provision 1.4.2 sub iii.

Human rights

We endorse the United Nations Guiding Principles on businesses and human rights. The obligation to respect human rights is the basis for our way of working. It is reflected in our Code of Conduct and what we require of our suppliers.

To have a better understanding of human rights in our own operations and the rest of our value chain, we conducted research to identify the company's salient human rights risks and to propose a suitable human rights governance structure for KPN's consideration. The identified human rights that are most relevant to KPN's activities and/or business relationships and that - are

● Compliance and risk

therefore more likely at risk of being violated appear to be, among others, various aspects of labor conditions in the supply chain, including those at our fiber construction suppliers; health & safety in our own operations, including aggression; health aspects of mobile frequencies and privacy & data security.

We initiated a human rights board, chaired by our Chief Technology and Digital Officer (CTDO), consisting of Compliance, General Counsel, HR, CPO, TDO and CSR. This board governs the topic, discusses results and takes next steps to improve our governance and live up to the expectations of upcoming legislation. We started a more in-depth gap analysis based

on the research results. This will lead to an updated Human Rights Statement, determination of risk appetite KPN and setting objectives.

We monitor the number of reports of human rights violations externally and internally. In 2022, there were 0 reports concerning human rights violations involving an employee in our operations (2021: 1).

The table below provides an overview of the relevant information on human rights policies for our three main stakeholder groups.

Reference table on human rights policies and outcomes

	Materiality	Our policy and outcomes	KPIs	Risks and mitigating measures
Customers	Material topics: <ul style="list-style-type: none"> Data & information protection and customer interaction Other topic: <ul style="list-style-type: none"> Responsible operations (see Appendix 3 Materiality assessment) 	Our policy and the outcome of our policy is described in the chapters Safeguarded privacy and security, Impact on society and Network infrastructure. For more details on privacy and security, see: https://www.kpn.com/algemeen/missie-en-privacy-statement/privacy-statement.htm	Safeguarded privacy and security (p. 45) and Appendix 4: Non-financial information	See Compliance and risk (p. 67) and Appendix 8 List of top risks
Employees	Other topic: <ul style="list-style-type: none"> Attractive working conditions KPN's corporate governance & human rights compliance (see Appendix 3 Materiality assessment) 	Our policy and the outcome of our policy is described in the chapter Sustainable employability. Our human rights statement is described on our corporate site: https://www.overons.kpn/downloads/KPN-Human-Rights-Statement.pdf Our privacy statement is described on our general site: https://www.kpn.com/algemeen/missie-en-privacy-statement/privacy-statement.htm	Our value for stakeholders: Employee value (p. 27) and Appendix 4: Non-financial information	See Compliance and risk (p. 67) and Appendix 8 List of top risks
Supply chain	Material topic: <ul style="list-style-type: none"> Supplier selection & Security Other topic: <ul style="list-style-type: none"> KPN's corporate governance & human rights compliance (see Appendix 3 Materiality assessment) 	Our policy and the outcome of our policy is described in the chapter Collaborating towards a sustainable value chain (p. 50). For more details, see: How we identify low/medium/ high risk suppliers, see: https://overons.kpn/content/downloads/Supply-Chain.pdf What we expect from our suppliers on human rights, see: https://www.overons.kpn/downloads/KPN_Supplier_Code_of_Conduct_2022.pdf	Environmental performance and responsible supply chain (p. 50). Appendix 10: Supply chain, and Appendix 4: Non-financial information	See Compliance and risk (p. 67) and Appendix 8 List of top risks

● Compliance and risk

Statement by the Board of Management and Responsibility Statement

Statement by the Board of Management

The Board of Management is responsible for the effectiveness of the design and operation of KPN's Internal Risk Management and Control Systems. These have been designed to manage the risks that may prevent KPN from achieving its objectives. However, these Internal Risk Management and Control Systems cannot provide absolute assurance that material misstatements, fraud and violations of laws and regulations have been avoided.

The Board of Management reviewed and analyzed:

- The strategic, operational, sustainability, financial, tax, financial reporting, and regulatory and compliance risks, as discussed in section 'Summary of main risks and countermeasures' on pages 70 to 73.
- The design and operational effectiveness of the Internal Risk Management and Control Systems, as discussed on pages 67 to 70 of this Integrated Annual Report.

The results of this review and analysis were shared with the Audit Committee and Supervisory Board and discussed with KPN's external auditors.

With reference to the best-practice provision 1.4.3 of the Dutch Corporate Governance Code and the chapter 'Compliance and risk', including Appendix 8, in this Integrated Annual Report, the Board of Management states that, to the best of its knowledge:

- i. This Integrated Annual Report provides sufficient insights into major failings in the effectiveness of the Internal Risk Management and Control Systems. There are no major failings to report (see also paragraph 'Description and evaluation of the Internal Risk Management and Control Systems' on page 74).
- ii. The aforementioned systems provide reasonable assurance that the financial reporting, as included in the Financial Statements on pages 101 to 175, does not contain any material inaccuracies.
- iii. Based on the current state of affairs, it is justified that the financial reporting, as included in the Financial Statements on pages 101 to 175, is prepared on a going concern basis.
- iv. This Integrated Annual Report states those material risks and uncertainties that are relevant to the expectation of the company's continuity for the period of 12 months after the preparation of this report.

Responsibility Statement

With reference to section 5.25c paragraph 2c of the Financial Markets Supervision Act, the Board of Management states that, to the best of its knowledge:

- The Financial Statements of 2022 give a true and fair view of the assets, liabilities, financial position and profit or loss of KPN and its consolidated companies.
- The Integrated Annual Report gives a true and fair review of KPN's position as at 31 December 2022, the development in 2022 of KPN and its group companies included in the Financial Statements, together with a description of the top risks KPN faces.

Rotterdam, 23 February 2023

Joost Farwerck

Chairman of the Board of Management and Chief Executive Officer

Chris Figuee

Member of the Board of Management and Chief Financial Officer

Jean-Pascal van Overbeke

Member of the Board of Management and Chief Consumer Market

Marieke Snoep

Member of the Board of Management and Chief Business Market

Babak Fouladi

Member of the Board of Management and Chief Technology and Digital Officer

Hilde Garssen

Member of the Board of Management and Chief People Officer

● **Composition of the Board of Management**

Composition of the Board of Management

The Board of Management manages KPN's strategic, commercial, financial, CSR and organizational matters. The Board of Management currently consists of six members.

The composition of the Board of Management did not change in 2022. All members of the Board of Management comply with clause 2:132a of the Dutch Civil Code, which limits the number of

positions on a supervisory or management board that a director may hold.

Composition of the Board of Management

Name	Position	Year of birth	Start of term	End of current term
J.F.E. Farwerck	Chairman of the Board of Management and Chief Executive Officer	1965	April 2013/ April 2017 ¹ December 2019 ¹	2024
H.C. Figuee	Board member and Chief Financial Officer	1972	February 2020	2024
J.P. van Overbeke	Board member and Chief Consumer Market	1965	December 2019	2024
M.W.M. Snoep	Board member and Chief Business Market	1971	December 2019	2024
B. Fouladi	Board member and Chief Technology & Digital Officer	1969	December 2019	2024
H. Garssen	Board member and Chief People Officer	1973	December 2019	2024

¹ Reappointment

Joost Farwerck



Mr. Farwerck was appointed Chairman of the Board of Management and Chief Executive Officer on 1 October 2019. He has been a member of the Board of Management since 10 April 2013. Mr. Farwerck started working at KPN in 1994 and held senior management positions in various divisions. Mr. Farwerck is also a member of the board of FME, a member of the Cyber Security Council, a member of the Board of KPN Mooiste Contact Fonds, a member of the Supervisory

Board of the Foundation De Nieuwe Kerk Amsterdam and a member of the Supervisory Board of the Foundation Het Nationale Theater. Mr. Farwerck is a Dutch citizen.

Chris Figuee



Mr. Figuee has been a member of the Board of Management and Chief Financial Officer since 1 February 2020. Prior to his appointment at KPN, Mr. Figuee was CFO of ASR Nederland. Before joining ASR, Mr. Figuee worked at Achmea for five years, as a member of the Achmea Group Committee and Director of Group Finance. In 1999, he joined McKinsey, where he rose to the role of partner in 2006, a role he held until he joined Achmea in 2009. Mr. Figuee

started his career at Aegon, where he held various positions, including that of Senior Portfolio Manager. Mr. Figuee is currently also a member of the Supervisory Board of Azerion, a member of the Supervisory Board of UNICEF Netherlands and a member of the Economic Board Zuid-Holland. Mr. Figuee is a Dutch citizen.

● Composition of the Board of Management

Jean-Pascal van Overbeke



Mr. Van Overbeke has been a member of the Board of Management since 1 December 2019 and Chief Consumer Market since 1 September 2018. In this role, he oversees the day-to-day operations of KPN's Consumer activities. Prior to joining KPN, Mr. Van Overbeke served as Executive Director of SFR from 2016 to 2018. Before that, he was Deputy Group CEO of Lebara, Group Chief Operating Officer at Maxis Communications Group, and Chief Marketing Officer and Chief Commercial Officer at Orange. In his earlier career, he was Head of Trade Marketing, Director Marketing Residential Market and Director Strategy & Transformation Programs at Mobistar. Mr. Van Overbeke is a Belgian citizen.

Marieke Snoep



Ms. Snoep has been a member of the Board of Management since 1 December 2019. She was appointed as Chief Business Market effective on 1 February 2019. As Chief Business Market, Ms. Snoep oversees the day-to-day operations of KPN's Business activities. She has more than 25 years of strategic and commercial experience in the Dutch telecommunications market. Prior to joining KPN, Ms. Snoep was a member of the board of T-Mobile Netherlands from 2012. In her earlier career, she held consultancy roles with Solvision (currently Ordina) and Atos Origin. Ms. Snoep is a member of the Board of VNO-NCW, a member of Raad van Anders NLdigital and an active member of SER Topvrouwen. Ms. Snoep is a Dutch citizen.

Babak Fouladi



Mr. Fouladi has been a member of the Board of Management since 1 December 2019. He was appointed Chief Technology & Digital Officer on 4 December 2018. In this role, he is responsible for KPN's network technologies and the digitalization of processes and services. Prior to joining KPN, Mr. Fouladi served as Group Chief Technology and Information Officer at MTN Group (South Africa) from 2016. Before that, he formed part of the executive team as Chief Technology Officer of Vodafone Spain and Vodafone Romania. Mr. Fouladi is a British citizen.

Hilde Garssen



Ms. Garssen has been a member of the Board of Management since 1 December 2019. She was appointed Chief People Officer on 10 December 2018. Prior to joining KPN, Ms. Garssen served as Senior Managing Director Business Services at ABN AMRO Bank for over two years. Since 1998, she has held numerous HR roles at ABN AMRO Bank, including Chief Human Resources Officer and Managing Director Change, Integration & Management Group Coordination & Reward. Ms. Garssen is a member of the Supervisory Board of the KWF Dutch Cancer Society, a member of the Supervisory Board of TBI Holdings B.V. and a member of the board of KPN Mooiste Contact Fonds. Ms. Garssen is a Dutch citizen.

● Composition of the Board of Management

Insider transactions

KPN employees who have access to inside information because of their role, profession or duties, including all members of the Board of Management and Supervisory Board, are subject to the inside information Code of Conduct. This Code of Conduct comprises

rules for the possession of and transactions in KPN securities by such employees. Members of the Board of Management and Supervisory Board are also subject to reporting obligations to the AFM. The following table provides an overview of transactions in 2022 by members of KPN's Board of Management and Supervisory Board.

Date	Name	Transaction	Price per share (EUR)
April 11	J.F.E. Farwerck	Vesting of 92.10% of 302,514 conditional KPN shares awarded as LTI 2019 into 175,033 ordinary KPN shares (after sale of part of the shares to finance the income tax)	-
April 11	J.P. van Overbeke	Vesting of 92.10% of 196,732 conditional KPN shares awarded as LTI 2019 into 144,200 ordinary KPN shares (after sale of part of the shares to finance the income tax)	-
April 11	M.W.M. Snoep	Vesting of 92.10% of 156,136 conditional KPN shares awarded as LTI 2019 into 90,339 ordinary KPN shares (after sale of part of the shares to finance the income tax)	-
April 11	B. Fouladi	Vesting of 92.10% of 196,732 conditional KPN shares awarded as LTI 2019 into 144,200 ordinary KPN shares (after sale of part of the shares to finance the income tax)	-
April 11	H. Garssen	Vesting of 92.10% of 62,454 conditional KPN shares awarded as LTI 2019 into 36,135 ordinary KPN shares (after sale of part of the shares to finance the income tax)	-
April 14	J.F.E. Farwerck	Award of 342,173 conditional KPN shares as LTI 2022	-
April 14	H.C. Figuee	Award of 175,975 conditional KPN shares as LTI 2022	-
April 14	J.P. van Overbeke	Award of 169,457 conditional KPN shares as LTI 2022	-
April 14	M.W.M. Snoep	Award of 169,457 conditional KPN shares as LTI 2022	-
April 14	B. Fouladi	Award of 169,457 conditional KPN shares as LTI 2022	-
April 14	H. Garssen	Award of 130,352 conditional KPN shares as LTI 2022	-
April 22	H.C. Figuee	Award of 36,904 ordinary KPN shares as STI 2021	-
April 22	J.P. van Overbeke	Award of 17,276 ordinary KPN shares as STI 2021	-
April 22	M.W.M. Snoep	Award of 35,538 ordinary KPN shares as STI 2021	-
April 22	B. Fouladi	Award of 45,988 ordinary KPN shares as STI 2021	-
April 22	H. Garssen	Award of 27,337 ordinary KPN shares as STI 2021	-

Share ownership Board of Management¹

Number of ordinary shares	31 December 2022	31 December 2021
J.F.E. Farwerck	1,077,294	902,261
H.C. Figuee	139,513	102,609
J.P. van Overbeke	293,648	132,172
M.W.M. Snoep	190,092	64,215
B. Fouladi	243,171	52,983
H. Garssen	153,773	90,301

¹ Shares held by current members of the Board of Management (including vested shares in lock-up period). Share ownership relates to ordinary shares. A share ownership incentive applies, under which the members of the Board of Management are encouraged to acquire company shares equal to 150% of the annual fixed compensation for members of the Board of Management (excluding CEO) and 250% of the annual fixed compensation for the CEO

Share ownership Supervisory Board

None of the current members of the Supervisory Board holds shares in KPN.

● Composition of the Supervisory Board

Composition of the Supervisory Board

The Supervisory Board oversees strategic and commercial policymaking by the Board of Management and the way in which it manages and directs KPN's operations. KPN's Supervisory Board currently consists of eight members. At the AGM on 13 April 2022, Ms. Koelemeijer and Ms. Vergouw were appointed as members of the Supervisory Board and Mr. Sickinghe and Ms. Zuiderwijk stepped down as they had reached the end of their second four-year term.

Three vacancies will arise at the closure of the 2023 AGM, as Mr. Hartman, Ms. Sap and Ms. Guillouard will be stepping down. Mr. Hartman and Ms. Sap have both reached the end of their second four-year term, whereas Ms. Guillouard has decided to

step down due to personal reasons. The Supervisory Board will propose to the AGM to appoint Mr. Noteboom, Mr. Heemskerk and Mr. Dijkhuizen as new members of the Supervisory Board, and to reappoint Ms. Sap for a two-year period to ensure continuity. To this end, the Supervisory Board will be temporarily expanded to 9 members.

Mr. Spanbroek, General Counsel and Company Secretary, acts as secretary to the Supervisory Board.

All members of the Supervisory Board comply with clause 2:142a of the Dutch Civil Code, which limits the number of positions on a supervisory or management board that a director may hold.

Name	Year of birth	Start of term	End of current term	Audit Committee	Nominating & Corporate Governance Committee		Strategy & Remuneration Organization Committee	
					C ¹	x	x	C ¹
G.J.A. van de Aast (Chair)	1957	14 April 2021	2025				x	
C.R.A. Guillouard	1965	15 April 2020	2023	C ¹				x
P.F. Hartman (Vice-Chair)	1949	15 April 2015 10 April 2019 ²	2023		x		C ¹	
K. Koelemeijer	1963	13 April 2022	2026				x	x
E.J.C. Overbeek	1967	4 September 2017 14 April 2021 ²	2025					C ¹
A.D. Plater	1967	10 September 2020	2025	x				x
J.C.M. Sap	1963	15 April 2015 10 April 2019 ²	2023	x			x	
C. Vergouw	1976	13 April 2022	2026		x			x

1 C: Chair

2 Reappointment

● Composition of the Supervisory Board

Gerard van de Aast



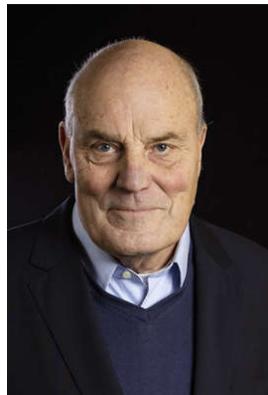
Mr. Van de Aast was appointed as a member of the Supervisory Board on 14 April 2021 and chairs the Supervisory Board since 13 April 2022. His current (first) term ends in 2025. Mr. Van de Aast is currently Chair of the Supervisory Board of NS Group and vice-chair of the Supervisory Board of Signify. Mr. Van de Aast is a seasoned executive with a recognized track record at board level in various sectors ranging from construction to software engineering, both in the Netherlands and abroad. His executive experience includes CEO positions at Reed Business, VolkerWessels and Imtech. Mr. Van de Aast is a Dutch citizen.

Catherine Guillouard



Ms. Guillouard was appointed member of the Supervisory Board on 15 April 2020. She will step down for personal reasons at the 2023 AGM. Ms. Guillouard is chair of the Supervisory Board of Ingenico and non-executive director at Airbus SE. Her previous roles include that of CEO of RATP Group, various positions at Air France, including that of CFO, the position of CFO at satellite company Eutelsat Communications and the position of CFO and Deputy CEO of the electrical parts distribution company Rexel. Ms. Guillouard is a French citizen.

Peter Hartman



Mr. Hartman was reappointed as a member of the Supervisory Board on 10 April 2019 and is currently its Vice-Chair. His current (second) term ends in 2023. Mr. Hartman is a member of the advisory board of Aviation Glass & Technology and member of the Advisory Board of Mainblades Inspections. He was vice-chair of the Supervisory Board of Air France/KLM Group from 2013 to 2017. Before that, he spent 40 years working for KLM, the last seven of those as CEO. Mr. Hartman is a Dutch citizen.

Kitty Koelemeijer



Ms. Koelemeijer was appointed as a member of the Supervisory Board on 13 April 2022. Her current (first) term of office ends in 2026. Ms. Koelemeijer is a full professor of Marketing at Nyenrode Business University. She has a strong background in marketing, supply chain management, innovation, digital transformation, retailing and digital commerce. Ms. Koelemeijer combines her academic work with several supervisory board roles at both listed and non-listed companies, advocacy groups and charities. She is a member of the Supervisory Board of Brunel and holds supervisory roles at NLInBusiness, Vereniging Eigen Huis and Fonds GehandicaptenSport. She is a member of the Dutch 'Societal Impact Team'. Ms. Koelemeijer is a Dutch citizen.

● Composition of the Supervisory Board

Edzard Overbeek



Mr. Overbeek was reappointed as a member of the Supervisory Board on 14 April 2021. His second term ends in 2025. Mr. Overbeek is CEO of HERE Technologies. Having spent nearly 30 years in the ICT industry, Mr. Overbeek has gained extensive experience in the global digital and communication industry. Prior to joining HERE Technologies, he held several management roles at Cisco, including leading the global services organization

and the Asia-Pacific, Japan and China region. Mr. Overbeek is a Dutch citizen.

Jolande Sap



Ms. Sap was reappointed as a member of the Supervisory Board on 10 April 2019. Her current (second) term ends in 2023. Ms. Sap is dedicated to making the business world and society at large more sustainable. She holds several supervisory board and other board-level posts, including member of the Supervisory Board of KPMG Netherlands, and non-executive director of Renewi PLC. In addition, she heads the Dutch 'Societal

Impact Team', and is a member of the board of the Dutch Emissions Authority. Between 2008 and 2012, Ms. Sap represented the Dutch Green party, GroenLinks, in the lower house of the Dutch parliament, during the last two years of which she was party leader. Before that, she worked as an economist in the fields of science, policy and business. Ms. Sap is a Dutch citizen.

Alejandro Plater



Mr. Plater was appointed as a member of the Supervisory Board on 10 September 2020. His current (first) term ends in 2025. Mr. Plater is Group COO at A1 Telekom Austria Group, where he has been working since 2015. As part of this position he is also the chair or a member of the supervisory board of various subsidiaries of that group. Prior to joining A1 Telekom Austria Group, Mr. Plater worked for 18 years for Ericsson in Mexico, Sweden and

Argentina. Earlier in his career, Mr. Plater worked at insurance companies Sud América Seguras and Chubb & Son. Mr. Plater is an Argentinian and a Swedish citizen.

Chantal Vergouw



Ms. Vergouw was appointed as a member of the Supervisory Board on 13 April 2022. Her current (first) term of office ends in 2026. Ms. Vergouw is the CEO of Dutch insurer Interpolis (part of Achmea). Prior to joining Interpolis in 2016, she held various management positions at ING. Ms. Vergouw brings extensive experience in the banking and insurance sector, most notably in areas such as digitalization, customer service, operations, marketing,

branding and omnichannel sales towards B2C and B2B markets. She holds presiding supervisory positions at the Animal Protection Association and the National Inspection Body for Animal Welfare (LID) in the Netherlands. Ms. Vergouw is a Dutch citizen.

● Supervisory Board Report

Supervisory Board report

The year 2022

While, early 2022, Europe was just recovering from the COVID-19 pandemic, a new crisis hit with the Russian attack on Ukraine. Although businesswise KPN has limited direct exposure to these countries, the impact on the people of Ukraine and broader society struck us all. KPN supported – and continues to support – where possible via its services, ranging from free calling to Ukraine to support at the national charity night and special TV channels for refugees.

Indirectly, KPN also felt the impact of the war. Supplies – mainly those coming over land from the eastern hemisphere – were once again hindered in transport and were therefore scarce. The rise in energy prices could be overcome in 2022 due to early purchases, but are expected to impact our results in 2023. The high inflation levels do not only impact our cost levels, but also the ability of our customers – as well as our employees – to pay for their cost of living. With that, it also touches upon our ability to offset cost increases via our tariffs. And with the continued geopolitical tension the need for strong cyber resilience and security increased.

Overall, KPN seems well positioned to help the Netherlands move forward. Our state-of-the-art networks – with our mobile network even scoring best in the world in a well-recognized test – enable all our customers to benefit from the digital possibilities of our time-era – and to overcome some of its challenges. As we have learned during the pandemic, hybrid working is a serious alternative for many people, often saving time, travel and fuel, and every day we find more digital services that help us overcome challenges, whether smaller or larger. With KPN's continued motto 'Security First', it additionally ensures that the services it offers are well-protected, and that supports its customers in ensuring their own security. All of this, combined with our continued progress on key sustainability themes, truly positions KPN as "the Network of the Netherlands".

Strategy and business

Throughout the year, the Supervisory Board continued to monitor the operational performance of the company, while also regularly reviewing key strategic developments, the implementation of our strategic plan, and the risks and threats facing us. Our focus remained on providing reliable service to our customers, ensuring the well-being of our employees, creating value for our shareholders and overall creating sustainable long-term value for our company and its stakeholders.

The second year of our 'accelerate to grow' strategy showed continued strong roll-out of our fiber network, despite some slow-downs due to a change in roll-out approach and scarce labor capacity. The continued recognition of the quality of our mobile network, in combination with the growth of our mobile customer base, can be seen as evidence of the right investment decisions in the past years. In broadband, we now have more customers on our fiber network than on copper, although our customer numbers are not yet at the level that we aspire. The Supervisory Board continued to monitor the Net Promotor Score as an important metric for the satisfaction of our customers, noting some decline throughout the year – also influenced by the general economic climate – while maintaining an important advantage over our main competitors. A major milestone was the inflection in our business market revenues, after many years of decline, which was even ahead of our own plans. This was also supported by a strong increase in our brand recognition in this market segment. With these achievements, the company has made another important step on its growth trajectory. Overall, the company realized its financial guidance for the year.

And while doing so, we continued to deliver on our sustainability ambitions, whether through our continued focus on reduction of Green House Gas emissions in our value chain, our work towards circularity or our contributions to social connections and a secure digital life. An important achievement in this area was realized in December, when KPN secured that, as of 2027, the majority of its energy consumption will be directly supplied by a new to be built wind farm at the North sea. We are proud to be continuously recognized as leader in this field, but remain focused on the important road that we – and all around us – still have to go.

The Supervisory Board, supported by its Committees, paid specific attention to various topics of relevance. A key subject in this respect was Cyber Security. An investigation initiated by the Dutch Radiocommunication Agency revealed the need for improvement in the security of our lawful intercept facilities, and new legislation required further scrutiny on our overall security controls. The Supervisory Board received several updates on the progress made, and urged Management to stay on top of this critical topic. A further matter of high importance for the company was regulation. The Supervisory Board reviewed and supported the approach made by management to provide an 8-year commitment for improved conditions for wholesale access to its fiber network, which were subsequently declared binding by ACM.

In the course of the year, the Supervisory Board started its discussions with management on the next phase of the company's

● Supervisory Board Report

strategy, following the current strategic plan period. These discussions, focus both on the next 3 year period, in which the focus will remain on the roll-out of fiber, as well as on the period thereafter – all with a focus on sustainable long-term value creation. This process will continue in the coming period, leading to announcements if and when due.

The Supervisory Board furthermore reviewed and where relevant approved various matters relating to the corporate matters of the company. It reviewed Management's proposals related to the share buyback program, considering the interests of its key stakeholders as well as prudent financial management, and thereupon approved buying back shares worth EUR 300m in 2022. The Supervisory Board also oversaw the refinancing of a hybrid bond by a new Green hybrid bond, and was pleased to see that, despite difficult market sentiment, the new bond was well received. It once more underpins the company's commitment to sustainability, also in its financing. Other corporate matters that the Board discussed included certain tax matters, as well as potential M&A opportunities.

Specific attention was paid to the company's employees and their well-being in complex times. The Supervisory Board applauded the one-off payments that the company made to its employees to support them in a time of financial distress. The Collective Labor Agreement that was concluded at the end of 2022 is considered to be fair and reasonable under the current circumstances. The Supervisory Board received regular updates on safety and well-being of our employees, both in terms of stress-levels and, following specific attention for the topic in the Netherlands, around potential inappropriate behavior towards our employees. During the summer the Supervisory

Board discussed the company culture, its core values and purpose with management. It took note of management's efforts in this field to ensure alignment between the company culture and its strategy, which included company-wide discussions on perceived contradictions in the current culture, and provided feedback on these topics.

The Supervisory Board aimed to stay in touch with not just the Board of Management, but also with staff throughout the company, whether in individual deep dive sessions with specialists or in recurring meetings with groups of employees and managers. It furthermore continued to have a regular dialogue with the Central Works Council and appreciated the continued open and professional relationship between the Central Works Council, the Board of Management, and the Supervisory Board.

About the Supervisory Board

The composition of the Supervisory Board changed last year with the regular resignation of Mr. Sickinghe and Ms. Zuiderwijk and the subsequent appointment of Ms. Koelemeijer and Ms. Vergouw in the vacancies that had arisen. Upon closure of the AGM in April 2022, Mr. van de Aast took over the chairmanship of the Supervisory Board from Mr. Sickinghe.

The Supervisory Board continues to have a good mix of backgrounds and experience, supporting a diverse view on a wide range of topics. An overview of the current skills and competences in the Supervisory Board is provided in the skills matrix. The full profile of the Supervisory Board is available on the company's website.

● Supervisory Board Report

Skills / Characteristics	Gerard van de Aast	Catherine Guillouard	Peter Hartman	Kitty Koelemeijer	Edzard Overbeek	Alejandro Plater	Jolande Sap	Chantal Vergouw
Business leadership	x	x	x		x	x		x
Industry knowledge (Telco/IT)	x				x	x		
Industry knowledge (Digitalization)	x			x	x	x		x
Industry knowledge (Cybersecurity)					x	x		
Commercial	x	x	x	x	x	x		x
Operational	x	x	x		x	x		x
International experience	x	x	x		x	x		
Society / government relations	x	x	x	x			x	
ESG				x			x	
Employment / social relations	x		x	x			x	x
Stock listing / financial markets	x	x		x		x		
Finance, Audit & Risk	x	x	x				x	x
Diversity								
<u>Executive / non-executive</u>								
(Full time) Executive position at other company		x			x	x		x
Mainly non-executive role	x		x	x			x	
<u>Gender</u>								
Male	x		x		x	x		
Female		x		x			x	x
<u>Nationality</u>								
Dutch	x		x	x	x		x	x
Non-Dutch		x				x		
<u>Age</u>								
Year of birth	1957	1965	1949	1963	1967	1967	1963	1976

At all times, the composition of the Supervisory Board was such that the members were able to act critically and independently of one another, the Board of Management and any particular interest involved, as provided for under best practice provisions 2.1.7 to 2.1.9 of the Dutch Corporate Governance Code. Throughout the year, seven out of eight members of the Supervisory Board, including the Chair, were independent from the company within the meaning of these provisions. Mr. Plater, who was nominated by América Móvil, is not considered independent under provision of the Dutch Corporate Governance Code. See Note 23 to the Consolidated Financial Statements for information on related party transactions.

At the end of the 2023 AGM, Ms. Sap and Mr. Hartman will have reached the end of their second term of office. In addition, Ms. Guillouard has decided to step down at the same moment due to personal reasons, in line with her decision to lay down her primary position as CEO of RATP Group.

For the vacancies arising, the Supervisory Board has nominated Mr. Noteboom, Mr. Heemskerk and Mr. Dijkhuizen. In order to safeguard continuity following a number of changes to its

composition in a relatively short period of time, the Supervisory Board furthermore proposes to reappoint Ms. Sap for a third term of two years. To this end, the Supervisory Board will be temporarily expanded to 9 members.

Mr. Noteboom is a seasoned executive with a recognized track record in Dutch and international business, most notably as CEO of Randstad Holding and - since his retirement from that role - in various non-executive positions.

Mr. Heemskerk is currently Secretary General of the European Round Table for Industry in Brussels. He held several positions in international business and politics, and was Minister for Foreign Trade within the Ministry of Economic Affairs, also responsible for IT & Telecoms regulations, from 2007 to 2010. His nomination is based on the enhanced right of recommendation of the Central Works Council.

Mr Dijkhuizen is an experienced executive with a strong track record as finance professional. He is currently member of the managing board and CFO of NIBC Holding NV, from which he will

● Supervisory Board Report

retire as of 30 June 2023. Previously he was partner and Chairman of the Board of Management at KPMG NV.

Ms. Sap has, during her eight-year tenure at KPN's Supervisory Board, made an important contribution to the board. Her clear views on the people and planet aspects of doing business, in addition to her valuable contributions to the Audit Committee and the Remuneration Committee, have helped the Board and the company make ample progress towards sustainability already at an early stage. Due to the temporary expansion of the Board to nine members, this nomination is also based on the enhanced right of recommendation of the Central Works Council.

The Central Works Council and Board of Management support all nominations.

The Supervisory Board is grateful to both Mr. Hartman and Ms. Guillouard for their valuable contribution to KPN over the past years. During his eight-year tenure, Mr. Hartman has continuously added his extensive experience in international business and Dutch society to the Board. As chair of the Remuneration Committee he has steered the company through a changing environment around executive remuneration, always focused on fair remuneration, both for the individuals, the company and society. Ms. Guillouard has, as chair of the Audit Committee, overseen reliable reporting and prudent financial management with diligence, while adding her broad business experience to the full Supervisory Board.

Since April 2022, the Supervisory Board has been equally divided between women and men. Subject to the appointment of the nominated candidates by the shareholders meeting, as of 12 April 2023 it will consist of three women and six men, i.e. for one-third of female members. Despite the decline in gender diversity, the Supervisory Board remains strongly committed to the principle, whether enacted or not, that a board should have a diverse composition, in gender, but also skills and experience.

We note that also the Board of Management currently has one third female members, as well as one third non-Dutch members.

The Supervisory Board annually evaluates its own performance. In 2022, the evaluation was performed by the incoming chair,

supported by the company secretary. The evaluation was based on a questionnaire, followed by interviews with all members of the Supervisory Board, and selected members of the Board of Management. The findings were discussed in a board meeting in December in which the Supervisory Board concluded that the board overall functioned in an effective and efficient way. A topic of attention was the continuity in the Supervisory Board, as well as in the Audit Committee, following a large number of changes in composition in a short period of time. The proposed reappointment of Ms. Sap for a third term of office aims to address this concern. The Supervisory Board furthermore discussed the best way to discuss and follow the development and execution of the strategy, as well as the ESG aspects thereof, and will review its committee structure to support this. The Supervisory Board agreed to spend sufficient time in the full board meetings for discussing regular business progress, and to treat cybersecurity, being an area of strategic interest for the company, as a matter for discussion in the full board, rather than the Audit Committee. Finally, it decided to reinforce its training program, with initial focus on such topics as spectrum and auctions, as well as ESG.

Meetings

The Supervisory Board met on 11 occasions in 2022, of which seven were regularly scheduled and four were scheduled ad hoc to discuss matters at hand.

The overall attendance at the Supervisory Board meetings was 95%. An overview of attendance per member of the Supervisory Board and per Committee is provided in the table below. In the event members could not join a meeting, as standard practice the chair discussed the matters at hand before and/or after the meeting to obtain the input and views of all members. Also outside of formal board meetings, members of the Supervisory Board were in regular contact.

Supervisory Board meetings normally commence and end with a closed session (i.e. without presence of management), in which the members prepare or evaluate the meeting. In the quarterly meetings, typically the full Board of Management is present to review the performance over the past period and discuss key strategic topics. For other or ad hoc meetings, different participation from the Board of Management may be agreed.

● Supervisory Board Report

Name	Board (11)	Audit (5)	RemCo (5)	NomCo (5)	SOC (1) ¹
Mr. Van de Aast	100%	100%	100%	100%	
Ms. Guillouard	91%	100%			100%
Mr. Hartman	100%		100%	100%	
Ms. Koelemeijer ²	88%		100%		0%
Mr. Overbeek	91%				100%
Mr. Plater	91%	100%			100%
Ms. Sap	100%	100%	100%		
Ms. Vergouw ²	100%			100%	100%
Mr. Sickinghe ³	100%		100%	100%	N/a
Ms. Zuiderwijk ³	100%		100%	100%	
Total	95%	100%	100%	100%	80%

1 The Strategy & Organization Committee functions as a standing sounding committee on strategic matters for the Board of Management. During 2022, it held one formal meeting and its members had ad hoc contacts with the CEO or other members of the Board of Management on specific matters related to the strategy

2 Member as of 13/4/2022

3 Member until 13/4/2022

Committee Reporting

The Supervisory Board has established four Committees that prepare the deliberation and decision making by the full board: the Audit Committee, the Remuneration Committee (RemCo), the Nomination and Corporate Governance Committee (NomCo) and the Strategy and Organization Committee (SOC). The main considerations and conclusions of each Committee were shared with the full Supervisory Board and the meeting documents and minutes are available to all members of the Supervisory Board, which takes the final decision in all matters.

Audit Committee

The Audit Committee had five meetings in 2022, all of which were also attended (at least in part) by the CFO, the external auditor Ernst & Young Accountants LLP (EY), the internal auditor and the director of Corporate Control. The chair of the Supervisory Board frequently attended the meetings as a permanent invitee. The Audit Committee – as well as the chair of the Supervisory Board – met separately with the external auditor.

In line with its tasks, the Audit Committee reviews and discusses all financially relevant matters that are presented to the Supervisory Board, most notably the quarterly and annual financial results and reports and (the financial and risk-related aspects of) the business plan. Overall, the Audit Committee was satisfied with the processes around external reporting as operated by the company, as was also confirmed by the reports from the internal and external auditors.

The Audit Committee has a specific focus on the effectiveness and outcome of the company's internal control framework and the risk management systems, for which it receives and reviews

reports by the internal auditor, the chief compliance & privacy officer and the external reporting review committee. Each quarter, the Audit Committee also reviews the conclusions of the external auditor, as included in its board report. The audit plans, both for the internal and external auditor, are annually reviewed by the Audit Committee, and are subsequently submitted to the full Supervisory Board for its approval.

During 2022, the Audit Committee paid specific attention to a number of matters within scope, including the company's shareholder remuneration, most notably the continued share buyback program, supporting the continuation thereof after having reviewed all relevant considerations around KPN's strategic options for cash allocation. Assurance related to specific requirements by certain business customers (third-party reporting) was a returning topic on the Committee's agenda, and the Committee was pleased to note the progress being made, while urging management to strive for further improvement in this domain. Specific attention was paid to the company's main tax files, including the finalization of the German tax audits (remaining from the E-Plus divestment) and the dispute around the VAT treatment of vouchers. The Audit Committee furthermore discussed other topics within its scope of attention, including compliance, health and safety. In this respect it paid specific attention to potential cases of inappropriate behavior, concluding that management's approach on such topics was considered adequate.

Finally, the Audit Committee evaluated the performance of EY over 2022. It concluded, also based on input from management and the internal auditor, that EY had performed well, taking a critical view with sufficiently safeguarded objectivity and independence, while taking an overall constructive approach

● Supervisory Board Report

whenever possible. It therefore recommended to the full Supervisory Board to nominate EY for appointment at the 2023 General Meeting of Shareholders as the company's independent external auditor for the financial year 2024.

Remuneration Committee

The Remuneration Committee met five times in 2022. The CEO and Chief People Officer attended (parts of) the committee meetings. The committee assisted the Supervisory Board in executing and reviewing KPN's remuneration policy and ensuring that members of the Board of Management are compensated consistent with that policy.

For an overview of the activities of the Remuneration Committee in 2022, and further details on the remuneration policy and its application, please refer to the Remuneration Report starting on page 90.

Nomination & Corporate Governance Committee

The Nomination and Corporate Governance Committee met on five occasions in 2022, mostly with the CEO and Chief People Officer attending. The Committee received regular updates on key HR related matters in the company from the Chief People Officer. It reviewed the performance of (the members of) the Board of Management on key leadership traits as well as operational performance. It also discussed the company's leadership pipeline and leadership development, with a specific focus on the management layer directly below the Board of Management, with the CEO and Chief People Officer.

Given the resignation of a number of its members in a limited number of years, the Committee devoted ample time to the succession planning of the Supervisory Board itself. Following input from management, the Central Works Council and the AGM, it concluded on an updated 'profile of the Supervisory Board', which gives guidance to all involved when proposing or recommending persons for appointment to the Supervisory Board.

For the vacancies arising in the Board in 2023, the Committee proposed the appointment of Mr. Noteboom and Mr. Dijkhuizen, and recommended to the full Supervisory Board to adopt the nomination by the Central Works Council of Mr. Heemskerk. In order to safeguard continuity following a number of changes to its composition in a relatively short period of time, the Committee proposed and discussed with the Central Works Council a temporary expansion of the Supervisory Board to nine members, and the subsequent reappointment of Ms. Sap for a period of two years. For further information on the proposed (re)appointments, see above - 'About the Supervisory Board'.

Finally, the Committee steered the annual evaluation of the Supervisory Board itself (see above - 'About the Supervisory Board').

Strategy & Organization Committee

The Strategy & Organization Committee functions as a standing sounding committee on strategic matters for the Board of Management. It held one formal meeting in 2022, in which it prepared, with the CEO and Chief Strategy Officer, the joint meeting of the Supervisory Board and Board of Management on the next phase of the strategy. It helped shape the agenda and select key topics for discussion, thus facilitating an effective discussion in the full meeting. Committee members also occasionally served as a sounding board for the CEO and other members of the Board of Management on specific matters related to the strategy.

● Supervisory Board Report

Financial Statements

The Financial Statements for the year ended 31 December 2022, were prepared by the Board of Management and approved by the Supervisory Board. The Report of the independent auditor, Ernst & Young Accountants LLP, is included in the section 'Other Information' on pages 175 - 185. The Supervisory Board recommends that the AGM adopts these Financial Statements.

Final remarks

The year behind us was challenging, for the world, the country and society at large. The Supervisory Board was pleased to recognize the role, as an enterprise but also as a corporate citizen, that KPN could take amidst these challenges. Our employees have remained highly engaged and committed. Our customers have rewarded us with their loyalty and continued appreciation. Our shareholders have shown their confidence in the strategy and results as evidenced by the relative share price performance.

We are proud to support the network of the Netherlands.

Gerard van de Aast, chair

Catherine Guillouard

Peter Hartman

Kitty Koolemeijer

Edzard Overbeek

Alejandro Plater

Jolande Sap

Chantal Vergouw

● Remuneration Report

Remuneration Report

Letter from the Chair of the Remuneration Committee

Dear stakeholder,

On behalf of the Remuneration Committee, I am pleased to report on the activities of the Committee in 2022 and to present the Remuneration Report 2022. This Remuneration Report was prepared in line with the requirements stemming from Dutch law and the Dutch Corporate Governance Code and will be submitted to the General Meeting of Shareholders for an advisory vote. The Remuneration Report 2021 was submitted to the AGM for an advisory vote in April 2022 and resulted in a 97.45% voting 'for' and 2.55% voting 'against'. This outcome supports the overall conclusion that KPN's remuneration report is considered to be in line with current best practices. No material changes are considered for the underlying guiding principles of the Remuneration report 2022.

The remuneration policy was last amended by the General Meeting of Shareholders in April 2020. The objective of the remuneration policy for the Board of Management is to attract, reward and retain necessary leadership talent, in order to support the execution of the company's strategic objectives.

We continued to make good progress on the execution of our strategy and our financial results were solid and continue to reflect a mix of an ongoing competitive environment and the impact of our strategic actions. Our long standing emphasis on sustainability remains an important part of our foundation. We continuously work towards reducing our ecological footprint, while helping our customers to limit theirs. Our Accelerate to Grow strategy focuses on accelerating our fiber roll-out, growing our customer footprint, improving the digital customer experience for families and businesses and renewing our way of working. We took great care of our people by introducing a new CLA for 2023 which gives our employees trust and growth in turbulent economic times. The Remuneration Committee believes that the main principles of the remuneration policy for the members of the Board of Management supports this strategy, so that there is no need to update this policy.

As part of its annually recurring tasks, the Committee defined the level of pay-out for individual members of the Board of Management as part of the STI plan 2021 and LTI grant 2019, and determined the financial and non-financial targets and performance criteria for the STI and LTI plans 2022.

The Supervisory Board maintains continued focus on ESG and our role in Dutch society and has introduced, for the LTI plan of 2022, a gender diversity target as one of the two non-financial targets with an equivalent weight of 15% of the total LTI plan. Interim updates on the development of this gender diversity target, as is prevalent for all LTI targets, will ensure that the Supervisory Board keeps track on this.

In the second half of the year, the Committee received updates on anticipated pay-out levels and scenarios in this respect. The chair of the Committee, a Remuneration Committee member and the Chief People Officer also discussed the remuneration policy and its application with the Central Works Council.

The committee considered whether the remuneration of the members of the Board of Management was still at the overall market-competitive pay-level, as these have not been changed since their appointment. During this process, the committee has viewed the remuneration of the Board of Management against the developments of the employment market peer group, as laid out in the Remuneration Policy, and the development of the general CLA increases for KPN employees. Considering all appropriate factors, the Committee has decided to increase the base salary of the members of the Board of Management with 2% as per 1 October 2022.

I trust that the Remuneration Report on the next pages provides our stakeholders with the relevant information on the implementation of the company's remuneration policy.

Peter Hartman
Chair of the Remuneration Committee

● Remuneration Report

Remuneration policy of the Board of Management

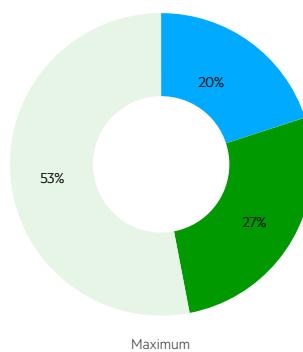
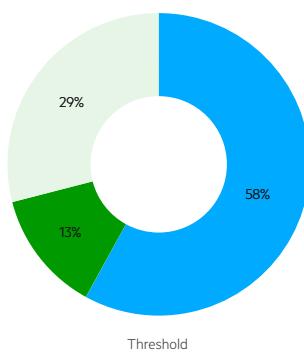
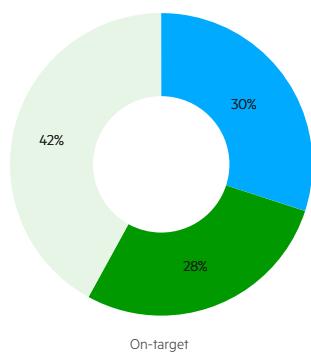
The main principles of KPN's remuneration policy, as described below, are based on a balanced approach between market competitive standards, the ratio between fixed and variable pay and the Economic and Environmental, Social & Governance (ESG) contribution of the company linked to the non-financial parameters of the variable pay:

- Paying at market-competitive level, considering all fixed and variable components of the remuneration policy, achieved through benchmarking against an employment market peer group
- Pay-for-performance by driving financial and non-financial performance that generates long-term sustainable and profitable growth. Target remuneration aims at 30-40% of pay in base pay and 60-70% in variable pay in order to maintain a strong alignment with the company's financial performance goals and long-term value creation strategy

- Differentiating by experience and responsibility through alignment of the pay with the responsibilities, relevant experience, required competences and performance of individual jobholders
- Balancing all stakeholder interests, including the views of shareholders and society, including dialogue with the works council, by complying with best practices in corporate governance, defining targets for the variable pay plans based on financial and non-financial targets and a transparent and clear remuneration.

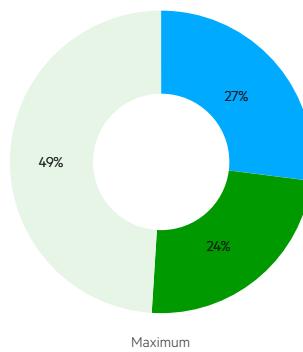
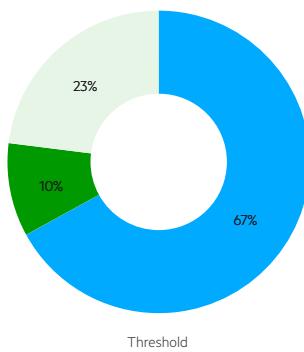
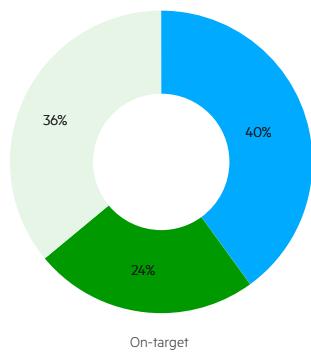
The following pie charts represent the fixed/variable pay mix for both the CEO and other Board members in the case of an on-target, threshold and maximum performance of the assigned financial and non-financial targets.

CEO



Base
STI
LTI

Other Board members



Base
STI
LTI

● Remuneration Report

KPN uses the following employment market peer group that consists of Dutch-listed and European sector-specific companies:

Companies:

Akzo Nobel	ASML	Telecom Italia
DSM	Signify	Telenor
Randstad	Telecom Austria	Proximus
Ahold Delhaize	Telefónica Deutschland	Swisscom
Philips	Telia Company	

The employment market peer group is used as a reference to evaluate the overall market-competitive pay-level for the members of the Board of Management.

Main features of the short-term and long-term incentive plans:

Short-term incentive (STI) plan

Component	Short-term incentives
Form of compensation	Cash, possible pay-out for maximum 50% in shares, if share ownership guideline levels have not yet been reached
Value determination (on-target level)	CEO: 90% of base salary and other members Board of Management: 60% of base salary
Financial- and non-financial targets	Financial (70% weight) and non-financial targets (30% weight), subject to the financial circuit-breaker; linear vesting
Scenario at or below threshold performance	At threshold: 25% of the on-target incentive paid. Below threshold: no pay-out
Scenario on-target performance	100% of the on-target incentive paid
Scenario maximum performance	150% of the on-target incentive paid

Long-term incentive (LTI) plan

Component	Long-term incentives
Form of compensation	Shares
Value determination (on-target level)	CEO: 135% of base salary and other members of the Board of Management: 90% of base salary
Financial- and non-financial targets	Financial (70% weight) and non-financial targets (30% weight); linear vesting
Scenario at or below threshold performance	At threshold: 25% of granted shares vest (TSR 75%, i.e. 50th percentile peer group). Below threshold: no vesting
Scenario on-target performance	100% of the granted shares vest (for TSR linear between 50th percentile and first position peer group)
Scenario maximum performance	200% of the granted shares vest (for TSR first position in the peer group)
Holding period	3 years after vesting

Remuneration of the Board of Management in 2022

The actual remuneration of the members of the Board of Management was determined by the Supervisory Board according to the remuneration policy as approved by the AGM.

● Remuneration Report

Remuneration packages of the individual current members of the Board of Management:

Member	Position	Base salary (EUR)	On-target STI (% base salary)	On-target LTI (% base salary)
Joost Farwerck	Chief Executive Officer	892,500	90%	135%
Chris Figuee	Chief Financial Officer	688,500	60%	90%
Jean-Pascal van Overbeke	Chief Consumer Market	663,000	60%	90%
Marieke Snoep	Chief Business Market	663,000	60%	90%
Babak Fouladi	Chief Technology & Digital Officer	663,000	60%	90%
Hilde Garssen	Chief People Officer	510,000	60%	90%

1 As of 1 October 2022

Annual base salary

The base salary levels of the Board of Management were increased with 2% as of 1st of October 2022. The Committee considered possible amendments to the base salaries of the members of the Board of Management, which had not been changed since their appointment in December 2019. It concluded

to increase the base salaries of the members of the Board of Management, taking due account the developments of the employment market peer group, as laid out in the Remuneration Policy, and the changes to the base salaries of the company's employees under the collective labor agreement.

Details actual pay-out level STI

Plan	Target	Weight	Bandwidth pay-out level					Outcome		
			Minimum	On-target	Maximum	Performance	Actual pay-out %	Minimum	On-target	Maximum
STI 2022 Financials (70% weighting):										
– Adjusted EBITDA AL	25%	25%	100%	150%	104%	26.08%			●	
– Service Revenue	25%	25%	100%	150%	124%	31.07%			●	
– FCF	20%	25%	100%	150%	121%	24.09%			●	
Non-financials (30% weighting):										
– NPS NL	15%	10	13	16	11,5	9.30%		●		
– Broadband base	15%	4,300,992	4,344,436	4,387,881	4,266,581	0.00%	●			
Total pay-out level	100%					90.54%		●		

The STI 2022 outcome reflects the fact that we delivered on our financial guidance aspects and ambitions for 2022. KPN remained fully on track with the execution of its strategy while maintaining a robust liquidity position. Together with improving service revenue trends, cost savings enabled us to protect our margins, deliver solid EBITDA growth and exceed our guidance in terms of free cash flow delivery. For broadband lines the actual performance was below the assigned threshold, mainly driven by challenging competitive dynamics in the wider broadband market.

The commitment our employees showed towards customer centricity and the reliability of products and services has been paying off, as illustrated by KPN's leading customer satisfaction in the Dutch market. Based on an ambitious on-target NPS NL target level of 13 set at the beginning of the year the actual performance ended up at 11.5.

● Remuneration Report

Members of the Board of Management are encouraged to acquire company shares equal to 250% of base salary for the CEO and 150% of base salary for the other members of the Board of Management. To further stimulate reaching the anticipated share

ownership levels, the STI is paid out, after deduction of taxes, for maximum 50% in shares if the share ownership guideline levels have not yet been reached.

Details actual pay-out (vesting) level LTI 2020: vesting period 2020-2022

Plan	Target	Weight	Bandwidth vesting level					Outcome		
			Minimum	On-target	Maximum	Performance	Actual vesting %	Minimum	On-target	Maximum
LTI 2020 Financials (70% weighting):										
– TSR versus peer group	25%	75% 10th position	100% linear vesting	200% 1st position	163%	41%			●	
– FCF	45%	25%	100%	200%	45%	20%		●		
Non-financials (30% weighting):										
– Reputation target	15%	67.6	69.5	71.6	71.6	30%			●	
– Circularity target	15%	82%	84%	86%	86%	30%			●	
Total vesting level	100%				121%			●		

For the LTI plan issued in 2020, the financial targets were based on relative TSR, 25% weight, and free cash flow, 45% weight and the non-financial targets were determined based on circularity and reputation, each with a weight of 15%. The LTI plan 2020 vests in April 2023 and the final TSR performance was determined mid-February 2023. The LTI plan vested based on the TSR performance that put KPN in fourth position in the TSR reference peer group that consists of 21 companies (i.e. STOXX 600 Europe Telecom index), supported by KPN's growing dividend and share buyback program. During the vesting period 2020-2022, KPN's results on cumulative free cash flow, supported by a strong cost savings discipline, performed above the ambitious threshold level of the bandwidth which contributed to a strong liquidity position at the end of 2022.

The reputation target is based on external data measured by RepTrak, the leading international organization devoted to advancing knowledge about corporate reputations. The external data are independently collected through an online survey among a representative sample of the general public. The bandwidth of the reputation target is based on the 12-month moving averages of the data collected by RepTrak prior to the vesting period. The reputation target for the LTI plan 2020 was set based on three attributes, i.e. 'well organized company', 'excellent managers' and 'positive influence on society'. The two attributes 'excellent managers' and 'well-organized company' were selected as main drivers to measure the successful implementation and execution of the new strategy, while the attribute 'positive influence on society' was selected for KPN's continuous commitment to Dutch society. The composite performance of the three attributes was 71.6 and outperformed the target level of the bandwidth set at

69.5, indicating a significant growth as part of the continuous improvement in KPN's reputation during the vesting period 2020-2022. In the vesting period KPN particularly improved on 'positive influence on society', one of the most impactful drivers of reputation. This is also the outcome of KPN continued contribution to society, sustainable operations and its vital role in society during the pandemic.

Circularity was selected as a non-financial target to reflect our long-term ambition on sustainability. We built a road-map to reach our ambition of having close to 100% circular operations by 2025. This road-map is governed by the Energy & Environmental Board. The circularity target was aligned to a close to 100% performance on re-use and recycling (i.e. outflow of materials and waste) by 2025. The on-target ambition for the performance period 2020-2022 on reuse and recycling was set at 84% versus a baseline of on or about 77% in 2019. The actual outcome in the performance period 2020-2022 is 86% and therefore at the maximum level. This reflects the significant effort particularly in networks and offices by our suppliers to improve transparency and timely reporting in our value chains across all significant materials flows.

Targets LTI 2022, vesting period 2022-2024

For the LTI plan issued in 2022, the financial targets are based on relative TSR with a 25% weighting and free cash flow with a 45% weighting. Under the LTI plan, the Supervisory Board selects two non-financial targets each year based on a predetermined set of five strategic categories. The non-financial targets for the LTI plan 2022 were determined based on the ESG related targets circularity and diversity, each with a weighting of 15%.

● Remuneration Report

Circularity was selected as a non-financial target to reflect our long-term sustainability ambitions. The circularity target was aligned to the reduction of scope 3 supply chain emissions. The on-target ambition for the performance period 2022-2024 was set versus the baseline in 2014. As part of our close to 100% circular ambition we collaborate with our partners to optimize our value chain towards our ambition of zero waste by 2025.

Diversity was selected as a non-financial target to maintain continued focus on our role in Dutch society. The diversity target being the percentage of female employees in senior management positions was selected to focus on the importance of diversity within KPN and the important role KPN has within the Dutch society.

Actual received remuneration of the Board of Management (in thousands of EUR)

See Note 5 for full disclosure of remuneration cost under IFRS principles (also including former members).

Name	Position	Year	Base	STI	Actual vested LTI ¹	Pension benefits	Social security/ other compensation ²	Total ³	% Fixed ⁴	% Variable ⁴
Joost Farwerck	CEO	2022	879	717	2,460	219	30	4,305	22%	78%
		2021	875	937	996	213	30	3,051	31%	69%
Chris Figuee	CFO	2022	678	368	1,260	117	37	2,460	29%	71%
		2021	675	482	-	110	37	1,304	58%	42%
Jean-Pascal van Overbeke	CCM	2022	653	355	1,220	154	15	2,397	29%	71%
		2021	650	464	634	153	15	1,916	37%	63%
Marieke Snoep	CBM	2022	653	355	1,220	126	30	2,384	29%	71%
		2021	650	464	514	117	30	1,775	40%	60%
Babak Fouladi	CTDO	2022	653	355	1,220	126	13	2,367	29%	71%
		2021	650	464	634	125	13	1,886	37%	63%
Hilde Garssen	CPO	2022	503	273	940	83	15	1,814	29%	71%
		2021	500	357	206	82	15	1,160	47%	53%

1 The 2022 amounts give an indication of the value of the shares that will vest in April 2023 which relate to the LTI 2020 grant. The 2021 amounts are the actual values of the shares that vested in April 2022 which relate to the LTI 2019 grant.

2 In addition to social security, the stated amounts include allowances that can be considered as indirect remuneration and relates to the value for the private use of the company car.

3 All remuneration was borne by KPN BV, please see Note 5 to the Consolidated Financial Statements for the individual pension benefits, on cost and social security.

4 Excluding pension cost, social security and other compensation.

● Remuneration Report

Change in remuneration for members of the Board of Management versus company performance and remuneration of an average employee over five years.

The table includes the current members of the Board of Management and a comparison is disclosed over the last five years as far as a 'like for like' comparison was possible (i.e. full year appointment during the five-year period).

	2018	2019	2020	2021	2022
Remuneration Joost Farwerck (EUR) ¹	1,384,000	1,669,000	2,301,000	3,051,000	4,305,000
Position	COO	COO/CEO	CEO	CEO	CEO
-Year on Year difference (EUR)	-520,000	285,000	632,000	750,000	1,254,000
-Year on year difference (%)	-27%	+21%	+38%	+33%	+41%
Remuneration CFO (EUR) ²	1,419,000	1,555,000	1,169,000	1,304,000	2,460,000
-Year on Year difference (EUR)	-603,000	136,000	-386,000	135,000	1,156,000
-Year on year difference (%)	-30%	+10%	-25%	+12%	+89% ³
Remuneration other current members on average (EUR) ⁴		92,500	1,112,000	1,684,000	2,241,000
-Year on Year difference (EUR)			1,019,500	572,000	557,000
-Year on year difference (%)			n/m	+51%	+33%
TSR position (part of LTI)					
-Position peer group	8th (no vesting)	6th (75% vesting)	6th (75% vesting)	8th (102.8% vesting)	4th (163% vesting)
Free cash flow (part of STI/LTI)	Performance:	Performance:	Performance:	Performance:	Performance:
-STI bandwidth pay-out level	Around maximum	Maximum	Between on-target and maximum	Between on-target and maximum	Between on-target and maximum
-LTI bandwidth pay-out level	Below threshold	Slightly above threshold	Slightly above threshold	Between threshold and on-target	Between threshold and on-target
EBITDA (part of STI)	Performance:	Performance:	Performance:	Performance:	Performance:
-Pay-out level STI bandwidth	Around on-target	Between on-target and maximum	Above on-target	Around on-target	Around on-target
Average cost per FTE (IFRS, EUR) ⁵	85,355	88,445	84,306	90,869	93,282
Pay ratio CEO (IFRS) ⁶	29	30	30	33	32

1 Remuneration as of 1 October 2019 as CEO. Prior to that the remuneration relates to his COO position.

2 The years 2018-2019 refer to the remuneration of Jan Kees de Jager. The 2020 amount is the remuneration of Chris Figee recalculated on a full-year basis considering his appointment on 1 February 2020.

3 Including the first vesting of the LTI award (2020 grant).

4 Since appointment to the Board of Management with an effective date of 1 December 2019.

5 Based on KPN CLA agreement, base salaries for the CLA population increased by 2.6% in 2022. Average cost per FTE (IFRS) in 2021 was impacted by annual differences in outcomes of incentive plans.

6 The pay ratio for the year 2018 relates to Maximo Ibarra.

The fluctuation in actual pay levels during the five reference years is predominantly the result of the outcome of the STI and LTI combined with the relative high emphasis on pay for performance reflected in the short-term and long-term incentive plans. The STI pay-out (in terms of performance versus the assigned targets) was aligned with the level of pay-out to senior management and the CLA employees as in general the same financial and non-financial targets were applied in these variable pay plans when compared to the assigned targets of the Board of Management. The average STI pay-out over the five-year period is close to 99% of the on-target level and the LTI plans vested over the five-year period on average close to 79% of the on-target level reflecting the ambitious targets set for variable incentive plans.

Considering the five-year results, variable pay on financial and non-financial targets is strongly linked with KPN's performance against peers (TSR) and its outcomes on the key metrics FCF and EBITDA AL ensuring alignment with the financial performance goals and the long-term value creation strategy. Increasing revenues were supported by ongoing savings from the simplification and digitalization of services. KPN generates growth in FCF which supports a progressive regular dividend and a robust liquidity position and the company remains committed to an investment grade credit profile.

● Remuneration Report

KPN's internal pay ratio

To ensure transparency and clarity, KPN applies an IFRS-driven methodology to calculate the internal pay ratio. KPN's internal pay ratio compares the total CEO compensation under IFRS principles with the average compensation of employees with a labour agreement with KPN (total personnel expenses of KPN employees divided by the average number of KPN FTEs).

KPN's calculated pay ratio in 2022 is 32 (2021: 33). This outcome is in line with KPN's acceptable bandwidths. For further details, see Note 5 to the Consolidated Financial Statements.

The table below presents the number of shares and current share plans for current board members.

	Grant date	Shares held as of 1 January 2022	Vested ¹	Granted, forfeited or sold ²	As of 31 December 2022	Pre-tax fair value on grant date (EUR) ³	Pre-tax market value on vesting date or end of lock-up in 2022 (EUR)	End of lock-up period
Joost Farwerck	14 April 2022	-	-	342,173	342,173	1,214,714		14 April 2028
	15 April 2021	416,740	-	-	416,740	1,125,198		15 April 2027
	16 April 2020	535,132	-	-	535,132	1,091,669		16 April 2026
	11 April 2019	302,514	-175,033	-127,481	-	874,265	995,834	11 April 2025
Chris Figee	14 April 2022	-	-	175,975	175,975	624,711		14 April 2028
	15 April 2021	214,324	-	-	214,324	578,675		15 April 2027
	16 April 2020	275,211	-	-	275,211	561,430		16 April 2026
Jean-Pascal van Overbeke	14 April 2022	-	-	169,457	169,457	601,572		14 April 2028
	15 April 2021	206,386	-	-	206,386	557,242		15 April 2027
	16 April 2020	265,018	-	-	265,018	540,637		16 April 2026
	11 April 2019	196,732	-144,200	-52,532	-	568,555	633,995	11 April 2025
Marieke Snoep	14 April 2022	-	-	169,457	169,457	601,572		14 April 2028
	15 April 2021	206,386	-	-	206,386	557,242		15 April 2027
	16 April 2020	265,018	-	-	265,018	540,637		16 April 2026
	11 April 2019	156,136	-90,339	-65,797	-	451,233	513,976	11 April 2025
Babak Fouladi	14 April 2022	-	-	169,457	169,457	601,572		14 April 2028
	15 April 2021	206,386	-	-	206,386	557,242		15 April 2027
	16 April 2020	265,018	-	-	265,018	540,637		16 April 2026
	11 April 2019	196,732	-144,200	-52,532	-	568,555	633,995	11 April 2025
Hilde Garssen	14 April 2022	-	-	130,352	130,352	462,750		14 April 2028
	15 April 2021	158,758	-	-	158,758	428,647		15 April 2027
	16 April 2020	203,860	-	-	203,860	415,874		16 April 2026
	11 April 2019	62,454	-36,135	-26,319	-	180,492	205,589	11 April 2025

¹ The 2019 share grant vested in April 2022 with a actual vesting percentage of 92% (excluding deferred dividend).

² The shares granted to the Board of Management represent 40% (2021: 41%) of the total number of shares and share-based awards granted in 2022 to all employees. The grant numbers do not include any deferred dividend during the vesting period. The deferred dividend during the vesting period will be additionally granted in shares.

³ Value is calculated by multiplying the number of share awards by the fair value at grant date.



● Remuneration Report

See the Insider transactions section for stock ownership of the members of the Board of Management and Supervisory Board and see Note 5 to the Consolidated Financial Statements for a further description and valuation of the share plans.

Claw-back clause

The claw-back clause was not applied in 2022.

Developments for 2023

The current remuneration policy was approved by the AGM in April 2020. During the course of 2023, the remuneration policy will be reviewed. Based on the outcome of this review, potential adjustments to the current remuneration policy or a reconfirmation of the current policy will be presented for approval to the AGM of Shareholders in April 2024, taking in consideration input and views from the stakeholder engagement process which will be conducted over the course of 2023.

Supervisory Board

The objective of the remuneration policy for the Supervisory Board is to reward the members appropriately for their work based on market-competitive fee levels. To the extent applicable, the same principles of the Board of Management remuneration policy apply to the Supervisory Board remuneration policy.

KPN has a fixed annual fee and annual committee membership fees for the members of the Supervisory Board. The eligibility for committee fees is limited to two committees (i.e. the two highest fees will be applicable).

AEX-listed companies with a two-tier board serve as a reference to determine market-competitive fee levels. Supervisory Board members do not receive any variable compensation and are not granted any shares as a form of pay.

The following table shows the annual fixed fee structure for the members of the Supervisory Board and the members of the committees.

Position	Annual fee in EUR
Chair Supervisory Board	100,000
Vice-chair Supervisory Board	70,000
Member Supervisory Board	60,000
Chair Audit Committee	20,000
Member Audit Committee	10,000
Chair Strategy & Organization Committee	12,500
Member Strategy & Organization Committee	7,500
Chair Remuneration Committee	10,000
Member Remuneration Committee	5,000
Chair Nominating & Corporate Governance Committee	10,000
Member Nominating & Corporate Governance Committee	5,000

● Remuneration Report

The following table shows the actual fee for each current member of the Supervisory Board.

Amounts in €		Membership fee 2022	Committee fees 2022	Total 2022	Total 2021	Total 2020	Total 2019	Total 2018
G.J.A. van de Aast	Chair	88,556	15,000	103,556	53,334	-	-	-
P.F. Hartman	Vice-chair ¹	60,000	15,000	75,000	75,000	75,000	75,000	76,875
C.R.A. Guillouard	Member	60,000	27,500	87,500	84,611	54,896	-	-
E.J.C. Overbeek	Member	60,000	12,500	72,500	72,500	72,500	72,500	71,250
A.D. Plater	Member	60,000	17,500	77,500	77,500	23,680	-	-
J.C.M. Sap	Member	60,000	15,000	75,000	75,000	75,000	70,000	70,000
K. Koelemeijer ²	Member	42,833	8,923	51,756	-	-	-	-
C. Vergouw ²	Member	42,833	8,923	51,756	-	-	-	-
D.W. Sickinghe ³	Chair	28,611	5,007	33,618	117,500	116,771	115,000	116,875
C.J.G. Zuiderwijk ³	Member	17,167	2,862	20,029	70,000	70,000	70,000	71,875
Total		520,000	128,215	648,215				

1 Mr. Hartman voluntarily receives the regular member fee instead of the fee for the Vice-chairman position.

2 Since appointment in the Supervisory Board with an effective date of 13 April 2022.

3 Up to 13 April 2022.

Developments for 2023

The current remuneration policy was approved by the AGM in April 2020. During the course of 2023, the remuneration policy will be reviewed. Based on the outcome of this review, potential adjustments to the current remuneration policy or a reconfirmation of the current policy will be presented for approval to the AGM of Shareholders in April 2024, taking in consideration input and views from the stakeholder engagement process which will be conducted over the course of 2023.

Financial Statements



Consolidated Financial Statements

Consolidated Statement of Profit or Loss	104
Consolidated Statement of Other Comprehensive Income	105
Consolidated Statement of Financial Position	106
Consolidated Statement of Changes in Equity	108
Consolidated Statement of Cash Flows	109
General notes to the Consolidated Financial Statements	110
Notes to the Consolidated Statement of Profit or Loss	115
Notes to the Consolidated Statement of Financial Position	129
Other notes to the Consolidated Financial Statements	162

Corporate Financial Statements

Corporate Statement of Profit or Loss	167
Corporate Statement of Financial Position	168
Notes to the Corporate Financial Statements	170

Other information

Statutory provisions on allocation of profit	175
Combined independent auditor's report and assurance report	176
Annex to the combined independent auditor's and assurance report	185

● **Consolidated Financial Statements**

Consolidated Statement of Profit or Loss

For the year ended 31 December

€ million	Notes	2022	2021 (Restated)
Revenues	[4.1]	5,324	5,270
Other income	[4.2, 21]	50	852
Total revenues and other income		5,374	6,122
Cost of goods & services		1,379	1,325
Personnel expenses	[5]	809	844
Information technology/Technical infrastructure		298	307
Other operating expenses	[6]	328	324
Depreciation, amortization and impairments	[10, 11, 19]	1,346	1,460
Total operating expenses		4,160	4,259
Operating profit		1,214	1,862
Finance income		8	-
Finance costs		-213	-223
Other financial results		-22	-11
Financial income and expenses	[7, 19]	-227	-234
Share of the profit/loss (-) of associates and joint ventures	[12, 21]	6	-2
Profit before income tax from continuing operations		993	1,627
Income taxes	[8]	-227	-344
Profit for the year from continuing operations		766	1,283
Profit/loss (-) for the year from discontinued operations		-5	5
Profit for the year		761	1,288
Profit attributable to non-controlling interests		-	1
Profit attributable to equity holders of the company		760	1,288
Earnings per ordinary share after taxes attributable to equity holders of the company for the year in EUR	[9]		
Basic (continuing operations)		0.18	0.30
Diluted (continuing operations)		0.18	0.30
Basic (discontinued operations)		-	-
Diluted (discontinued operations)		-	-
Basic (total, including discontinued operations)		0.18	0.31
Diluted (total, including discontinued operations)		0.18	0.31

● **Consolidated Financial Statements**

Consolidated Statement of Other Comprehensive Income

For the year ended 31 December

€ million	Notes	2022	2021
Profit for the year		761	1,288
Other comprehensive income, net of tax			
Other comprehensive income to be reclassified subsequently to profit or loss when specific conditions are met:			
Net gain/loss (-) on cash flow hedges	[16]	39	31
Currency translation differences	[16]	2	-7
Net other comprehensive income/loss (-) to be reclassified to profit or loss in subsequent periods		41	24
Items of other comprehensive income not to be reclassified subsequently to profit or loss:			
Retirement benefits remeasurements		5	52
Net gain/loss (-) on equity instruments designated at fair value through other comprehensive income	[13.1]	10	5
Net other comprehensive income/loss (-) not to be reclassified to profit or loss in subsequent periods		15	57
Other comprehensive income/loss (-) for the year, net of tax		56	81
Total comprehensive income for the year, net of tax		817	1,369
Total comprehensive income for the year, net of tax, attributable to:			
Equity holders of the company		817	1,368
Non-controlling interests		-	1
Total comprehensive income/loss (-) attributable to equity holders of the company arises from:		817	1,369
Continuing operations		822	1,363
Discontinued operations		-5	5

● Consolidated Financial Statements

Consolidated Statement of Financial Position

Assets

€ million	Notes	31 December 2022	31 December 2021
Non-current assets			
Property, plant and equipment	[10]	5,568	5,463
Intangible assets	[11]	2,884	3,006
Right-of-use assets	[19]	848	804
Equity investments accounted for using the equity method	[12]	496	511
Equity investments measured at fair value through other comprehensive income	[13.1]	76	49
Derivative financial instruments	[13.3]	125	212
Other financial asset at fair value through profit or loss	[13.1, 21]	168	204
Deferred income tax assets	[8]	261	506
Trade and other receivables	[14.1]	95	77
Contract assets and contract costs	[14.2]	50	36
		10,571	10,869
Current assets			
Inventories		49	37
Trade and other receivables	[14.1]	632	677
Contract assets and contract costs	[14.2]	84	45
Income tax receivables		76	2
Derivative financial instruments	[13.3]	23	-
Other financial asset at fair value through profit or loss	[13.1, 21]	28	14
Other current financial assets	[13.1]	100	300
Cash and cash equivalents	[15]	399	793
		1,392	1,868
Total assets		11,963	12,737



● Consolidated Financial Statements

Equity and liabilities

€ million	Notes	31 December 2022	31 December 2021
Equity			
Share capital		161	168
Share premium		7,960	8,445
Other reserves		-106	-358
Retained earnings		-5,356	-5,523
Equity attributable to holders of perpetual capital securities		990	496
Equity attributable to equity holders of the company		3,650	3,228
Non-controlling interests		2	2
Total equity	[16]	3,652	3,230
Non-current liabilities			
Borrowings	[13.2]	5,171	6,067
Lease liabilities	[19]	770	736
Derivative financial instruments	[13.3]	366	64
Deferred income tax liabilities	[8]	2	-
Provisions for retirement benefit obligations	[17]	49	92
Provisions for other liabilities and charges	[18]	131	150
Contract liabilities	[20]	130	169
Other payables	[20]	8	8
		6,629	7,286
Current liabilities			
Trade and other payables	[20]	1,140	1,176
Contract liabilities	[20]	169	186
Borrowings	[13.2]	196	677
Lease liabilities	[19]	153	137
Derivative financial instruments	[13.3]	1	-
Income tax payables	[8]	-	17
Provisions for other liabilities and charges	[18]	23	27
		1,682	2,221
Total equity and liabilities		11,963	12,737

● Consolidated Financial Statements

Consolidated Statement of Changes in Equity

€ million, except number of shares	Notes	Subscribed ordinary shares	Share capital	Share premium	Other reserves	Retained earnings	Equity attributable to holders of perpetual capital securities			Equity attributable to holders of the controlling company	Non- controlling interests	Total equity
Balance at 31 December 2020		4,202,844,404	168	8,445	-199	-6,289	496		2,621	1	2,622	
Profit for the year			-	-	-	1,288	-		1,288	1	1,288	
Other comprehensive income for the period			-	-	24	57	-		81	-	81	
Total comprehensive income for the period			-	-	24	1,344	-		1,368	1	1,369	
Share based compensation	[5]		-	-	-	-14	-		-14	-	-14	
Sold treasury shares			-	-	17	-	-		17	-	17	
Dividends paid			-	-	-	-554	-		-554	-	-554	
Paid coupon perpetual hybrid bond	[13.2]		-	-	-	-10	-		-10	-	-10	
Share repurchase	[16]		-	-	-200	-	-		-200	-	-200	
Total transactions with owners, recognized directly in equity			-	-	-183	-578	-		-761	-	-761	
Balance at 31 December 2021		4,202,844,404	168	8,445	-358	-5,523	496		3,228	2	3,230	
Balance at 1 January 2022		4,202,844,404	168	8,445	-358	-5,523	496		3,228	2	3,230	
Change in accounting policies	[2]		-	-	-	-11	-		-11	-	-11	
Balance at 1 January 2022 (restated)		4,202,844,404	168	8,445	-358	-5,534	496		3,217	2	3,219	
Profit for the year			-	-	-	760	-		760	-	761	
Other comprehensive income for the period			-	-	41	15	-		56	-	56	
Total comprehensive income for the period			-	-	41	776	-		817	-	817	
Share based compensation	[5]		-	-	-	-9	-		-9	-	-9	
Sold treasury shares			-	-	14	-	-		14	-	14	
Treasury shares withdrawn	[16]	-165,524,811	-7	-485	492	-	-		-	-	-	
Issuance of perpetual hybrid bond	[13.2]		-	-	-	-	494		494	-	494	
Dividends paid			-	-	-	-571	-		-571	-	-571	
Paid coupon perpetual hybrid bond	[13.2]		-	-	-	-17	-		-17	-	-17	
Share repurchase	[16]		-	-	-300	-	-		-300	-	-300	
Other			-	-	5	-	-		5	-	5	
Total transactions with owners, recognized directly in equity		-165,524,811	-7	-485	211	-597	494		-384	-	-384	
Balance at 31 December 2022		4,037,319,593	161	7,960	-106	-5,356	990		3,650	2	3,652	

● **Consolidated Financial Statements**

Consolidated Statement of Cash Flows

For the year ended 31 December

€ million	Notes	2022	2021
Profit before income tax from continuing operations		993	1,627
Adjustments for:			
- Net financial expense	[7]	227	234
- Share-based compensation	[5]	7	6
- Share of the profit/loss (-) of associates and joint ventures		-6	2
- Depreciation, amortization and impairments	[10, 11, 19]	1,346	1,460
- Other income and non-cash income and expense	[4.2, 21]	-50	-852
- Changes in provisions (excluding deferred taxes)		-64	-56
Changes in working capital relating to:			
- Current assets		-7	-49
- Current liabilities		11	53
Income taxes paid/received		-50	-77
Interest paid/received		-220	-218
Net cash flow from operating activities from continuing operations		2,188	2,129
Net cash flow from operating activities from discontinued operations		-	-1
Net cash flow from operating activities		2,188	2,128
Acquisition of and investments in subsidiaries, associates and joint ventures (net of acquired cash)	[12, 21]	-37	-30
Disposal of subsidiaries and associates (net of cash)	[21]	14	196
Tax paid on disposal of subsidiaries and associates	[12]	-34	-197
Investments in software		-245	-227
Investments in other intangible assets		-	-4
Investments in property, plant and equipment		-961	-989
Disposals of property, plant and equipment and intangible assets		-	79
Acquisition or disposal of other financial assets	[13.1]	184	-37
Net cash flow from investing activities from continuing operations		-1,079	-1,209
Net cash flow from investing activities from discontinued operations		-4	-3
Net cash flow from investing activities		-1,083	-1,212
Dividends paid		-571	-554
Share repurchase	[16]	-300	-200
Paid coupon perpetual hybrid bonds		-17	-10
Issuance of perpetual hybrid bonds		493	-
Proceeds from borrowings	[13.2]	-	689
Repayments of borrowings and settlement of derivatives	[13.1, 13.2]	-981	-498
Repayments of lease liabilities	[19]	-124	-135
Other		2	-9
Net cash flow from financing activities from continuing operations		-1,499	-717
Net cash flow from financing activities from discontinued operations		-	-
Net cash flow from financing activities		-1,499	-717
Total net cash flow from continuing operations		-390	203
Total net cash flow from discontinued operations		-4	-4
Changes in cash and cash equivalents		-394	198
Net cash and cash equivalents at 1 January		793	594
Net cash and cash equivalents at 31 December		399	793
Bank overdrafts		-	-
Cash and cash equivalents	[15]	399	793

● Consolidated Financial Statements

General notes to the Consolidated Financial Statements

[1] General information

Koninklijke KPN N.V. (KPN or the company) was incorporated in 1989 and is domiciled in the Netherlands. KPN is registered at the Chamber of Commerce (file no. 02045200). The address of KPN's registered office is Wilhelminakade 123, 3072 AP, Rotterdam. KPN's shares are listed on Euronext Amsterdam.

KPN is a leading telecommunications and IT provider in the Netherlands, offering fixed and mobile telephony, fixed and mobile broadband internet and TV to retail and business consumers. KPN is market leader in the Netherlands in infrastructure and network-related IT solutions to business customers. KPN also provides wholesale network services to third parties.

The Financial Statements were authorized for issue by both the Supervisory Board and the Board of Management on 24 February 2023 and are subject to adoption by the Annual General Meeting of Shareholders on 12 April 2023.

[2] Summary of significant accounting policies

Basis of preparation

The Consolidated Financial Statements of KPN have been prepared in accordance with International Financial Reporting Standards as adopted by the European Union (IFRS) and with the statutory provisions of Part 9, Book 2 of the Dutch Civil Code, under the historical cost convention, except for certain equity investments accounted for using the equity method, and certain equity investments and derivative financial instruments measured at fair value, and on a going-concern basis.

All amounts are presented in millions unless stated otherwise. Certain figures may not tally exactly due to rounding. In addition, certain percentages may have been calculated using rounded figures.

Restatement of comparative financial information

Some comparative financial information for 2021 has been restated. The restatements consisted of reclassifications within revenues categories and reclassifications of expenses between the various operating expense categories. The adjustments were based on further review of the nature of these revenues and expense types. The impact on total revenues and total operating expenses is limited as both decreased by EUR 1m.

Summary of significant accounting policies

The general accounting policies as applied are described below. Significant accounting policies are described in the Notes to the Consolidated Financial Statements.

Changes in accounting policies and disclosures

KPN applies new standards and amendments issued by the International Accounting Standards Board (IASB), when effective and endorsed by the European Union. KPN has not early adopted any standards.

KPN has concluded that the following, endorsed, amendments effective 1 January 2022 did not have a significant impact:

- IFRS 3 regarding the added exception to avoid potential 'day 2' gains or losses from contingent assets and liabilities or levies; and
- IAS 16 regarding recognition of proceeds generated by items of property, plant & equipment during their construction phase.

KPN has not applied the amendments to IFRS 16 regarding COVID-19 related rent concessions.

Amendment to IAS 37: Onerous contracts

The amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets specify which costs must be included when assessing whether a contract is onerous or loss-making using a 'directly related cost approach'.

Costs that relate directly to a contract to provide goods or services include both incremental costs (such as costs of direct labor and materials) and an allocation of costs directly related to contract activities (such as depreciation of equipment used to fulfill the contract as well as costs of contract management). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. Previously, KPN did not consider costs of own personnel as incremental costs, whereas costs of externally hired personnel are included in the incremental costs.

The amendments have been endorsed by the EU and are effective as of 1 January 2022 with mandatory prospective application for contracts for which KPN had not yet fulfilled all of its obligations at the beginning of the annual reporting period in which it first applies the amendments (2022). The amendments resulted in an increase of the provisions for onerous contracts of EUR 14m on 1 January 2022. The impact on equity (net of tax) is EUR 11m. The cumulative effect of initially applying

● Consolidated Financial Statements

the amendments was recognized as an adjustment to retained earnings at 1 January 2022.

Future implications of new and amended standards and interpretations

The IASB has issued several new standards and amendments to existing standards with an effective date of 1 January 2023 or later.

KPN has concluded that the following, endorsed, amendments effective 1 January 2023 (or later) will not have a significant impact:

- Amendments to IAS 12: Deferred tax related to assets and liabilities arising from a single transaction;
- IAS 1 on the presentation of financial statements and disclosure of accounting policies; and
- Amendments to IAS 8 Accounting policies, changes in accounting estimates and errors: definition of accounting estimates.

KPN is reviewing the impact of the following amendments which are effective as of 1 January 2023 (or later) but have not yet been endorsed:

- IFRS 10 and IAS 28 regarding the sale or contribution of assets between an investor and its associate or joint venture;
- Amendments to IAS 1 on classification of liabilities as current or non-current; and
- Amendments to IFRS 16 on measurement of the lease liability in a sale and leaseback transaction.

KPN currently does not expect a significant impact from these standards.

Basis of consolidation

KPN's Consolidated Financial Statements include the financial results of its subsidiaries and incorporate KPN's share of the results from associates.

Subsidiaries are all entities directly or indirectly controlled by KPN. 'Control' is defined as the power over an entity, i.e. the ability to govern the financial and operating policies, resulting in obtaining the variable returns from the entity's activities.

Subsidiaries are fully consolidated from the date on which control is obtained by KPN and are deconsolidated from the date on which KPN's control ceases. All intercompany transactions, balances and unrealized results on transactions with subsidiaries are eliminated.

Changes in ownership interests in subsidiaries without change of control that do not result in loss of control are accounted for as equity transactions. Gains or losses on disposals to non-controlling interests are also recorded in equity.

Foreign currency translation

The Financial Statements are presented in euro (EUR), which is KPN's presentation currency as well as functional currency.

Transactions in foreign currencies are translated into euro using the exchange rates applicable at transaction date. At reporting date, monetary assets and liabilities denominated in foreign currencies are translated to euro using the rates at reporting date. Exchange rate differences are recognized in profit or loss - except when these differences are related to qualifying cash flow hedges and qualifying net investment hedges, in which case the exchange rate differences are recorded in Other Comprehensive Income (OCI).

Exchange rate differences on non-monetary assets and liabilities are reported as part of the fair value gain or loss from that asset or liability. Exchange rate differences arising from the translation of the net investment in foreign entities, of borrowings and other currency instruments designated as hedges of such investments are recognized in OCI.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate at the reporting date.

Subsidiaries

For consolidation purposes, the results and financial position of subsidiaries are translated into euro at the closing rate of the date of the financial position (assets and liabilities) or at the average exchange rates applicable for the specific reporting period (income and expenses). All resulting exchange differences are recognized in OCI.

Statement of Cash Flows

The Statement of Cash Flows is prepared using the indirect method. Cash flows denominated in currencies other than euro are translated at average exchange rates. Cash flows relating to interest and taxes on profits and tax deductions relating to interest on perpetual hybrid bonds are included in the cash flow from operating activities. Tax payments directly related to disposal of subsidiaries are presented as part of the cash flows from investing activities when separately identifiable. The consideration paid in cash for acquired subsidiaries is included in the cash flow from investing activities, net of cash acquired. Cash flows resulting from the disposal of subsidiaries are disclosed separately, net of cash sold.

● Consolidated Financial Statements

Significant accounting estimates, judgments and assumptions made by management

Significant accounting estimates, judgments and assumptions made by management are evaluated continuously and are based on historic experience and other factors, including expectations of future events thought to be reasonable under the circumstances. Actual results may deviate from the estimates applied. Estimates are revised when material changes to the underlying assumption occur.

The accounting estimates, judgments and assumptions deemed significant to KPN's Financial Statements relate to:

Subjects	Notes
Determination of deferred tax assets for losses carry forward and provisions for tax contingencies	Notes 8 and 22
Determination of value in use of cash-generating units for goodwill impairment testing	Note 11
Assessments of exposure to credit risk and financial markets risk	Note 13.4
The 'more likely than not' assessment required to determine whether or not to recognize a provision for idle cables, which are part of a public electronic communications network	Notes 18 and 22
The assessment of the lease terms deemed reasonably certain of KPN's lease contracts and the incremental borrowing rate used to measure the lease liabilities	Note 19
Assessments whether revenue for variable consideration is probable or highly probable. This concerns revenue related to disputes and revenue related to VAT regarding unused multipurpose bundles	Notes 4
Several assessments related to KPN's 50% interest in Glaspoort B.V. (classified as a joint venture): - The assessment whether KPN has joint control over Glaspoort; - The assessment whether operational contracts between Glaspoort and KPN are at arm's length; - The valuation of KPN's interest in the joint venture (initially set at fair value, subsequently accounted for using the equity method subject to periodic impairment testing); and - The valuation of the contingent cash consideration (financial asset at fair value through profit or loss).	Notes 12, 13.1 and 21

In preparing the Financial Statements, KPN has applied the concept of materiality to the presentation and level of disclosures. Only essential and mandatory information is disclosed that is relevant to a reader's understanding of these Financial Statements.

Sustainability and climate change

KPN is continuously enhancing, improving and modernizing its network to realize its sustainability goals, which include: providing internet access for everyone and everything and stimulate social inclusion, while building the most efficient network using technology to reduce energy consumption despite higher data usage. Through its sustainability efforts, KPN not only reduces its own energy consumption but also enables its customers to do the same. KPN's increasing fiber footprint and the migration from copper to fiber network contributes to the realization of KPN's sustainability goals. Through participation in its joint venture Glaspoort B.V., KPN is accelerating its nationwide ambitions. In mobile, initiatives include the modernization of broadcasting and customer premises equipment. Other initiatives include the reduction of KPN's leased fleet and replacement of expired vehicle leases with electric vehicles only. The Board of Management has committed to the sustainability goals by adding non-financial sustainability linked targets to the LTI plans, such as the reduction of supply chain emissions (scope 3) and gender ratio targets.

In 2022, KPN issued a Green Hybrid Bond, demonstrating its commitment to the realization of its goals (see Note 13.2).

KPN has analyzed whether the above has had any impact on the valuation of KPN's assets, liabilities and financial results and concluded the impact is limited. The migration to new generation network equipment has resulted in an acceleration of depreciation charges for the assets to be replaced. KPN is also investing in its employees by facilitating suitable solutions to continue working from home.

● Consolidated Financial Statements

[3] Segment reporting

Operating segments are reported in a manner consistent with the internal reporting to KPN's CEO, who is the Chief Operating Decision-Maker according to IFRS 8 Operating Segments.

Comparative financial information for 2021 has been restated as several smaller units were transferred from the Consumer and Business segments to Network, Operations & IT (NOI) and Other. In addition, some limited expenses were reclassified between existing operating expense categories based on further review of their nature. The impact on the segment information was not material.

Almost all of KPN's operating activities are in the Netherlands.

Operating segments

KPN's operating segments comprise of Consumer, Business, Wholesale and Network, Operations & IT (NOI). For general information on these segments, read more in sections Shareholder value and Customer value.

Other

'Other' comprises KPN Holding, Corporate Center and eliminations. KPN accounts for its interest in Glaspoort within this segment.

Segmentation 2022

€ million	Notes	Consumer	Business	Wholesale	NOI	Other (incl. eliminations)	Total KPN Group
Statement of Profit or Loss							
External revenues ¹		2,849	1,793	658	22	2	5,324
Other income	[4.2]	-	1	-	49	-	50
Inter-division revenues		8	5	32	1	-45	-
Total	[4]	2,857	1,798	689	72	-43	5,374
Operating expenses		-989	-942	-120	-582	-180	-2,814
EBITDA		1,868	857	569	-510	-223	2,560
DA&I		-153	-58	-8	-1,061	-66	-1,346
Operating result		1,715	799	561	-1,571	-289	1,214
Share of profit or loss of associates and joint ventures	[12]	-	-	-	-	6	6
EBITDA		1,868	857	569	-510	-223	2,560
DA&I right-of-use assets	[19]	-12	-2	-1	-60	-56	-131
Interest lease liabilities	[19]	-1	-	-	-13	-4	-18
EBITDA after lease		1,854	855	568	-583	-282	2,411
Total assets ²		4,368	2,862	623	9,254	-5,144	11,963
Total liabilities		4,366	2,740	624	9,264	-8,684	8,311

1 External revenues mainly consist of rendering of services

2 Total assets of Other includes the carrying value of Glaspoort (EUR 489m, see Note 12) and the deferred consideration related to Glaspoort (EUR 197m, see Note 13.1)

● Consolidated Financial Statements

Segmentation 2021 (restated)

€ million	Notes	Consumer	Business	Wholesale	NOI	Other (incl. eliminations)	Total KPN Group
Statement of Profit or Loss							
External revenues ¹		2,845	1,754	646	13	11	5,270
Other income	[4.2]	1	1	-	20	830	852
Inter-division revenues		11	7	38	1	-57	-
Total	[4]	2,857	1,762	684	34	785	6,122
Operating expenses		-984	-941	-132	-582	-161	-2,800
EBITDA		1,873	821	553	-549	624	3,322
DA&I		-176	-57	-8	-1,162	-57	-1,460
Operating result		1,697	764	545	-1,711	567	1,862
Share of profit or loss of associates and joint ventures	[12]	-	-	-	-	-2	-2
EBITDA							
DA&I right-of-use assets	[19]	-12	-2	-1	-63	-45	-123
Interest lease liabilities	[19]	-1	-	-	-14	-5	-20
EBITDA after lease		1,860	818	552	-626	575	3,180
Total assets ²		4,398	2,846	629	9,343	-4,480	12,737
Total liabilities		4,401	2,727	630	9,354	-7,605	9,507

1 External revenues mainly consist of rendering of services

2 Total assets of Other includes the carrying value of Glaspoort (EUR 503m, see Note 12) and the deferred consideration related to Glaspoort (EUR 218m, see Note 13.1)

● Consolidated Financial Statements

Notes to the Consolidated Statement of Profit or Loss

[4] Revenues and Other income

[4.1] Revenues

€ million	2022	2021 (Restated)
Service revenues	4,909	4,860
Non-service revenues	385	377
Revenues from contracts with customers	5,295	5,237
Rentals and other revenues	29	33
Revenues	5,324	5,270

Service revenues are all revenues recognized over time and includes fees for usage of KPN's network and facilities, e.g. monthly subscription fees and revenues from customer-specific IT solutions.

Non-service revenues are revenues recognized at a point in time and includes, for example, sale of handsets, peripheral equipment as well as software licenses sold without ongoing support.

The application of KPN's accounting policies on revenue recognition, including relevant judgments, and information about KPN's performance obligations is summarized below:

Service revenues

- Exploitation services are considered a separate performance obligation. Revenue is recognized over time during the contract period.
- Network access is considered a separate performance obligation. Revenue is recognized over time during the subscription period. Content, e.g. TV content, is generally considered part of the network access performance obligation and revenue is recognized on a gross basis.
- Revenues for streaming services, which are contracted and billed to customers separately, are recognized on a net basis if KPN acts as an agent.
- One-off connection fees are not separate performance obligations as they are considered to be necessary to get access to the network. The fees charged to the customer are recognized as a contract liability and bundled with the performance obligation for network access.
- Transaction-related dealer fees paid to acquire or retain subscribers are capitalized as contract costs and expensed on a straight-line basis over the contract term of the underlying customer contract.

• Installation services offered to consumers are generally considered a separate performance obligation, as customers can choose to use an engineer for installation or to install the equipment themselves. Installation services that are treated as a separate performance obligation include installation of customer premises equipment (CPE), e.g. set-top boxes, setting up in-home WiFi, and installation of customers' own devices. Revenue from installation services is allocated to the installation service at the start of the contract and recognized as revenue at a point in time (at completion of the installation).

The difference between the amount of revenue recognized and the amount charged to the customer is recognized as a contract asset. Most CPE is considered part of KPN's network. These hardware elements are capitalized as part of property, plant and equipment as KPN retains ownership and control over the economic benefits, and are therefore not considered a separate performance obligation nor an identified asset in terms of IFRS 16.

- Transition and transformation projects for establishing new services to large business customers (for example workspace management services) are considered separate performance obligations, as the customer can benefit from the project deliverables on their own. Revenue is recognized over time (percentage of completion during the project phase). The projects sometimes include the delivery of peripheral equipment and software licenses. These are not considered as separate performance obligations if KPN performs the installation and/or must provide ongoing support as part of the transition project. If not part of a transition project, revenue for peripheral equipment is recognized as revenue at a point in time (upon delivery of the equipment), whereas revenue for licenses with ongoing support is recognized over time (on a monthly basis).
- The Wholesale segment bills customers at (regulated) tariffs that may be disputed by other operators and regulators. A contract liability is recognized in case the invoiced revenue is not considered highly probable.

Non-service revenues

- Handset sales are a separate performance obligation and are recognized as revenue at a point in time (upon delivery of the handset equipment). The amount of revenue allocated to the handset less the amount charged to the customer upfront is recognized as a contract asset if the payment to be received for the handset is conditional on the delivery of telco services, and as a financial receivable if the payment to be received is unconditional.

● Consolidated Financial Statements

- A handset sale combined with a postpaid subscription is treated as a consumer loan under the Dutch Financial Supervision Act (Wet op het financieel toezicht, Wft) if the consumer customer repays the handset in monthly instalments and the credit amount is above EUR 250. These handset instalment payments are not conditional on the delivery of the telco services. Therefore, a financial receivable is recognized for the instalments to be received (see Note 14). These receivables do not include a significant financing component and are therefore measured at nominal value.
- The handsets sold and delivered by third parties, related to KPN subscription contracts, do not qualify as performance obligations for KPN. Handset-related dealer fees result in an unbilled receivable on the Statement of Financial Position, which is decreased when handset instalments are billed to the end-customer.

In 2021 and 2022, the time value of money was not significant and therefore not recorded.

Generally, the payment term is two weeks in the consumer market and 30 days in the business market.

KPN applies the practical expeditives provided in IFRS 15 under which disclosure of amounts of consideration allocated to the remaining performance obligations (unsatisfied or partially satisfied) do not need to be disclosed. This applies to contracts with an original expected duration of less than one year or when KPN bills a fixed amount for network services provided. KPN recognizes revenue from network services in the amount to which KPN has a right to invoice the customer and this amount corresponds directly with the value of KPN's performance completed to date.

Revenues, disaggregated per segment, including interdivision revenues

The disaggregation of the revenues per segment has been restated. Within the Business segment, EUR 137m service revenues that are related to core telco products have been restated from Tailored Solutions (large corporate customers with integrated solutions) to LCE (large corporate enterprises). Within the Consumer segment, EUR 8m revenues of a few services were restated from non-service revenues to service revenues (see Note 2).

€ million	2022	2021 (Restated)
Fixed-Mobile service revenues	1,494	1,459
Fixed-only service revenues	758	782
Postpaid-only service revenues	246	241
Legacy/other service revenues	90	110
Consumer service revenues	2,588	2,592
Non-service revenues ¹	269	265
Total Consumer revenues	2,857	2,857
Access & connectivity ²	555	517
IT services ³	42	31
SME service revenues	596	548
Access & connectivity ²	521	534
IT services & Other ³	255	261
LCE service revenues	776	795
Access & connectivity ²	73	67
IT services ³	48	46
Service management	171	176
Tailored Solutions service revenues	292	289
Business service revenues	1,664	1,632
Non-service & other revenues ¹	133	130
Total Business revenues	1,797	1,762
Mobile service revenues	178	156
Broadband service revenues	296	293
Other service revenues ⁴	214	233
Wholesale service revenues	688	681
Non-service revenues	1	2
Total Wholesale revenues	689	683
NOI and Other (incl. eliminations)	-20	-32
Total	5,324	5,270

1 Non-service revenues includes the sale of handsets and peripheral equipment and in the business segment also the sale of software licenses

2 Service revenues for among others mobile, broadband & networking, fixed-voice and IoT

3 IT services includes cloud & workspace and cybersecurity

4 Service revenues for among others interconnect traffic, visitor roaming, digital products (messaging, content delivery) and NL-ix (Interconnect exchange)

● Consolidated Financial Statements

Accounting policy: Revenues

The core principle is that revenue is recognized to depict the transfer of promised goods or services to the customer in an amount that reflects the consideration to which KPN expects to be entitled in exchange for those goods or services. Revenue is recognized when it is probable that the economic benefits associated with a transaction will flow to KPN and the amount of revenue and associated costs can be measured reliably.

KPN follows the five-step process of IFRS 15 to recognize revenue. After a contract with a customer has been entered into, the separate performance obligations are identified, which are the distinct goods and services promised to the customer (the customer can benefit from the goods or services either on their own or together with other resources that are readily available to the customer, and the transfer of goods or services to the customer are separately identifiable from other promises in the contract). The next steps are the determination of the transaction price and the allocation to the performance obligations. Allocation of the transaction price to performance obligations is based on standalone selling prices, which are based on our price lists and therefore readily available. The final step is to recognize revenue when a performance obligation is satisfied. Revenue is recognized either at a point in time or over time. In general, telco and IT services are delivered over time, whereas handsets and peripheral and network equipment, in case they are treated as separate performance obligations, are delivered at a point in time.

Revenue for variable considerations, including revenue under dispute, is recognized only when it is highly probable which, in some cases, requires significant judgment.

An adjustment for the time value of money is made to a transaction price for the effects of financing if time between recognition of revenue and cash receipt is expected to exceed 12 months and if it provides the customer with a significant benefit.

If KPN transfers goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized in case the earned consideration is conditional. A financial receivable is recognized if KPN's right to an amount of consideration is unconditional (only the passage of time is required before payment of the consideration is due).

KPN recognizes contract liabilities in the Statement of Financial Position for considerations received in respect of unsatisfied performance obligations. Contract liabilities are recognized as revenue when KPN performs under the contract.

At the start of a contract with a customer, in case services or goods are delivered by sub-contractors, KPN determines whether its performance obligation is to provide the specified goods or services itself (KPN acts as a principal) or to arrange for another party to provide those goods or services (KPN acts as an agent) based on the agreed terms and conditions with the customer and the sub-contractor, as well as the nature of the goods and services promised to the customer. When KPN acts as an agent, the revenue recognized is not the gross amount but the net amount that KPN is entitled to retain for its services as the agent.

Accounting policy: Costs to obtain and/or fulfill a contract

The incremental costs of obtaining a contract with a customer are recognized as an asset if KPN expects to recover those costs. Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained are recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer, regardless of whether the contract is obtained or not. Costs to fulfill a contract are recognized as an asset if:

- The costs relate directly to a contract; and
- The costs generate or enhance resources that will be used in satisfying performance obligations in the future; and

- The costs are expected to be recovered.

Capitalized contract costs are amortized on a linear basis over the period in which KPN transfers the related goods or services to the customer. KPN applies the practical expedient to immediately expense contract costs when the asset that would have resulted from capitalizing such costs would have been amortized within one year or less.

Assets recognized for costs to obtain a contract and costs to fulfill a contract are subject to impairment testing.

● Consolidated Financial Statements

[4.2] Other income

€ million	2022	2021
Other income	50	852

Other income in 2022 relates to the book gain on the sale of assets to Glaspoort B.V. (EUR 47m) and book gains on the sale of various fixed assets (EUR 3m).

Other income in 2021 relates to the book gain on the sale of the subsidiary Glaspoort B.V. (EUR 830m), see Note 21 for further information on the sale of subsidiaries, the book gain on the sale of assets to Glaspoort B.V. (EUR 15m), book gains on the sale of various fixed assets (EUR 5m) and adjustments to the book result on sale of subsidiaries in 2019 and 2020 (EUR 1m).

Accounting policy: Other income

Other income includes gains on the sale of property, plant and equipment, gains on the sale of subsidiaries as well as other gains not related to KPN's operating activities.

[5] Personnel expenses

€ million	2022	2021 Restated
Salaries and wages	727	748
Retirement benefits	79	79
Social security contributions	92	84
Additional labor capacity	47	58
Own work capitalized	-134	-116
Other	-2	-8
Total personnel expenses	809	844

Employee redundancy costs are not included in personnel expenses but in other operating expenses (see Note 18).

Number of own personnel (FTE) per segment ¹	31 December 2022	31 December 2021
Consumer	2,538	2,566
Business	2,638	2,694
Wholesale	222	213
NOI	3,090	3,232
Other	963	993
Total FTE	9,452	9,699

1 All employees were employed in the Netherlands

● Consolidated Financial Statements

Share plans

KPN has granted shares (equity-settled) and share-based awards (cash-settled) on its shares to members of the Board of Management and senior management. The conditionally granted awards will vest after three years if the employee is still employed by KPN. For awards granted until 2018, vesting is based on individual vesting of 25% relative total shareholder return (TSR) versus peer group, 25% free cash flow, 25% earnings per share, 12.5% on sustainability/environmental targets and 12.5% on stakeholder/customer targets. Vesting of non-financial targets is subject to achieving a cumulative net profit during the vesting period of three years (i.e. a qualifier for vesting). The peer group and the vesting schedule can be found under 'Long-term incentives' in the Remuneration Report.

As of 2019, the targets for the LTI plan are set as follows: 70% financial targets, of which 45% on cumulative free cash flow over the plan period and 25% on relative TSR measured against the STOXX Europe 600 Telecommunications index and 30% non-financial targets, determined at the start of a new plan from the following categories: (i) Sustainability; (ii) Reputation; (iii) Social; (iv) Key business projects; and (v) Market share.

The main features of the awards granted to KPN management are summarized in the following table.

	Board of Management	Senior management	Maximum term	Settlement type¹	Vesting period	Holding period after vesting of/until
2018	X	X	5 years	Equity ²	3 years	2 years
		X	3 years	Cash	3 years	–
2019	X	X	6 years	Equity ²	3 years	3 years
		X	3 years	Cash	3 years	–
2020	X		6 years	Equity ²	3 years	3 years
		X	3 years	Cash	3 years	–
2021	X		6 years	Equity ²	3 years	3 years
		X	3 years	Cash	3 years	–
2022	X		6 years	Equity ²	3 years	3 years
		X	3 years	Cash	3 years	–

1 The cash-settled share awards will be settled in cash and no holding restrictions apply. An exception to the holding period for equity-settled plans is made with respect to shares that were sold upon vesting to cover the tax obligation on the vested shares. After vesting, the holder is able to sell a number of unconditional granted shares only up to the amount necessary to settle the wage taxes liability relating to the profit made on the stock compensation plan. Wage tax in the Netherlands is generally around 50% of the total vested amount

2 Including deferred dividend

The total compensation expense associated with the share plans was EUR 11m in 2022 (2021: EUR 8m). The related liability (for cash-settled shares) on 31 December 2022 was EUR 10m (31 December 2021: EUR 8m). This liability is included under Other payables. For the 2019 Share Plan and share-based awards, the service conditions were met in 2022. The intrinsic value at vesting was EUR 8m (2021: EUR 6m).

● Consolidated Financial Statements

The following table presents the number of shares and share-based awards in thousands under the share plans.

	Total 31 Dec 2020	Granted/ additional vesting ¹	Exercised/ Vested	Forfeited	Total 31 Dec 2021	Granted/ additional vesting ²	Exercised/ Vested	Forfeited ³	Total 31 Dec 2022 ⁴	-of which: Non- vested
2018 Share-based awards Sr. man.	1,083	-	-834	-249	-	-	-	-	-	-
2018 Shares BoM/Sr. man.	1,913	-	-1,473	-440	-	-	-	-	-	-
2019 Share-based awards Sr. man.	2,022	-	-	-265	1,757	-	-1,619	-139	-	-
2019 Shares BoM/Sr. man.	1,137	-	-	-30	1,107	-	-1,020	-87	-	-
2020 Share-based awards Sr. man.	2,925	-	-	-167	2,758	-	-	-657	2,101	2,101
2020 Shares BoM	1,809	-	-	-	1,809	-	-	-	1,809	1,809
2021 Share-based awards Sr. man.	-	2,033	-	-	2,033	-	-	-354	1,679	1,679
2021 Shares BoM	-	1,409	-	-	1,409	-	-	-	1,409	1,409
2022 Share-based awards Sr. man.					-	1,740	-	-88	1,652	1,652
2022 Shares BoM					-	1,157	-	-	1,157	1,157

1 On the basis of a 100% grant. The equity-settled share numbers do not include any deferred dividend during the vesting period. The deferred dividend during the vesting period will be granted in additional shares

2 At grant date, the fair value is calculated using a Monte Carlo Simulation model. In April 2022 the fair value was EUR 3.26 (2021 grant: EUR 2.41) for the 2022 share-based award (cash-settled) and EUR 3.55 (2021 grant: EUR 2.70) for the 2022 equity-settled share grant for the Board of Management (excluding deferred dividend)

3 At the end of 2022, KPN held the 4th position with respect to the 2020 share grant and at the end of 2021, KPN held the 8th position with respect to the 2019 share grant. This position and the outcomes of the other targets will lead to 121% vesting in April 2023 of the 2020 share grant. Final TSR measurement for the 2019 share grant was conducted in February 2022, which resulted in 92% vesting in April 2022

4 The fair value of each cash-settled share-based award was measured on 31 December 2022 using recent strategic plans, forecasts and a Monte Carlo Simulation model, based on the most recent available share price of KPN and its performance compared with peer companies at the moment of valuation (i.e. closing share prices as at 31 December 2022). The fair value on 31 December 2022 was EUR 4.67 (2021: EUR 2.23) for the 2020 share-based award, EUR 3.74 (2021: EUR 2.19) for the 2021 share-based award and EUR 3.68 for the 2022 share-based award

The fair value of each award at the grant date is determined using the following assumptions:

Assumptions	2022 LTI	2021 LTI
Risk-free interest rate based on euro government bonds for remaining time to maturity of 2.7 years	0.7%	-0.5%
Expected dividend for KPN (based on one year's historical daily data preceding the date of award)	4.7%	5.6%
Expected volatility (PSP grant based on 2.7 years' historical daily data) used for TSR	26.3%	27.0%
Share price at date of award (closing at grant date)	€ 347	€ 2.82

● Consolidated Financial Statements

The following paragraphs detail the actual remuneration of the Board of Management. Please refer to the Remuneration Report for the executive pay policy.

Details of actual remuneration

The remuneration of the Board of Management, representing the costs incurred by the company measured under IFRS principles, is as follows:

Name current member	Year	Salary	STI ¹	LTI ²	Pension Cost ³	Social security and other compensation ⁴	Total	
J.F.E. Farwerck	2022	879,375	716,568	1,108,118	219,036	30,022	2,953,119	
	2021	875,000	936,775	971,240	213,246	30,364	3,026,625	
H.C. Figuee	2022	678,375	368,493	528,456	116,895	37,160	1,729,379	
	2021	675,000	481,815	324,249	109,638	37,416	1,628,118	
J.P.E. van Overbeke	2022	653,250	354,872	561,278	154,304	14,558	1,738,262	
	2021	650,000	463,944	526,584	152,525	14,814	1,807,867	
M.W.M. Snoep	2022	653,250	354,872	550,466	126,138	29,814	1,714,540	
	2021	650,000	463,944	462,514	117,328	30,070	1,723,856	
B. Fouladi	2022	653,250	354,872	561,278	126,214	12,645	1,708,259	
	2021	650,000	463,944	501,586	124,975	12,901	1,753,406	
H. Garssen	2022	502,500	272,978	408,082	82,638	14,572	1,280,770	
	2021	500,000	356,880	300,294	81,984	14,828	1,253,986	
Total current members		4,020,000	2,422,655	3,717,678	825,225	138,771	11,124,329	
		2021	4,000,000	3,167,302	3,086,467	799,696	140,393	11,193,858

1 Actual STI relates to performance in the current year but paid out in the following financial year. Please see the 'Short-term incentives' section in the Remuneration Report for the actual pay-out levels per target

2 The amounts in the table represent the cost recognized for shares in 2022 and 2021 based on their fair values at grant date. The fair value of the share-based award is recorded as cost over the vesting period. Please see the 'Long-term incentives' section in the Remuneration Report for a further explanation

3 The pension costs include the costs for survivor's pension, disability coverage, administration as well as the gross allowances. The fixed gross allowance (for the base pay part above EUR 114,866) in 2022 was, EUR 159,047 for Mr. Farwerck (2021: EUR 153,991), EUR 80,273 for Mr. Figuee (2021: EUR 75,095), EUR 112,117 for Mr. Van Overbeke (2021: EUR 110,922), EUR 88,578 for Ms. Snoep (2021: EUR 81,622), EUR 88,495 for Mr. Fouladi (2021: EUR 87,758) and EUR 53,706 for Ms. Garssen (2021: EUR 53,419)

4 In addition to social security, the stated amounts include allowances that can be considered as indirect remuneration and relates to the value for the private use of the company car

See the Remuneration Report for the number of shares under the share plans per individual board member.

See the Insider Transactions section for stock ownership of members of the Board of Management and Supervisory Board.

Supervisory Board

Please see the Remuneration Report for the actual fee received by each member of the Supervisory Board. The total fee for 2022 is EUR 648,215 (2021: EUR 652,889).

Accounting policy: Share-based compensation

For equity-settled plans, the fair value of shares granted to employees is measured at grant date. For cash-settled plans, the fair value of the liability for the awards granted is remeasured at each reporting date and at settlement date.

The costs of share-based compensation plans are determined based on the fair value of the shares and the number of shares expected to vest. On each balance date, KPN determines whether it is necessary to revise the expectation of the number of shares that will vest. The fair value is recognized as personnel expense in profit or loss over the vesting period of the shares against an increase in equity in the case of equity-settled share-based compensation plans and against the recognition of a liability in the case of cash-settled share-based compensation plans.

● Consolidated Financial Statements

[6] Other operating expenses

Other operating expenses comprise, among others, a net addition to the restructuring provision (see Note 18).

Auditor's fees

The fees listed below relate to the services provided to KPN and its consolidated group entities by Ernst & Young Accountants LLP, as well as by other Dutch and foreign-based EY individual partnerships and legal entities, including their tax services and advisory groups:

€ million	2022	2021
Financial statements audit fees	3.8	39
Other assurance fees	0.8	0.9
Total audit fees, charged by Ernst & Young Accountants LLP	4.7	4.7
Tax fees	-	0.2
Total	4.7	5.0

The financial statements audit fees include the fees for professional services rendered for the audit of KPN's annual financial statements and the annual statutory financial statements of subsidiaries or services that are normally provided by the auditor in connection with the audits.

The other assurance fees include the fees incurred for assurance and related services that are reasonably related to the performance of the audit or review of KPN's Financial Statements, such as revenue and IT-related assurance services and regulatory-related assurance services.

Accounting policy: Operating expenses

Operating expenses are divided into direct cost (cost of goods and services) and indirect cost (IT/TI, personnel expenses and other operating expenses).

Cost of goods and services are costs incurred in the context of a sales transaction and include subscriber acquisition and retention costs and traffic expenses. These costs are expensed as incurred, except handset fees paid to dealers and transaction-related dealer commissions that are capitalized and amortized over the contract term. The cost of a handset is expensed when the handset is sold (as incurred), both as an individual sale or as a component of a transaction in combination with a subscription.

Information technology (IT) expenses relate to KPN's IT environment and include licenses and maintenance expenses for software and/or IT hardware when not directly related to a sales transaction. Technical infrastructure (TI) expenses are expenses related to KPN's fixed and mobile networks.

Personnel expenses are all expenses related to KPN's workforce, both related to own employees and external personnel from employment agencies.

Other operating expenses include expenses related to marketing and communication, billing and collection, housing and facilities.

● Consolidated Financial Statements

[7] Financial income and expenses

€ million	Notes	2022	2021
Finance income		8	-
Interest on borrowings		-192	-192
Interest expense lease liability	[19]	-18	-20
Interest on other provisions		-1	-3
Other interest expenses		-3	-8
Finance costs		-213	-223
Hedge ineffectiveness		10	-
Amortizable part of hedge reserve		-15	-15
Amortization discontinued fair value hedges		18	22
Derivative financial instruments not qualified for hedge accounting	[13.3]	-11	-17
Exchange rate differences		3	5
Fair value loss on contingent cash receivable Glaspoort	[13.1]	-16	-2
Other		-12	-4
Other financial results		-22	-11
Total		-227	-234

Finance income in 2022 was EUR 8m (2021: EUR 0m), mainly due to interest income on the contingent cash receivable related to Glaspoort, partly offset by negative interest on cash balances.

Finance costs decreased by EUR 10m, which was mainly related to lower other interest expenses. Lower interest cost related to debt redemptions were largely offset by higher interest rates on floating rate debt. Interest on borrowings included a non-cash amount of EUR 6m (2021: EUR 6m) relating to debt issuance and similar costs, which are amortized over the remaining life of the respective bonds using the effective interest rate method.

Other financial results increased by EUR 11m (higher net cost), mainly due to a EUR 16m fair value loss on the contingent cash receivable related to Glaspoort (2021: EUR 2m loss), EUR 9m costs in 2022 related to the tender of the USD hybrid bond (included in Other), EUR 4m lower gains from amortization of discontinued fair value hedges and EUR 2m lower exchange rate gains, partly offset by EUR 10m gain on hedge ineffectiveness (2021: EUR 0m) and EUR 6m lower fair value loss on derivative financial instruments not qualified for hedge accounting due to maturing swaps.

[8] Taxation

The Netherlands

The book loss, which is recognized as a result of the sale of E-Plus in 2014 (see schedule net DTA book loss sale of E-Plus), was used to offset KPN's taxable income in the Netherlands in 2014 up to and including 2022, and will be used to offset a significant part of KPN's taxable income in the Netherlands in the coming years. KPN's unrealized losses as per 2021 are realized in 2022. Due to the realization in 2022, the current tax expense in 2022 is significantly lower compared to 2021.

KPN has an agreement with the Dutch tax authorities with respect to the application of the Dutch innovation box tax regime. This is a facility under Dutch corporate income tax law where profits attributable to innovation are taxed at an effective rate of 9.0% (2021: 9.0%). The application of the innovation box resulted in a benefit of EUR 29m over 2022 (2021: EUR 40m). The higher iBox benefit in 2021 is a result of the bookgain related to the realization of the Glaspoort joint venture.

In 2021, the realization of the joint venture (Glaspoort) with APG triggered a taxable event, which has been discussed and agreed with the Dutch tax authorities (see Note 21). Also, the extension of the fiber roll-out between KPN, APG and Glaspoort, will follow the same principles for tax purposes as the initial transaction (see Note 12).

Germany

At the end of 2022, the German Tax Authorities finalized their tax audit of the remaining/former E-Plus companies. The overall net impact is zero. As all relevant tax years have been audited, KPN will now proceed to dissolve the respective legal entities.

See Note 21 for the impact of the acquisitions, which are separately liable for income taxes, and disposals of subsidiaries and business units.

Income tax expense

€ million	2022	2021
Current tax	9	-292
Deferred taxes	-236	-52
Income tax (charge)/benefit from continuing operations	-227	-344

The reconciliation from the Dutch statutory tax of 25.8% (2021: 25%) to the effective tax rate (ETR) of 23.0% (2021: 21.1%) is explained in the following table.

● Consolidated Financial Statements

	2022		2021 - restated	
	€ million	ETR	€ million	ETR
Profit before income tax from continuing operations excluding associates and joint ventures	987		1,628	
Taxes at Dutch statutory tax rates	-255	25.8%	-407	25.0%
Dutch tax rate adjustment	-	0.0%	14	-0.8%
Not taxable income, non deductible expenses and liquidation losses	-2	0.2%	1	-0.1%
Innovation tax facilities current year	29	-2.9%	40	-2.4%
Deferred tax related to prior years	-	0.0%	7	-0.4%
Deferred tax related to current year	-3	0.3%	4	-0.2%
Tax benefit perpetual EUR instrument	6	-0.6%	3	-0.1%
Other	-1	0.1%	-5	0.3%
Income tax benefit/(charge) from continuing operations	-227	23.0%	-344	21.1%

Changes in Dutch tax rates resulted in a benefit of EUR 14m in 2021 due to the valuation of our net deferred tax assets, while the tax exemption of the result on disposal of subsidiaries and business units resulted in a tax loss of EUR 2m in 2022 (2021:

EUR 1m benefit). Furthermore, in 2021, a one-time tax benefit of EUR 7m has been claimed due to an update of tax calculations on real estate and lease property depreciation that relate to deferred tax positions reported in prior years.

Deferred tax positions

Deferred tax assets

€ million	Tax loss & other carry forwards ¹	Unrealized liquidation losses ²	Bonds & hedges ³	Restriction on depreciation ⁴	Fiscal goodwill ⁵	Lease Liabilities ⁶	Other	Offset against deferred tax liabilities	Total ⁷
Balance at 31 December 2020	81	501	64	94	4	206	61	-446	567
Income statement benefit/(charge)	-8	-	-4	-20	-5	-16	28	33	7
Transfer to current tax	-73	-	-	1	-	-	-	-	-72
Tax charged to OCI	-	-	-10	-	-	-	-	-	-10
Tax rate changes ⁸	-	16	2	6	1	11	-	-22	14
Balance at 31 December 2021	-	517	52	81	-	201	89	-435	506
Income statement benefit/(charge)	-	-	-	-13	-	11	-18	6	-14
Transfer to current tax	-225	-	-	-	-	-	3	-	-222
Tax charged to OCI	-	-	-13	-	-	-	-	3	-10
Tax rate changes	-	-	-	-	-	-	-	-	-
Other	517	-517	-	-	-	-	7	-7	-
Balance at 31 December 2022	293	-	39	68	-	212	82	-433	261

1 Net offsettable losses expected to be recovered within the foreseeable future. KPN has a history of recent profits

2 Unrealized losses will become available for offset against taxable profits as from 2022. The offset is unlimited in time

3 Amounts relate to capitalized costs for tax purposes, derivative positions adjusted for tax purposes and unrealized FX results included in the hedge reserve

4 Amounts relate to assets depreciated in 5 years for tax purposes and less than 5 years for book purposes

5 Amounts relate to goodwill depreciated for tax purposes (originated from internal transfers)

6 For leases, KPN separately recognizes both deferred tax assets and deferred tax liabilities, based on the underlying temporary difference

7 Of which EUR 90m to be recovered within 12 months (2022: EUR 230m). Recoverability depending on future taxable results. Based on current projections, KPN expects to fully utilize its losses within the foreseeable future

8 Representing the impact of the Dutch corporate tax rate change of which a net benefit of EUR 1m has been added to OCI in 2021

● Consolidated Financial Statements

Net DTA book loss on the sale of E-Plus

€ million	Net DTA	Realized	Unrealized	Offset by DTL	Net Loss
Balance at 31 December 2020	547	46	501	-	2,188
Movement 2021	-30	-46	16	-	-184
Balance at 31 December 2021	517	-	517	-	2,004
Movement 2022	-224	293	-517	-	-870
Balance at 31 December 2022	293	293	-	-	1,134

Deferred tax liabilities

€ million	Software development ¹	Goodwill depreciation ²	PPA ³	Right of use assets ⁴	Other	Offset against deferred tax assets	Total
Balance at 31 December 2020	100	102	44	189	11	-446	-
Income statement benefit/(charge)	-24	10	-7	-14	2	33	-
Tax rate changes	7	4	1	10	-	-22	-
Balance at 31 December 2021	83	116	38	185	13	-435	-
Income statement benefit/(charge)	-10	1	-8	10	1	6	-
Tax charged to OCI	-	-	-	-	-3	3	-
Tax rate changes	-	-	-	-	-	-	-
Other	-	-	9	-	-	-7	2
Balance at 31 December 2022	73	117	39	195	11	-433	2

1 Amounts relate to capitalized software costs which are taken as expenses for tax books

2 Amounts relate to acquired goodwill depreciated for tax purposes (not for book purposes)

3 See Note 21 for the impact of the acquisitions. This amount also includes the reclassification from DTA PPA (Other)

4 For leases, KPN separately recognizes both deferred tax assets and deferred tax liabilities, based on the underlying temporary difference

Tax loss carry forward

€ million	31 December 2022			31 December 2021 - restated		
	Tax loss carry forward	Maximum deferred tax asset	Recognized deferred tax asset	Tax loss carry forward	Maximum deferred tax asset	Recognized deferred tax asset
Koninklijke KPN – corporate tax ¹	1,134	293	293	-	-	-
Other	104 ²	22	-	72 ³	15	-
Total KPN Group	1,238	315	293	72	15	-

1 The offset of realized losses with future profits is unlimited as from 2021. Furthermore, we refer to "Tax and regulations" in this integrated report on changes regarding the use of losses as from 2022.

Note: the losses (loss E-Plus) are available as from 2022

2 Losses relating to foreign jurisdictions that are not expected to materialize in foreseeable future

3 Losses relating to foreign jurisdictions that are not expected to materialize in foreseeable future. 2021 is restated for the UK as these (non-valued) losses are not available for loss carry forward

● Consolidated Financial Statements

Expiration of the available tax loss carry forward and recognized tax assets

€ million	31 December 2022			31 December 2021 - restated		
	Tax loss carry forward	Maximum deferred tax asset	Recognized deferred tax asset	Tax loss carry forward	Maximum deferred tax asset	Recognized deferred tax asset
2023	-	-	-	-	-	-
2024	-	-	-	-	-	-
2025	-	-	-	-	-	-
2026	4	1	-	3	1	-
Later	57	12	-	54	11	-
Unlimited	1,177	302	293	15	3	-
Total	1,238	315	293	72	15	-

Accounting policy: Taxation

Current income tax

The current income tax charge is calculated in accordance with the prevailing tax regulations and rates, taking into account non-taxable income and non-deductible expenses. The current income tax expense reflects the amount for the current reporting period that KPN expects to recover from or pay to the tax authorities. Income tax related to items recognized directly in equity/OCI is recorded in equity/OCI and not in profit or loss, with an exception for (hybrid) financial instruments classified as equity.

KPN's management periodically evaluates positions taken in the tax returns regarding situations in which uncertainty on a tax position exists over whether the relevant taxation authority will accept the tax treatment under law. These uncertain tax positions ('UTP') will be recognized if the amount can be reliably estimated and when the chance of a cash outflow is estimated as probable. When these criteria are not met, these positions are classified as contingent liabilities, unless the cash outflow is considered remote.

● Consolidated Financial Statements

Deferred income tax

Deferred income tax positions are recognized for temporary differences between the tax basis of assets and liabilities and their carrying values. DTAs are recognized for deductible temporary differences, the carry forward of unused tax credits, and any unused tax losses. DTAs are recognized only to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilized. Both the recognized and unrecognized DTAs are reassessed on each reporting date based on available projections. If future taxable profits are insufficiently available, derecognition may become inevitable unless certain exceptions can be applied. DTAs are recorded for deductible temporary differences associated with investments in subsidiaries and associates. They are recorded only to the extent that it is probable that the temporary differences will reverse in the foreseeable future, and taxable profit will be available against which the temporary differences can be utilized.

DTLs are recognized for all taxable temporary differences except when they arise from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither

the profit or loss reported in the Statement of Profit or Loss nor the taxable profit or loss. Also, no DTLs are recorded for taxable temporary differences associated with investments in subsidiaries and associates when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future. Deferred tax positions are stated at nominal value and are measured at the corporate income tax rates KPN expects to be applicable in the year when the asset is realized or liability is settled based on enacted or substantially enacted tax laws.

If a tax provision is recognized for a UTP that relates to deferred taxes, the UTP will be netted against these deferred taxes. DTAs and DTLs are netted if there is a legally enforceable right to offset current tax assets against current tax liabilities and the DTAs/DTLs relate to income taxes levied by the same taxation authority on the same taxable entity or if, in the case of different taxable entities, there is an intention either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.



● Consolidated Financial Statements

[9] Earnings per share

The following table shows the income and share data used in the calculations of the basic and diluted EPS.

€ million	2022	2021
Profit for the year from continuing operations	766	1,283
Profit for the year from discontinued operations	-5	5
Profit for the year	761	1,288
Profit attributable to non-controlling interests	-	-
Deduction for perpetual capital securities	-18	-10
Adjusted profit (loss) attributable to ordinary shareholders of the company	743	1,278
Weighted average number of subscribed ordinary shares	4,080,828,686	4,178,961,845
Dilution effects: non-vested shares	5,615,541	4,363,596
Weighted average number of subscribed ordinary shares including dilution effects	4,086,444,227	4,183,325,441

Earnings per ordinary share after taxes attributable to equity holders of the company for the year:

€	2022	2021
Basic (continuing operations)	0.18	0.30
Diluted (continuing operations)	0.18	0.30
Basic (discontinued operations)	-	-
Diluted (discontinued operations)	-	-
Basic (total, including discontinued operations)	0.18	0.31
Diluted (total, including discontinued operations)	0.18	0.31

Diluted earnings per share are calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares.

Non-vested shares are regarded to have potential dilutive effects on the ordinary shares.

Coupons and carrying amount adjustments on the perpetual capital securities were deducted from the profit attributable to equity holders, since the perpetual hybrid bonds represent equity but do not constitute profit attributable to ordinary shareholders.

The total basic earnings per share include EUR 0.06 (2021: EUR 0.08) tax expenses.

● Consolidated Financial Statements

Notes to the Consolidated Statement of Financial Position

[10] Property, plant and equipment

Statement of changes in property, plant and equipment

€ million	Land and buildings	Plant and equipment	Other tangible non-current assets	Assets under construction	Total
Balance at 1 January 2021	405	4,863	38	116	5,422
Investments ¹	44	937	13	3	997
Depreciation	-46	-872	-15	-	-933
Impairments and retirements	-	-8	-	-1	-10
Other	-2	-9	-2	-	-13
Closing net book value	401	4,912	34	118	5,463
Cost	1,569	9,756	79	118	11,521
Accumulated depreciation/impairments	-1,168	-4,845	-45	-	-6,058
Balance at 31 December 2021	401	4,912	34	118	5,463
Investments	25	881	3	32	942
Depreciation	-44	-767	-12	-	-823
Impairments and retirements	-2	-8	-	-2	-12
Other	-2	-	-	-	-2
Closing net book value	377	5,018	24	148	5,568
Cost	1,580	9,280	56	148	11,064
Accumulated depreciation/impairments	-1,202	-4,262	-32	-	-5,496
Balance at 31 December 2022	377	5,018	24	148	5,568

1 Investments in Plant and equipment include the acquisitions of fiber networks not qualifying as a business under IFRS 3 of EUR 17m

Estimated useful lives of the principal PPE categories

PPE category	Depreciation period
Land	No depreciation
Buildings	14-33 years
Network equipment	3-7 years
Fiber network infrastructure	30 years
Copper network infrastructure	5-10 years
Office equipment	4-10 years

The assets' residual values and useful lives are reviewed at least annually and adjusted if appropriate.

KPN's strategy includes, among others, accelerating the roll-out of fiber, which affects the depreciation period of all new investments

in copper infrastructure. As of 1 January 2019, depreciations of these investments were capped at 10 years.

In early 2020, KPN announced its plans to phase out its copper network after three years starting in early 2023 for existing addresses where fiber service delivery is available as per early 2020, and for the addresses in every then already announced fiber roll-out project under construction. Together with the current fiber roll-out these overlay addresses receive an announcement that copper will be phased out after three years. The depreciation of this part of the copper network was accelerated for an additional amount of EUR 18m in 2022 (2021: EUR 17m).

As of 1 October 2022, the depreciation period of switching equipment (IP routers) was revised from four to seven years. The impact on the depreciation expenses in 2022 was EUR -7m (expected impact 2023 is estimated at around EUR -27m).

● Consolidated Financial Statements

Accounting policy: PPE

PPE are valued at cost less depreciation and impairment. The cost include direct costs (materials, direct labor and work contracted out) and directly attributable overhead costs.

Asset retirement obligations are capitalized as part of the cost of tangible fixed assets and expensed as either depreciation over the assets' estimated useful life or as impairment charges.

PPE are depreciated using the straight-line method, based on estimated useful life, taking into account residual value. Land is not depreciated. PPE are reviewed for impairment whenever events or changes in circumstances indicate that the book value

of the assets concerned may not be recoverable. An impairment loss is recognized for the amount by which the assets' book value exceeds its recoverable amount.

Impairments are reversed if and to the extent that the impairment no longer exists. The recoverable amount is defined as the higher of an assets' fair value less costs of disposal and its value in use.

Interest is capitalized as an increase in PPE if the construction of assets takes a substantial period of time and the amount is material.

[11] Intangible assets

Statement of changes in intangible assets with finite lives and goodwill

€ million	Goodwill	Customer relationships	Software acquired from third parties	Software internally generated	Software in development	Licenses	Other	Total
Balance at 1 January 2021	1,496	175	100	305	27	1,132	3	3,238
Investments	-	-	31	182	9	-	4	226
Changes in consolidation ¹	-64	-	-	-	-	-	-	-64
Amortization	-	-26	-61	-199	-	-100	-1	-387
Impairments	-	-	-1	-6	-	-	-	-8
Reclassifications	-	-1	-1	1	-	-	1	-
Closing net book value	1,432	148	69	283	35	1,032	7	3,006
Cost	2,089	326	177	650	35	1,779	17	5,074
Accumulated amortization/impairments	-657	-178	-108	-367	-	-747	-11	-2,068
Balance at 31 December 2021	1,432	148	69	283	35	1,032	7	3,006
Investments	7	-	20	192	29	-	-	247
Changes in consolidation ²	-	9	-	-	-	-	-	9
Amortization	-	-25	-45	-189	-	-100	-1	-361
Impairments	-	-4	-1	-7	-8	-	-	-19
Reclassifications	-	-	2	-1	1	-	-	2
Closing net book value	1,439	127	45	278	57	932	5	2,884
Cost	2,096	335	136	604	57	1,779	17	5,025
Accumulated amortization/impairments	-657	-207	-92	-326	-	-847	-12	-2,141
Balance at 31 December 2022	1,439	127	45	278	57	932	5	2,884

1 The change in consolidation of EUR 64m relates to the sale of Glaspoort B.V. (see Note 21)

2 The change in consolidation of EUR 9m relates to the new customer base of Itzos B.V.

● Consolidated Financial Statements

Goodwill per CGU

€ million	31 December 2022	31 December 2021
Consumer	743	743
Business ¹	661	654
Wholesale	35	35
Total	1,439	1,432

1 Increase of EUR 7m relates to Itzos BV.

Goodwill impairment tests

In accordance with IAS 36, KPN assesses goodwill for impairment at the end of each year and when a triggering event occurs. The annual impairment tests as at 31 December 2022 did not indicate that the book value of KPN's goodwill is not recoverable. KPN's market capitalization on 31 December 2022 was higher than the book value of its equity. A test was performed of the recoverable amount of the book value of each cash-generating unit (CGU), based on their value-in-use, which was determined by using the discounted cash flow method.

Key assumptions used in the cash flow projections are estimated EBITDA, Capex, change in working capital and pre-tax weighted average cost of capital (WACC). The cash flow projections are management's best estimate based on the updated strategic plan and extrapolation to terminal values. Housing and facilities expenses, which includes energy costs, are expected to increase by around 50% in 2023 and 10% in 2024. After 2024, energy costs are expected to normalize. The WACC is calculated using a capital

asset pricing model. The terminal growth rate for the period after 10 years is updated consistently in line with the changes in the discount rate. In 2022, the WACC and the terminal growth rate were higher compared to 2021.

For all three CGUs, the annual impairment tests in 2022 and 2021 resulted in significant positive headroom as at 31 December 2022 and 31 December 2021.

Key assumptions in goodwill impairment tests

CGU	EBITDA margin	Capex intensity	Discount rate	Terminal sales growth ¹
Consumer 2022	49% – 51%	24% – 28%	7% – 8%	0.5%
Consumer 2021	53% – 56%	25% – 30%	6% – 7%	-0.6%
Business 2022	31% – 32%	14% – 16%	7% – 8%	0.5%
Business 2021	30% – 33%	14% – 16%	6% – 7%	-0.6%
Wholesale 2022	67% – 73%	34% – 37%	7% – 8%	0.5%
Wholesale 2021	69% – 75%	35% – 39%	6% – 7%	-0.6%

1 Estimates after 10 years

The sensitivity analyses on the impairment test, resulting from a change in the key assumptions, showed that the headroom of the CGUs is more than sufficient. The analyses were performed for each key assumption separately. For example, a 1% higher discount rate, a 20% higher Capex, a 1% lower terminal growth rate or a 20% lower EBITDA in each of the CGUs would not lead to a goodwill impairment.

● Consolidated Financial Statements

Accounting policy: Goodwill and intangibles with finite lives

The excess of the consideration transferred over the fair value of the identifiable net assets acquired in a business combination is recorded as goodwill. Goodwill on acquisitions of subsidiaries is included in intangible assets. Goodwill on acquisition of associates is included in investments in associates. Goodwill is allocated to CGUs for the purpose of impairment testing. The allocation is made to those CGUs or groups of CGUs that are expected to benefit from the synergies of the business combination. Goodwill is carried at cost less accumulated impairment losses and tested for impairment annually or whenever there is an indication that goodwill may be impaired. Goodwill is impaired if the recoverable amount is lower than the book value. The recoverable amount is defined as the higher of the fair value less costs of disposal and the value in use of the CGU concerned. Impairment losses on goodwill are not reversed in the event that circumstances that triggered the impairment have changed.

Licenses and software are valued at cost less amortization and impairment. Amortization is calculated using the straight-line method over the economic useful life and commences at the date that services can be offered (available for use). Internally

developed and acquired software which is not an integral part of PPE, is capitalized on the basis of the costs incurred, which includes direct costs and directly attributable overhead costs incurred.

Other intangible assets, such as customer relationships and trade names acquired in business combinations, are capitalized at their fair values at acquisition date and are amortized using the straight-line method over the economic useful life.

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the book value of the asset may not be recoverable. An impairment loss is recognized for the amount by which the book value of the licenses exceeds its recoverable amount. Impairments are reversed if and to the extent that the impairment no longer exists. Intangible assets not yet available for use are tested annually for impairment or whenever KPN has an indication that the intangible fixed assets may be impaired. For example, licenses are tested as part of a CGU as licenses do not generate independent cash flows.

The amortization periods of the intangible assets with finite lives are 5-20 years for licenses, 3-5 years for software and 4-20 years for other intangible assets.

[12] Equity investments accounted for using the equity method

KPN holds several equity investments accounted for using the equity method of which Glaspoort (see below) is the most significant. Other equity investments are not material, individually nor in aggregate. Their combined carrying value at 31 December 2022 is EUR 7m (31 December 2021: EUR 8m) and KPN's share in their net result amounted to a loss of EUR -1m in 2022 (2021: nil).

Joint venture Glaspoort

Glaspoort is a network company, pursuing an open-access wholesale strategy based on non-discriminatory terms, fostering competition and innovation in the Netherlands. See Note 21 for more information on the sale of 50% of the shares of Glaspoort B.V. in 2021.

Glaspoort is classified as a joint venture based on the assessment of ownership and voting power (50/50 with the joint venture partner) and the joint control established through the joint venture agreement between the shareholders. The assessment includes, among others, the following:

- KPN's option to purchase one additional share in Glaspoort. This option is exercisable between the 5th and the 8th anniversary of

the transaction (9 June 2021) provided certain criteria are met, and in any case after the 8th anniversary.

- KPN's influence on Glaspoort's relevant activities through KPN's presence in the governance structure.
- KPN is anchor tenant on Glaspoort's network and will also be one of its suppliers through a number of operational contracts between KPN and Glaspoort.

The assessment whether joint control remains in place is reviewed annually.

KPN accounts for its interest in Glaspoort using the equity method in the Consolidated Financial Statements. KPN initially recognized its interest in the joint venture at its fair value (EUR 451m), based on the total consideration received (see Note 21). The initial fair value has been allocated to equity of Glaspoort, determined under application of KPN's accounting policies, and goodwill. In determining equity, intangible assets of EUR 878m have been recognized in the initial balance sheet of Glaspoort, which mostly relate to contractual relationships held by Glaspoort, with - among others - KPN. The sale of the additional scope projects to Glaspoort in December 2021 (refer below), which is treated as a sale of assets, has been used as an input to determine the fair

● Consolidated Financial Statements

value of the intangible assets. The intangible assets are amortized over a period of 30 years.

In December 2021, KPN, Drepuna and Glaspoort signed an agreement to extend the scope of the fiber roll-out of Glaspoort. KPN will receive EUR 170m (pre-tax) for the sale of the additional scope from Glaspoort. Of this amount, EUR 60m has been received in cash upon closing of the transaction in 2021. The remaining amount (EUR 110m) will be received in annual installments based on progress of the roll-out. Upon start of the roll-out activities of the additional scope projects by Glaspoort, KPN deems its obligations regarding the realization of the additional scope projects fulfilled. Until such time, KPN recognizes the amount received as contract liability. Upon start of the roll-out activities by Glaspoort, KPN recognizes the related deferred consideration as receivable (contract asset), releases the related prepayment (from contract liabilities) and recognized 50% of the agreed consideration as other income. The remaining 50% is recognized over time as part of the result from joint ventures following the requirements of IAS 28 on downstream transactions.

At 31 December 2022, projects with a transaction value of EUR 124m have started (31 December 2021: EUR 30m). During 2022, KPN recognized EUR 47m in other income related to the sale of these additional scope projects (2021: EUR 15m). As at 31 December 2022, the deferred gain of EUR 59m is included in the net book value of the joint venture (31 December 2021: EUR 15m). The deferred consideration to be received for these projects is EUR 80m at 31 December 2022, of which EUR 51m is considered current (31 December 2021: EUR 20m, fully non-current). Of the prepayment received from Glaspoort at transaction date, EUR 16m remains as current contract liability (31 December 2021: EUR 49m).

On the closing date of the initial transaction (9 June 2021), both shareholders paid a share premium contribution of EUR 39m to Glaspoort's equity. In December 2021, both shareholders contributed an additional share premium of EUR 30m as part of the scope extension. During 2022, both shareholders contributed additional share premiums of EUR 24m each. KPN added the share premium payments to the carrying value of KPN's interest in the joint venture.

Summarized financial information of the joint venture, based on IFRS as applied by KPN, and reconciliation with the carrying amount of the investment in the consolidated financial statements, is set out below:

Summarized statement of financial position of Glaspoort B.V.

€ million	31 December 2022	31 December 2021
Tangible fixed assets	217	77
Intangible assets	989	908
Other non-current assets	43	11
Current assets	24	90
Net cash and cash equivalents	19	28
Non-current liabilities	-158	-99
Current liabilities	-67	-11
Equity	1,067	1,004
KPN's share in equity	533	502
Goodwill from initial valuation at fair value	15	15
Carrying amount of the investment	548	517
Equity Method		
Less: Deferred gain on downstream transactions	-59	-15
Carrying amount of the investment	489	503

Summarized statement of profit or loss of Glaspoort B.V.

€ million	2022	2021
Revenue	16	2
Operating expenses	-7	-6
Depreciation, amortization & impairment expenses	-16	-1
Net finance result	27	-
Profit before tax	19	-5
Income tax expense	-5	2
Profit for the year	14	-3
Total comprehensive income for the year	14	-3
KPN's share of profit for the year	7	-2
Adjustment PY	-1	-
Release deferred gain on downstream transactions (net of tax)	2	-
KPN's total reported result from JV GP	8	-2

Both shareholders have committed to additional share premium contributions. On 31 December 2022, the remaining maximum commitment of each shareholder is EUR 163m, payable to Glaspoort based on funding requirements following its annual budget (31 December 2021: EUR 187m). Neither shareholder has additional funding obligations regarding Glaspoort. Glaspoort has entered into funding agreements with financial institutions to cover its financial commitments, which include its fiber roll-out activities. These funding agreements have been entered into on a non-recourse basis without any guarantees from the shareholders.

● Consolidated Financial Statements

For information on transactions between Glaspoort and KPN and unsettled positions between Glaspoort and KPN, see Note 23. Glaspoort cannot distribute its profits without the consent from

the two joint venture partners and not before 2026. After 2026, Glaspoort can distribute dividends only if specific criteria are met.

Accounting policy: Equity investments accounted for using the equity method

Equity investments accounted for using the equity method include associates and joint ventures.

Associates are entities over which KPN has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies. A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

Investments in associates and joint ventures are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in KPN's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The statement of profit or loss reflects KPN's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of KPN's OCI. In addition, when there has been a change recognized directly in the equity of the associate or joint venture, KPN recognizes its share of

any change, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between KPN and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture through KPN's share of the profit (or loss) of associates and joint ventures.

The aggregate of KPN's share of profit or loss of an associate and a joint venture is shown in the statement of profit or loss.

The financial statements of the associate or joint venture are prepared for the same reporting period as KPN. When necessary, adjustments are made to bring the accounting policies in line with those of KPN.

After application of the equity method, KPN determines whether it is necessary to recognize an impairment loss on its investment in its associate or joint venture. At each reporting date, KPN determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, KPN calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognizes the loss within 'share of profit/loss (-) of associates and joint ventures' in the statement of profit or loss.

Upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control, and the fair value of the retained investment and proceeds from disposal, is recognized in profit or loss.

● Consolidated Financial Statements

[13] Financial assets and financial liabilities

Summary of the financial assets and liabilities at carrying amount and fair value, classified per category

€ million	Notes	31 December 2022		31 December 2021	
		Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at FVPL					
Contingent cash receivable regarding sale Glaspoort	[13.1]	197	197	218	218
Other current financial assets	[13.1]	100	100	300	300
Derivatives	[13.3]	148	148	212	212
Cash and cash equivalents, including classified as held for sale	[15]	399	399	793	793
Financial assets at amortized cost					
Trade and other receivables ¹	[14.1]	455	455	641	641
Financial assets at FVOCI					
Financial receivables handsets	[14.1]	158	158	-	-
Equity investments	[13.1]	76	76	49	49
Total financial assets		1,534	1,534	2,213	2,213
Financial liabilities FVPL					
Derivatives	[13.3]	366	366	64	64
Financial liabilities at amortized cost					
Borrowings	[13.2]	5,368	5,203	6,744	7,223
Lease liabilities	[19]	923	923	873	873
Trade and other payables ²	[20]	955	955	973	973
Total financial liabilities		7,612	7,447	8,654	9,132

1 Excluding prepayments and in 2022 the financial receivables handsets measured at FVOCI

2 Excluding social security and other taxes payable

Fair value measurement hierarchy at 31 December 2022

€ million	Level 1	Level 2	Level 3	Total
Financial assets at FVPL				
Contingent cash receivable regarding sale Glaspoort	-	-	197	197
Derivatives (cross-currency interest rate swap)	-	123	-	123
Derivatives (interest rate swap) and other	-	25	-	25
Financial assets at FVOCI				
Financial receivables handsets	-	-	158	158
Equity investments:				
Unlisted securities	-	-	76	76
Total assets	-	148	431	579
Financial liabilities at FVPL				
Derivatives (cross-currency interest rate swap)	-	100	-	100
Derivatives (interest rate swap)	-	266	-	266
Total liabilities	-	366	-	366

● Consolidated Financial Statements

Fair value measurement hierarchy at 31 December 2021

€ million	Level 1	Level 2	Level 3	Total
Financial assets at FVPL				
Other financial asset at fair value through profit or loss	-	-	218	218
Derivatives (cross-currency interest rate swap)	-	117	-	117
Derivatives (interest rate swap) and other	-	95	-	95
Financial assets at FVOCI				
Equity investments:				
Unlisted securities	-	-	49	49
Total assets	-	212	267	479
Financial liabilities at FVPL				
Derivatives (cross-currency interest rate swap)	-	47	-	47
Derivatives (interest rate swap)	-	17	-	17
Total liabilities	-	64	-	64

Fair value estimation

Level 1: Fair value of instruments traded in active markets and based on quoted market prices.

Level 2: Instrument is not traded in an active market and fair value is determined by using valuation techniques based on maximum

use of observable market data for all significant inputs.

Level 3: One or more of the significant inputs is not based on observable market data; the fair value is estimated using models and other valuation methods. The valuation of available-for-sale unlisted securities is based on a discounted cash flow model.

Accounting policy: Financial assets

Financial assets are classified at initial recognition.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and KPN's business model for managing them.

KPN initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs.

For the purposes of subsequent measurement, financial assets are classified into four categories:

- Financial assets at amortized cost (debt instruments);
- Financial assets at fair value through other comprehensive income (OCI) with recycling of cumulative gains and losses (debt instruments);
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments);
- Financial assets at fair value through profit or loss.

[13.1] Financial assets

Other financial asset at fair value through profit or loss

Upon sale in 2021 of the 50% interest in Glaspoort B.V. to Drepiana Investments Holding B.V. (see Note 21), KPN received a cash consideration upon deal close of EUR 233m and a contingent cash receivable of EUR 234m. The contingent cash receivable, to be received in annual installments based on the roll-out progress of Glaspoort, is classified as a financial asset measured at fair value through profit or loss. The contingent cash receivable was initially valued at EUR 218m. As at 31 December 2022, the carrying value is EUR 197m (2021: EUR 218m), of which EUR 28m is current (2021: EUR 14m). In 2022, the book value increased with interest income of EUR 8m (2021: EUR 3m) and decreased with EUR 16m (2021: EUR 2m) due to a fair value adjustment and EUR 14m

(2021: EUR 0m) due to received deferred payment. The fair value adjustment was recognized as a loss in other financial results.

Based on Glaspoort's current roll-out plan, KPN expects the final payment in 2027. The fair value of this contingent receivable is deemed equal to the net present value of the full amount of the installments to be received using the expected roll-out schedule as included in Glaspoort's initial business plan. A weighted average discount rate of 5.68% has been used based on the following elements:

- A base-rate using mid-swap rates to account for the time value of money, plus

● Consolidated Financial Statements

- A credit spread mark-up to account for the risk of non-payment based on AA-rated credit curves resulting in a weighted average spread of ~0.1% over a 5-year tenor, plus
- A mark-up to reflect the roll-out risk (mostly the risk of delay).

Equity investments measured at fair value through OCI

This includes several minority stakes of KPN Ventures. In 2022, additional investments for an amount of EUR 26m were acquired (2021: EUR 7m) and EUR 9m investments were sold (2021: nil).

These investments were irrevocably designated at fair value through OCI because KPN believes that the fluctuations in the fair value of these investments do not give a fair view of KPN's performance. In 2022, fair value net gains of EUR 10m were recognized (2021: EUR 5m).

[13.2] Financial liabilities

€ million	31 December 2022		31 December 2021	
	Carrying amount	Fair value	Carrying amount	Fair value
Senior eurobonds EUR	2,678	2,509	3,638	3,667
Senior eurobonds GBP	1,401	1,408	1,478	1,762
Senior global bonds USD	641	628	620	751
Subordinated hybrid bonds classified as liability	136	136	529	558
Other borrowings	511	521	480	484
Total borrowings	5,368	5,203	6,744	7,223
> of which: current	196	196	677	681
> of which: non-current	5,171	5,007	6,067	6,542

The fair value for eurobonds, global bonds and hybrid bonds is based on the listed price of the bonds. Other borrowings include commercial paper, cash collateral received on derivatives, bank overdrafts and other loans.

The fair value of the equity investments of KPN Ventures is based, where applicable, on the price of the last fundraising round of the equity investment, investment valuations or the bid made in mergers and acquisitions transactions. The investment valuations take into account forward-looking estimates and judgments about the underlying business, market conditions and other factors.

Other current financial assets

Other current financial assets include investments in short-term money market funds of EUR 100m (2021: EUR 300m), which are held at fair value through profit or loss (FVPL). These funds have a low volatility, with an investment objective of preservation of principal.

Senior bonds

million	Nominal	Carrying amount €	Nominal after swap €	Number of bonds
Senior eurobonds EUR	2,981	2,678	2,981	5
Senior eurobonds GBP	1,250	1,401	1,452	2
Senior global bonds USD	595	641	450	1

KPN has an unlimited Global Medium-Term Notes program which is used to meet medium- to long-term funding requirements. As at 31 December 2022, the total amounts outstanding under this program were EUR 2,981m across five bonds (carrying value EUR 2,678m) and GBP 1,250m across two bonds (carrying value EUR 1,401m, swapped to EUR 1,452m nominal). In addition, KPN has a senior global bond with USD 595m outstanding (carrying

KPN's weighted average interest rate on total outstanding borrowings on 31 December 2022 was 3.6% after swaps (2021: 2.9%). KPN's weighted average interest rate on senior debt on 31 December 2022 was 3.5% after swaps (2021: 2.7%).

value EUR 641m, swapped to EUR 450m nominal) which was issued under standalone documentation.

On 1 March 2022, KPN redeemed the 4.25% EUR 616m senior bond in line with its scheduled maturity. No new senior bonds have been issued during the year.

● Consolidated Financial Statements

Hybrid bonds

million	Nominal	Nominal €	Coupon	Classification	Final maturity	First reset date	Swapped	Credit rating ¹
USD hybrid bond	146	113	7,000%	Liability	28 Mar 2073	28 Mar 2023	Fixed 6.37%	BB+/BB+/Ba2
EUR perpetual hybrid bond	500	500	2,000%	Equity	Perpetual	8 Feb 2025	N/a	BB+/BB+/Ba2
EUR perpetual hybrid bond	500	500	6,000%	Equity	Perpetual	21 Dec 2027 ²	N/a	BB+/BB+/N.a.

1 Credit rating by S&P/Fitch resp. Moody's

2 These hybrid bonds are first callable in the three months period before their respective first reset dates

As at 31 December 2022, three hybrid bonds are outstanding with an aggregate nominal amount of EUR 1,113m after swaps. The USD 146m hybrid bond (carrying value EUR 136m, swapped to EUR 113m nominal) is included in borrowings, while the EUR 1,000m perpetual hybrid bonds are classified as equity. Both EUR hybrid bonds are subordinated debt instruments and are treated for 50% as equity and 50% as debt in KPN's gross and net debt definitions.

On 21 September 2022, KPN issued a new 6% EUR 500m perpetual Green Hybrid Bond under KPN's Green Finance Framework. With the proceeds, KPN will finance or refinance projects with positive environmental impact in three areas: (i) energy efficiency (network transformation including roll-out of fiber and modernization of KPN's mobile network), (ii) circular economy (investments that extend product life and reduce waste) and (iii) clean transportation (reducing emissions by shifting to electric vehicles). KPN has committed, on a best effort basis, to allocate an amount at least equal to the net proceeds of this instrument to finance investments and expenditures in the above areas within 36 months of issuance (with a maximum look-back period of 24 months for all expenditures). This hybrid bond can, at KPN's discretion, be redeemed at any time between 21 September 2027 and 21 December 2027, and annually on 21 December thereafter at par. The ratings for the green hybrid bond are BB+ by S&P and BB+ by Fitch. The rating agencies recognize 50% of the hybrid bond as equity in line with the existing hybrid bonds. The green hybrid bond has been listed on Euronext Dublin GEM.

On 21 September 2022, KPN tendered the 7% USD 600m hybrid bond and repurchased USD 454m notional amount, with USD 146m remaining outstanding after the tender offer. The hybrid bond had been swapped to a principal amount of EUR 465m and KPN effectively retired EUR 352m notional amount. The remaining EUR 113m notional amount after swaps can be called in March 2023.

KPN may, at its discretion and subject to certain conditions, elect to defer payments of interest on the hybrid bonds. Arrears of interest must be paid if dividends are paid on ordinary shares,

if payments are made on other hybrid bonds, in the event of early redemption, and for the USD hybrid bonds at final maturity. KPN does not recognize accruals for coupon payments on the EUR perpetual hybrid bonds of EUR 40m per annum. If an accrual had been recognized, the amount would have been EUR 10m on 31 December 2022.

Other borrowings

KPN has a Euro-Commercial Paper Program under which KPN can issue short-term debt instruments for up to EUR 1 billion. As at 31 December 2022, the outstanding balance of commercial paper amounted to EUR 60m (2021: EUR 60m), issued at an average interest rate of 2.01%.

KPN has a EUR 300m credit facility from the European Investment Bank, which was fully drawn at year-end 2022 and 2021. This loan has a floating interest rate referenced to 3-month Euribor and a single repayment on 2 August 2027. The interest for the current interest period was fixed at 2.64% per annum.

As at 31 December 2022, other borrowings furthermore included EUR 103m of collateral received as security under derivative financial instruments and EUR 50m borrowings under private placements.

Accounting policy: Borrowings

After initial recognition, loans and borrowings that are not part of a fair value hedge, are subsequently carried at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the P&L over the period of the borrowings using the effective interest method. The amortized cost is calculated by taking into account any discounts or premiums on acquisition or issuance and transaction costs. The effective interest amortization is recognized in the P&L as finance costs.

● Consolidated Financial Statements

Changes in liabilities arising from financing activities

€ million	Borrowings	Derivative financial instruments	Net liability	Lease liabilities	Net liability, including lease liabilities
Balance at 1 January 2021	6,500	-6	6,494	937	7,432
Exchange differences	177	-178	-2	-	-2
Movements recorded as net cash flows arising from/used in financing activities:					
Repayments of borrowings and settlement of derivatives and repayments of lease liabilities ¹	-613	-	-613	-135	-748
Issued bonds & loans ²	689	-	689	-	689
Fair value adjustments	-67	36	-31	-	-31
Other movements ³	59	-	59	70	130
Balance at 31 December 2021	6,744	-148	6,596	873	7,469
Exchange differences	20	-23	-2	-	-2
Movements recorded as net cash flows arising from/used in financing activities:					
Repayments of borrowings and settlement of derivatives and repayments of lease liabilities ¹	-1,075	80	-995	-124	-1,119
Issued bonds & loans	-	-	-	-	-
Fair value adjustments	-359	309	-50	-	-50
Other movements ³	37	-	37	174	211
Balance at 31 December 2022	5,368	218	5,586	923	6,509

1 In the Consolidated Statement of Cash Flows, this line item includes a net receipt of EUR 14m in 2022 (2021: EUR 115m) regarding cash collateral on derivatives and energy contracts (presented as non-current other receivables). The interest component of the lease payments is presented within cash flow from operating activities

2 Includes net proceeds from commercial paper of EUR 60m

3 Other movements of borrowings in 2022 includes receipts of EUR 32m (2021: EUR 55m) of cash collateral on derivatives and energy contracts. Other movements of the derivative financial instruments are predominantly movements in the interest part of cash flow hedges. Other movements of the lease liabilities include interest, additions of new contracts, remeasurements and modifications (see Note 19).

[13.3] Hedging activities and derivatives

KPN uses derivatives solely for the purpose of hedging underlying exposures. The primary risks managed using derivative instruments are foreign currency risk and interest rate risk.

and hedged items due to credit risk and valuation curves in combination with the cumulative change of the fair value of the hedging instrument becoming greater than the change in the fair value of the hedged item. Note that all hedges continue to be highly effective prospectively.

€ million	31 December 2022	31 December 2021
Assets (current and non-current)	148	212
Liabilities (current and non-current)	-366	-64
Total derivatives	-218	148
of which: designated in a hedge relationship	-233	122
of which: other derivatives not designated in a hedge relationship	15	26

A total gain of EUR 10m due to hedge ineffectiveness was recognized in the P&L in 2022 (2021: EUR 0m). This was mainly due to differences in the valuation of hedging instruments

Derivatives positions are reported on a gross basis and include a credit value adjustment attributable to derivative counterparty default risk. As at 31 December 2022, this lowered the net liability by EUR 9m (2021: net effect of EUR 0m). The increase in the credit value adjustment was primarily driven by the increased mark-to-market value of interest rate swaps as a result of significantly higher interest rates. Part of the derivatives portfolio is subject to master netting agreements that allow netting under certain circumstances.

If netting had been applied, the total derivatives asset position would be EUR 52m and the total derivatives liability position would be EUR 270m as at 31 December 2022 (2021: EUR 155m and EUR 6m respectively).

● Consolidated Financial Statements

Derivatives designated in a hedge relationship

Cash flow hedges

Bonds denominated in foreign currencies are hedged with cross-currency swaps. The currency exposure is hedged by effectively fixing the countervalue in the foreign currency to EUR and by hedging the interest rate exposure by swapping the fixed interest rates in foreign currency to fixed interest rates in EUR. There is an economic relationship between the hedged items and hedging instruments as the terms of the cross-currency swaps match the terms of the bonds. KPN has established a hedge ratio of 1:1 for the hedging relationships as the quantity of hedged items equals the notional amount of the cross-currency swaps. The hedges are until maturity of the underlying senior bonds or until the first call date in the case of the USD hybrid bond. For these hedges, KPN meets the criteria of, and also applies, cash flow hedge accounting. The effectiveness of the hedges is determined at inception and on

a quarterly basis. To test the hedge effectiveness, KPN uses the hypothetical derivative method and compares the changes in the fair value of the hedging instruments against the changes in the fair value of the hedged items attributable to the hedged risks. If the cumulative change in fair value of the hedging instrument and hedged item are not equal in absolute terms, the difference will be reported in the P&L to the extent that, in absolute terms, the fair value change of the hedging instrument is greater than the fair value change of the hedged item. Hedge ineffectiveness can arise from:

- Different curves linked to hedged items and hedging instruments
- The counterparties' credit risk differently impacting the fair value movement of the hedging instruments and hedged items
- Changes in the terms of the hedged item or hedge instrument

Overview of the cross-currency swaps at 31 December 2022 and 31 December 2021

Nominal (receive)	Coupon (receive)	Nominal (pay) (EUR m)	Coupon (pay)	Maturity date	Fair value 2022 (EUR m)	Fair value 2021 (EUR m)
USD 600m	7.000% semi-annual	465	6.344% semi-annual	28-3-2023	-	66
USD 143m	7.000% semi-annual	111	6.359% semi-annual	28-3-2023	23	-
GBP 400m	5.000% annual	480	4.138% (2021: 4.424%) annual	18-11-2026	-38	-16
GBP 850m	5.750% annual	971	5.432% annual	17-9-2029	-62	-18
USD 595m	8.375% semi-annual	450	8.517% semi-annual	1-10-2030	100	38
Total					23	70

Impact of the cash flow hedges on the Statement of Financial Position

€ million	Notional amount	Carrying amount	Line item in Statement of Financial Position	Change in fair value used for measuring ineffectiveness for the period
As at 31 December 2022				
Cross-currency swaps GBP	1,452	-100	Derivatives	-66
Cross-currency swaps USD	561	123	Derivatives	127
Total	2,013	23		61
As at 31 December 2021				
Cross-currency swaps GBP	1,445	-34	Derivatives	97
Cross-currency swaps USD	915	104	Derivatives	108
Total	2,361	70		205

The change in fair value of the associated hedged items attributable to the hedged risks resulted in an ineffectiveness loss in 2022 of EUR 1m (2021: EUR 1m gain).

● Consolidated Financial Statements

Effect of the cash flow hedge in the P&L and OCI

€ million	Total hedging gain/(loss) recognized in OCI	Ineffectiveness recognized as a gain/(loss) in P&L	Line item in P&L	Amount reclassified from OCI as a gain/(loss) in P&L	Line item in P&L
Year ended 31 December 2022					
Cross-currency swaps GBP	68	1	Other financial results	-78	Other financial results
Cross-currency swaps USD	-129	-2	Other financial results	101	Other financial results
Total	-62	-1		23	
Year ended 31 December 2021					
Cross-currency swaps GBP	-96	2	Other financial results	97	Other financial results
Cross-currency swaps USD	-108	-	Other financial results	81	Other financial results
Total	-204	1		178	

Fair value hedges

The 0.625% fixed-rate eurobond maturing on 9 April 2025 has also been swapped to a floating rate using fixed-to-floating interest rate swaps, where KPN receives a fixed rate of 0.920% and pays interest at a variable rate equal to six-month Euribor (fixed in arrears).

The 1.125% fixed-rate eurobond maturing on 11 September 2028 has been swapped to a floating rate using fixed-to-floating interest rate swaps, where KPN receives a fixed rate of 0.907% and pays interest at a variable rate equal to six-month Euribor.

In 2022, the 0.875% fixed rate Eurobond maturing on 15 November 2033 was also swapped to a floating rate using fixed-to-floating interest rate swaps, whereby KPN receives a fixed rate of 0.799% and pays interest at a variable rate equal to six-month Euribor (fixed in arrears). The swaps are used to hedge the exposure to changes in the fair value of these fixed rate eurobonds against changes in the EUR interest curve.

There is an economic relationship between the hedged item and the hedging instrument, as the terms of the interest rate swaps match the terms of the fixed-rate bonds (i.e. notional amount, maturity and payment dates). KPN has established a hedge ratio of 1:1 for the hedging relationships as the quantity of hedged item equals the notional amount of the hedging instrument. For these hedges, KPN meets the criteria of, and also applies, hedge accounting. If the cumulative change in the fair value of the hedging instrument and hedged item are not equal in absolute terms, the difference will be recorded in the P&L. The hedge ineffectiveness can arise from:

- Different curves linked to the hedged items and hedging instruments
- The counterparties' credit risk differently impacting the fair value movement of the hedging instruments and hedged items
- Changes in the terms of the hedge item or hedge instrument

Impact of the fair value hedges on the Statement of Financial Position

€ million	Notional amount	Carrying amount	Line item in Statement of Financial Position	Change in fair value used for measuring ineffectiveness for the period
As at 31 December 2022				
Interest rate swaps	1,950	-256	Derivatives	-331
As at 31 December 2021				
Interest rate swaps	1,250	52	Derivatives	-47

● Consolidated Financial Statements

Impact of the hedged items on the Statement of Financial Position

€ million	Carrying amount	Change in fair value adjustments	Line item in Statement of Financial Position	Change in fair value used for measuring ineffectiveness for the period
As at 31 December 2022				
Fixed-rate eurobonds 2025, 2028 & 2033	1,643	308	Borrowings	341
As at 31 December 2021				
Fixed-rate eurobonds 2025 & 2028	1,308	47	Borrowings	45

The ineffectiveness recognized in the P&L for the year ended 31 December 2022 was a gain of EUR 11m (2021: EUR 1m loss).

Derivatives not designated in a hedge relationship

In 2011, fixed-rate eurobonds with maturities on 30 September 2024 were swapped to a floating interest rate using fixed-to-floating interest rate swaps. Subsequently, in May 2015, KPN swapped the floating rate exposure on these bonds to a fixed rate for the remaining maturity of these bonds and discontinued fair value hedge accounting for the fixed-to-floating interest rate swaps. As a result, the cumulative gain until de-designation, which amounted to EUR 224m, is amortized to earnings until maturity

of the associated bonds. This is offset by the change in fair value of the outstanding interest rate swaps. The amortization recognized in earnings for 2022 was a gain of EUR 7m (2021: EUR 11m) and the remaining balance of the unamortized gain was EUR 12m at 31 December 2022 (2021: EUR 19m). The fair value of the outstanding interest rate swaps was EUR 15m as at December 2022 (2021: EUR 26m) and the change in fair value of these swaps resulted in a P&L loss of EUR 11m in 2022 (2021: EUR 17m loss). The net interest income of these swaps was an additional loss of EUR 15m (2021: EUR 16m gain), which results in net earnings (including amortization and change in fair value) in 2022 of EUR 19m negative (2021: EUR 10m positive).

Accounting policy: Derivatives and hedging activities

Derivatives are recognized at fair value. Gains and losses arising from changes in fair value are recognized as finance cost/income during the period in which they arise to the extent that the derivatives have no hedging designation or they are ineffective.

KPN applies IFRS 9 hedge accounting. Derivatives related to loans are designated as either cash flow or fair value hedges.

Offsetting effects are recognized in the P&L.

The hedge documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how KPN will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined).

A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- There is 'an economic relationship' between the hedged item and the hedging instrument;

- The effect of credit risk does not 'dominate the value changes' that result from that economic relationship; and
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that KPN actually hedges and the quantity of the hedging instrument that KPN actually uses to hedge that quantity of hedged item.

Changes in the fair value of an effective derivative, which is designated as a fair value hedge, along with the gain or loss on the hedged item that is attributable to the hedged risk, are recorded in the P&L as finance cost/ income. Changes in the fair value of an effective derivative, which is designated as a cash flow hedge, are recorded in OCI for the effective part, until the P&L is affected by the variability in cash flows of the designated hedged item. The ineffective part of the cash flow hedge is recognized as finance cost/income. If an underlying transaction has ceased to be an effective hedge or in case of early redemption of the hedged item, hedge accounting is discontinued prospectively which means that subsequent changes in fair value are recognized in the P&L as finance cost/income and the cumulative amount recorded in OCI is released in the P&L.

● Consolidated Financial Statements

[13.4] Financial risk management and policies

Financing policy

KPN strives for the right balance between investments in the business, shareholder remuneration and a prudent financing policy. It is KPN's policy to utilize excess cash for operational and financial flexibility and/or shareholder remuneration.

The net debt/EBITDA AL ratio is one of the drivers for KPN's credit rating. It is based on the nominal value of borrowings and takes 50% equity credit on hybrid bonds into account. KPN remains committed to an investment-grade credit profile and aims for a net debt/EBITDA AL ratio of below 2.5x in the medium term.

The difference between the carrying value and nominal value of borrowings includes: (1) carrying value adjustments resulting from fair value hedges; (2) in case of foreign currency bonds, the difference between the nominal amount at the prevailing spot rate and the swapped nominal amount in EUR; and (3) amortized debt issuance costs.

KPN's Treasury department manages the financial risks according to policies approved by the Board of Management and Supervisory Board. These policies are established to identify and analyze financial risks, set appropriate risk limits and controls, and monitor adherence to those limits.

The COVID-19 crisis, geopolitical tensions (including the war in Ukraine) and the impact of inflation, rising energy and raw material prices, have led to increased volatility in capital markets and periods of deteriorated market liquidity. In addition, the reversal of central banks' monetary policies led to a significant increase in (expected) interest rate levels. KPN's Treasury department monitored the situation closely and the impact on KPN's liquidity position, sources of financing and financial counterparties remained within acceptable risk limits. KPN did not suffer any material impact on its liquidity reserves and its ability to raise financing remained very strong, albeit at higher cost levels.

Credit and counterparty risk

Credit risk arises from the possibility of asset impairment occurring when counterparties are unable to meet their obligations in transactions involving financial instruments. KPN's counterparty policy sets limits for the maximum exposure per counterparty, which are primarily based on credit ratings, investment periods and collateral. The minimum counterparty credit rating (Moody's equivalent) is Baa2 for cash balances and Baa1 for entering into new derivative transactions. Cash balances used for working capital purposes can also reside at banks with lower credit ratings. Capital preservation is KPN's main priority when investing excess cash.

As at 31 December 2022, KPN's cash balances and short-term investments were held in bank accounts, bank deposits and money market funds with maturities of up to three months. The majority of cash balances were invested with counterparties with a credit rating equivalent to A3 at Moody's or higher, and the counterparties of outstanding derivatives have a credit rating equivalent to Baa1 or higher with Moody's.

KPN mitigates credit risk on bank counterparties arising from derivative financial instruments through collateral support agreements, which results in cash being paid or received as security. This cash collateral is released when derivatives are settled and/or mature. In 2022, the net cash collateral movement was EUR 14m receipt (2021: EUR 115m). As at 31 December 2022, KPN held net cash collateral (liability) of EUR 28m (2021: EUR 14m).

Credit risk on trade receivables is controlled using restrictive policies for customer acceptance. Credit management is focused on mobile services. Before accepting certain new customers in this segment, the creditworthiness of prospective clients is checked. In addition, KPN keeps track of the payment performance of

€ million	31 December 2022	31 December 2021
Borrowings	5,368	6,744
Perpetual hybrid bonds	1,000	500
50% equity credit for hybrid bonds	-500	-483
Less: Cash collateral paid on derivatives	-75	-56
Difference between carrying value and nominal value	141	-305
Adjusted gross debt	5,935	6,400
Net cash and cash equivalents	399	793
Short-term investments	100	300
Net debt ¹	5,435	5,307
Adjusted EBITDA AL	2,404	2,347
Net debt/EBITDA AL	2.3x	2.3x

1 Excluding lease liabilities

Financial risk management

KPN is exposed to a variety of financial risks. The overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on KPN's financial position and performance.

Derivatives are used to hedge certain risk exposures (see Note 13.3).

KPN's key financial risks are:

- Credit and counterparty risk
- Liquidity risk
- Market risk

● Consolidated Financial Statements

customers. If customers fail to meet set criteria, payment issues must be resolved before a new transaction will be entered into.

KPN's policy is to provide financial guarantees only to wholly-owned subsidiaries. As at 31 December 2022, KPN had parent guarantees and bank guarantees outstanding to third parties for various wholly-owned Dutch subsidiaries. The carrying amount of financial assets, including cash, and contract assets represents the

maximum credit exposure, which amounts to EUR 1,643m as at 31 December 2022 (2021: EUR 2,265m). On 31 December 2022, the total outstanding bank guarantees amounted to EUR 6m (2021: EUR 6m), which were issued in the ordinary course of business.

See schedule of the allowances for expected losses in Note 14 for information about credit losses on trade and other receivables. There were no other credit losses.

Maturity analysis of the financial liabilities based on the remaining contractual maturities on 31 December 2022

€ million	Borrowings			Derivatives				Trade and other payables ¹	Total
	Bonds and loans	Interest on bonds and loans (undiscounted)	Lease liabilities	Other debt and cash collateral	Derivatives inflow (including interest)	Derivatives outflow (including interest)			
2023	196 ²	187 ³	178	36	-308	288	903	1,481	
2024	431	181	139	-4	-166	170	-	752	
2025	625	157	129	-	-141	156	-	925	
2026	451	153	122	-	-587	619	-	758	
2027	300	128	93	-	-113	119	-	527	
2028 and further	3,491	330	399	-	-1,806	1,766	-	4,181	
Contractual cash flows	5,495	1,136	1,060	32	-3,121	3,118	903		8,623

1 Excluding accrued interest and social security and other taxes payable

2 Includes the USD hybrid bond with final maturity in 2073 but which will be called in March 2023 (redemption value of EUR 113m)

3 Interest payments on the USD hybrid bond are included

Liquidity risk

Liquidity risk is the risk that KPN will not be able to meet its financial obligations associated with financial instruments as they become due. KPN's approach to managing liquidity is to ensure sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage. Some of the derivatives contain reset clauses or collateral postings at pre-agreed dates, in order to mitigate counterparty exposure during the life of the swap. These reset clauses will result in early euro settlement obligations in cash with the swap counterparty, which could lead to additional cash inflows or outflows before maturity. In order to reduce liquidity risks, the reset clauses or collateral postings are spread over different points in time.

During 2022, KPN received net collateral of EUR 14m (2021: EUR 115m) according to pre-agreed settlement schedules.

Available financing resources

In addition to the available cash and cash equivalents, short-term investments and cash flows from operations, KPN has the following committed financing resources available:

Revolving credit facility

KPN has a sustainability-linked revolving credit facility for EUR 1.0 billion provided by twelve relationship banks, originally signed in August 2021. The facility can be used for general corporate purposes and does not contain any financial covenants. In August 2022, all banks agreed to a one year extension, which extends the maturity of the revolving credit facility to 4 August 2027. The facility contains another one-year extension option which can be exercised in August 2023 and which could extend the maturity to August 2028. The facility has a mechanism to adjust the margin based on KPN's performance on predefined sustainability targets on the roll-out of fiber, reduction in KPN's energy consumption and reduction of carbon emissions in the supply chain. The facility was undrawn as at 31 December 2022 resp. 31 December 2021.

Capital resources covenants

KPN's existing capital resources contain the following covenants as at 31 December 2022, which could trigger additional financial obligations or early redemption of the outstanding indebtedness. All senior bonds issued after 1 January 2006 (EUR 4.4bn outstanding as at 31 December 2022) contain a change of control clause. KPN may be required to early redeem if certain changes of control occur and within this change of control period (maximum of 90 days) a rating downgrade to sub-investment

● Consolidated Financial Statements

grade occurs. The hybrid bonds also contain a change of control clause by means of which KPN has the possibility to repurchase the hybrid bonds at par. A 5% interest step-up applies if a rating downgrade occurs during the change of control period in respect of that change of control. In addition, many of KPN's capital resources contain a covenant prohibiting KPN from entering into any amalgamation, demerger, merger, corporate restructuring or reorganization, unless prior written consent has been given by a majority of the lenders or bondholders or the resulting company assumes all of the rights and obligations with respect to the loans or bonds.

Market risk

KPN is exposed to various kinds of market risks in the ordinary course of business. These risks include foreign currency exchange rate risk and interest rate risk.

Foreign currency exchange rate risk

Foreign currency risks mainly result from settlement of international telecommunications traffic and purchase of assets and primarily consist of GBP and USD exposure. Foreign currency exchange rate risks related to bonds that are not denominated in EUR are hedged into EUR in line with KPN's hedging policies. Group companies and business operations are obliged to hedge their firm commitments and highly predictable anticipated transactions in non-functional currencies by forward exchange contracts.

Accordingly, KPN's Treasury department matches and manages the intercompany and external exposures using forward exchange contracts. No hedge accounting is applied for these hedge instruments.

As at 31 December 2022, more than 95% (2021: 98%) of cash and cash equivalents was denominated in the functional currency of the related entities. More than 99% of the net amount of trade receivables and more than 95% of the amount of trade payables was outstanding in the functional currency of the related entities as at 31 December 2022 (2021: more than 99% resp. 93%).

Interest rate risk and interest rate profile

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate as a result of changes in market interest rates. Borrowings, derivatives, cash and cash equivalents are subject to interest rate risk. With regard to interest rate risk exposure, KPN periodically evaluates the desired mix of fixed and floating interest rate liabilities, balancing the benefit of lower interest costs vs. the variability of cash flows. Any interest rate risk exposure longer than one year is considered to be fixed. KPN may use derivative financial instruments to adjust the desired interest rate risk exposure.

As at 31 December 2022, 64% of KPN's interest-bearing gross debt (after swaps, excluding bank overdrafts) was at fixed interest rates (2021: 77%).

With a view to the existing and forecasted debt structure, KPN could enter into additional future derivatives to further adjust the mix of fixed and floating interest rate liabilities.

A sensitivity analysis as at 31 December 2022 with regard to interest rate risk on floating interest-bearing liabilities showed that, ceteris paribus, each adverse change of 100 bps in Euribor would hypothetically result in EUR 23m higher interest costs per annum (2021: EUR 16m).

Interest rate benchmarks (Interbank Offered Rates, or IBORs) are reformed and/or replaced by alternative Risk-Free Rates (RFRs). This affects financial instruments on the derivatives and cash markets that operate with the impacted floating reference rates. The three most used IBORs are the European Interbank Offered Rate (Euribor), the London Interbank Offered Rate (Libor) and the EURO Overnight Index Average (Eonia). For each benchmark, the developments are at different stages and vary in scope and transition time. For example, GBP Libor is discontinued after 31 December 2021 whereas most tenors of USD Libor will continue until 1 July 2023. Euribor has been reformed and is not scheduled to be discontinued. As the Euribor benchmark remains, there is no impact for KPN on the used floating EUR interest rates. The transition of Eonia to Euro Short-Term Rate (ESTR) has a negligible impact for KPN, concerning interest on collateral paid and/or received under credit support agreements with swap counterparties. The relevant agreements have been amended to reflect the change to ESTR. The transition of GBP Libor to Secured Overnight Financing Rate (SOFR) may have a small impact on the valuation of KPN's cross-currency swaps as this benchmark is used to value the derivatives with a GBP currency leg.

Cash flow hedges

KPN carried out a sensitivity analysis as at 31 December 2022 with regard to interest rate and currency risk on the cash flow hedges. KPN applies cash flow hedge accounting on all bonds not denominated in EUR. With all other variables held constant, KPN calculated the hypothetical impact of changes in interest rates based on various scenarios. This would hypothetically result in a higher or lower value of the hedge reserve, which is included in equity attributable to equity holders. In a similar way, KPN calculated the hypothetical impact of changes in the EUR/USD rate and the EUR/GBP rate, holding all other variables constant. The results of the analysis are shown in the table below, indicating the hypothetical impact on the fair value of the cross-currency swaps (excluding the partially offsetting impact on the hedged items).

● Consolidated Financial Statements

€ million (before tax)	Change	GBP		USD		Total	
		2022	2021	2022	2021	2022	2021
Change in interest rate	+1%-point	6	-3	6	3	12	-
	-1%-point	-6	3	-6	-3	-12	-
Change in FX rate	+10%-point	6	31	-24	29	-18	60
	-10%-point	-7	-42	30	-36	22	-78

Prospective effectiveness testing indicates that all cash flow hedges are expected to be highly effective. Consequently, the expected impact on the P&L is immaterial.

For the sensitivity analysis on interest rate risk regarding pensions, see Note 17.

Fair value hedges

KPN carried out a sensitivity analysis on 31 December 2022 with regard to the fair value of interest rate swaps (excluding the partial offsetting impact on the hedged items):

€ million	Change	2022	2021
Change in EUR interest rates	+1%-point	-120	-63
	-1%-point	123	66

Financial assets

Financial assets subject to offsetting, enforceable master netting arrangements and similar agreements

€ million	Gross amount	Financial liabilities offset	Net amount in balance sheet	Not offset: Financial instruments/ Cash collateral	Net amount
31 December 2022					
Cash and cash equivalents	399	-	399	-	399
Collateral ¹	53	-	53	-53	-
Derivatives	148	-	148	-148	-
Total	600	-	600	-201	399
31 December 2021					
Cash and cash equivalents	793	-	793	-	793
Collateral ¹	56	-	56	-15	41
Derivatives	212	-	212	-88	124
Total	1,061	-	1,061	-103	958

¹ Included in non-current Trade and other receivables

● Consolidated Financial Statements

Financial liabilities

Financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements

€ million	Gross amount	Financial assets offset	Net amount in balance sheet	Not offset: Financial instruments/ Cash collateral		Net amount
				Financial instruments/ Cash collateral	Net amount	
31 December 2022						
Collateral ¹	103	-	103	-75	28	
Derivatives	366	-	366	-126	240	
Total	469	-	469	-201	268	
31 December 2021						
Collateral ¹	46	-	46	-46	-	
Derivatives	64	-	64	-57	6	
Total	110	-	110	-103	6	

1 Included in non-current Borrowings

For the financial assets and liabilities summarized above, each agreement between KPN and the counterparty allows for net settlement of the relevant financial assets and liabilities when both parties elect to settle on a net basis.

Accounting policy: Offsetting financial assets and liabilities

Financial assets and liabilities are offset and reported on a net basis on the balance sheet only when there is a current legally enforceable right to offset the recognized amounts, and there is an intention either to settle on a net basis or to realize the asset and settle the liability simultaneously.

● Consolidated Financial Statements

[14] Trade and other receivables, contract assets and contract costs

[14.1] Trade and other receivables

€ million	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Trade receivables	245	-	222	-
Financial receivables handsets	174	-	199	-
Sales to be invoiced	107	-	103	-
Interest to be received	9	-	17	-
Prepayments	93	16	95	16
Accruals and other receivables	5	79	40	61
Total	632	95	677	77

The financial receivables handsets consist of not yet invoiced installment payments on the handset loans, mainly issued by KPN Finance B.V. In 2022, KPN Finance B.V. assigned EUR 28m outstanding financial receivables handsets to a bank and removed these receivables from the balance sheet as the transfer of the receivables is characterized as a sale because the risks and rewards of ownership of the receivables have been substantially transferred. KPN has provided an indemnity to the bank in case the realized losses on the transferred receivables are exceptionally high. At 31 December 2022, the financial receivables handsets of KPN Finance B.V. (EUR 158m) are measured at FVOCI and at 31 December 2021 at amortized cost.

The non-current other receivables relate for EUR 75m to cash collateral received on derivatives (2021: EUR 56m).

Sales to be invoiced include accrued income related to usage of KPN's network, which is invoiced monthly in arrears.

The carrying amounts of trade and other receivables approximate their fair value. Trade and other receivables are non-interest bearing. Trade receivables are generally on payment terms of 14-30 days. The aging of the gross trade receivables is as follows:

€ million	31 December	31 December
	2022	2021
Trade receivables gross		
Amounts undue	189	169
Past due 0–90 days	50	48
Past due 91–360 days	15	17
More than one year	8	10
Total trade receivables gross	262	244
Provision for credit risk exposure	-17	-21
Total trade receivables net	245	222

[14.2] Contract assets and contract costs

€ million	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Contract assets	80	29	32	20
Costs to obtain a contract	-	21	-	15
Costs to fulfill a contract	4	-	13	-
Total	84	50	45	36

Contract assets

A contract asset is recognized if the earned consideration is conditional. This includes:

- Deferred discounts invoiced to customers if the discount is only granted in the first period of the service contract and the discount is recognized on a straight-line basis over the contract term.
- The consideration to be received regarding those additional scope projects sold to Glaspoort B.V. in December 2021 of which the roll-out activities have started, at which point other income is recognized. KPN has received 35% of the total consideration in cash upon closing of the transaction and the remaining amount will be received based on the roll-out progress (see Note 12 for the sale to Glaspoort of additional scope projects).
- Installation services and hardware delivered at the start of the contract if the amount of revenue recognized is higher than the amounts charged upfront.
- Transition projects for business customers when the revenue recognized is higher than the amounts invoiced for the transition phase.

Upon invoicing of contracts assets, the invoiced amounts are reclassified to trade receivables.

● Consolidated Financial Statements

Contract costs

Contract costs include:

- Transaction-related dealer fees paid to acquire or retain mobile subscribers.
- Costs incurred during the transition phase of projects for business customers to be able to deliver exploitation services that are not treated as a separate performance obligation. The

costs are capitalized as costs to fulfill a contract and expensed in principle on a straight-line basis over the remaining contract term in which the exploitation services are delivered.

[14.3] Allowances for expected credit losses

Movement schedule of the allowances for expected credit losses:

€ million	Trade receivables	Financial receivables handsets	Contract assets	Total
Balance at 1 January 2021	20	3	1	24
Additions/releases P&L	9	-	-	9
Usage	-8	-1	-1	-10
Balance at 31 December 2021	21	3	-	24
Additions/releases P&L	12	-1	-	11
Usage	-13	-	-	-13
Reclassification to FVOCI	-3	-1	-	-4
Balance at 31 December 2022	17	1	-	18

The allowance for expected credit losses for trade receivables is based on the aging of the gross trade receivables and historic losses. For the largest customers, an assessment is done whether or not an additional allowance needs to be recognized. The allowance for financial receivables handsets is also based on historic losses and is adjusted if there is an indication that customer payment behavior will deteriorate. The financial receivables handsets are the installments to be invoiced on average in approximately the next 12 months.

Accounting policy: Trade and other receivables, contract assets and contract costs

Trade and other receivables and contract assets classify as financial assets and are measured at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest method less provisions for impairment. An allowance for expected credit losses is recorded for all financial assets and contract assets at initial recognition. This allowance is regularly updated.

The amortized cost is calculated by taking into account any discounts or premiums on acquisition and transactions costs.

The effective interest rate amortization is recognized under finance income or finance costs.

If a financial asset is held within a business model with the objective of both collecting contractual cash flows and selling the financial asset, the financial asset is measured at fair value through other comprehensive income (FVOCI).

A financial asset is derecognized when the rights to receive cash flows from the asset have expired or KPN has transferred the rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a pass-through arrangement; and either (1) KPN has transferred substantially all the risk and rewards of the asset, or (2) KPN has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When KPN has transferred the rights to receive cash flows from an asset or has entered into a pass-through arrangement, KPN evaluates if, and to what extent, KPN has retained the risks and rewards of ownership. The risks and rewards are substantially transferred if more than 90% of the variability of the cash flows with respect to an asset is transferred.

See Note 4 for the accounting policy regarding contract costs.

● Consolidated Financial Statements

[15] Cash and cash equivalents

Cash and cash equivalents consist of highly liquid instruments with initial maturities of three months or less, including balances on bank accounts, bank deposits and money market funds.

€ million	31 December 2022	31 December 2021
Cash	144	258
Short-term bank deposits and money market funds	255	535
Total cash and cash equivalents	399	793

The decrease in cash and cash equivalents was mainly the result of EUR 571m dividend payments, EUR 300m share repurchases, EUR 468m of net debt redemptions (including EUR 500m bond proceeds and EUR 968m bond redemptions), EUR 71m net payments related to M&A and Glaspoort, and EUR 17m net investments Ventures, partly offset by EUR 862m free cash flow and EUR 200m change in short-term investments.

Accounting policy: Cash and cash equivalents

Cash and cash equivalents comprise cash in hand, deposits held at call with banks, AAA-rated prime money market funds, and other short-term highly liquid investments with original maturities of three months or less. Bank overdrafts are included in borrowings in current liabilities.

[16] Equity

Limitations in distribution of shareholders' equity

Total distributable reserves as at 31 December 2022 amounted to EUR 2,818m, which includes the perpetual capital securities (2021: EUR 2,545m). For further details on non-distributable reserves, see Note C to the Corporate Financial Statements.

Share capital

Authorized capital stock totals EUR 720m divided into nine billion ordinary shares of EUR 4ct each and nine billion preference shares B of EUR 4ct each. At 31 December 2022, a total of 4,037,319,593 ordinary shares were outstanding and fully paid-in. Dutch law prohibits KPN from casting a vote on shares KPN holds (treasury shares). The ordinary shares and preference shares B carry the right to cast one vote each. The ordinary shares are registered or payable to the bearer.

Shareholders may request the company to convert their registered shares to bearer shares, but not vice versa.

Share buyback

In 2021, KPN repurchased 73,684,157 ordinary shares at an average price of EUR 2.71, and in 2022 92,840,654 ordinary shares at an average price of EUR 3.23. Of these shares, 165,524,811 were cancelled in 2022, reducing the number of outstanding shares to 4,037,319,593.

At the 13 April 2022 AGM, shareholders granted the Board of Management the authority to acquire the company's own ordinary shares for a period of 18 months - starting on 13 April 2022 and ending on 13 October 2023. The number of ordinary shares to be acquired is limited to a maximum of 10% of the issued capital per 13 April 2022. The shares may be acquired, by or on behalf of the company, on the stock exchange or through other means at a price per share of at least the par value and at most the quoted share price plus 10%. The quoted share price is defined as the average of the closing prices of KPN shares as reported in the official price list of Euronext Amsterdam over the five trading days prior to the acquisition date. Resolutions by the Board of Management to acquire the company's own shares are subject to the approval of the Supervisory Board.

Ordinary shares purchased by the company will either be cancelled or held in treasury. At the 13 April 2022 AGM, shareholders granted the Board of Management the authority to reduce the issued capital by cancelling own shares with the approval of the Supervisory Board. The number of shares that may be cancelled is restricted to a maximum of 10% of the issued capital as at 13 April 2022 and may, if desired, be cancelled in one or more phases.

● Consolidated Financial Statements

Other reserves

€ million, unless indicated otherwise	Number of treasury shares	Treasury shares reserve	Hedge reserve	Currency translation reserve	Total Other reserves
Balance at 1 January 2021	5,609,432	-65	-156	22	-199
Movements recorded in OCI (net)	-	-	31	-7	24
Share buyback	73,684,157	-200	-	-	-200
Sold treasury shares	-1,643,571	17	-	-	17
Balance at 31 December 2021	77,650,018	-248	-125	15	-358
Movements recorded in OCI (net)	-	-	39	2	41
Share buyback	92,840,654	-300	-	-	-300
Shares canceled	-165,524,811	492	-	-	492
Sold treasury shares	-1,343,847	14	-	-	14
Other	-	5	-	-	5
Balance at 31 December 2022	3,622,014	-37	-86	17	-106

The additional paid-in capital is exempt from Dutch tax up to an amount of EUR 8,802m at 31 December 2022 (2021: EUR 9,282m).

Movements in the hedge reserve recorded in OCI are net of a tax loss of EUR 14m in 2022 (2021: EUR 9m loss) and in the currency translation reserve net of a tax gain of EUR 1m (2021: EUR 1m gain).

Equity attributable to holders of perpetual capital securities
On 8 November 2019, KPN issued a EUR 500m hybrid bond with a 2.00% coupon and on 21 September 2022 a EUR 500m hybrid bond with a 6.00% coupon, both with a perpetual maturity. These bonds are classified as equity in the Consolidated Statement of Financial Position and valued at net proceeds (see Note 13.2).

Hedge reserve

€ million	31 December 2022	31 December 2021
Effective portion cash flow hedges ¹	-23	-61
Amortizable part ²	-93	-107
Hedge reserve	-116	-168
Tax effect	30	43
Hedge reserve, net of tax	-86	-125

1 The effective portion of cash flow hedges will be recognized in the P&L in line with the maturities of the related derivatives (see Note 13.3)

2 The amortizable part of the hedge reserve is amortized over the remaining life of the related bonds (between 2016 and 2030). The impact on the P&L will be EUR 15m in 2023

Foundation Preference Shares B KPN

KPN has granted a call option, which is not limited in time, to the Foundation Preference Shares B KPN (the Foundation) to acquire preference shares B. For further information about the Foundation, see chapter 'Corporate governance'.

In KPN's opinion, the call option does not represent a significant fair value due to the fact that the preference shares B, issued after exercise of the call option, bear interest linked to Euribor.

Dividend per share

At the AGM of Shareholders on 12 April 2023, a final dividend of EUR 9.5ct per share will be proposed in respect of 2022. In August 2022, KPN paid an interim dividend in respect of 2022 of EUR 4.8ct per share, in total EUR 196m, bringing the total regular dividend in respect of 2022 to EUR 14.3ct per share (in total EUR 579m based on the number of outstanding shares at 31 December 2022 less Treasury shares held by KPN).

These Financial Statements do not reflect the proposal for the remaining dividend payable. In April 2022, KPN paid a final dividend of EUR 9.1ct per share in respect of 2021, in total EUR 375m. The total dividend in respect of 2021 was EUR 13.6ct per ordinary share.

Treasury shares reserve

KPN purchased shares in its own capital for delivery upon vesting of equity-settled share plans for management (see Note 5). Votes on purchased shares may not be cast and do not count in determining the number of votes required at a General Meeting of Shareholders. In 2022, 1 million shares were purchased for the equity-settled share plans (none in 2021). In 2022 and 2021, shares were sold in connection with vesting of these plans.

Treasury shares are accounted for at cost, representing the market price on the acquisition date. The proceeds at delivery of the treasury shares are recognized directly in the other reserves.

● Consolidated Financial Statements

[17] Retirement benefits

Retirement benefits are provided through a number of defined contribution plans and funded and unfunded defined benefit plans. The most significant plans are described hereafter.

KPN main pension plan

KPN's main pension plan covers employees in the Netherlands who are subject to KPN's collective labor agreement and employees with an individual labor agreement, and is externally funded through Stichting Pensioenfonds KPN. This plan is a collective defined contribution pension plan. It is accounted for as a defined contribution plan because KPN has no other obligation than to pay the annual contribution. This is a fixed percentage of the pensionable base for a period of three years. After this three-year period the annual contribution is reassessed based on a fixed and agreed method in which no reflection to past service or the funded status of the fund is included. As of 1 January 2023, a new three-year period has become effective.

Getronics UK and US

The Getronics US and UK operations were divested in 2008 and 2012, respectively. The closed and frozen pension plans of the former US and UK operations remained with KPN and are accounted for as a defined benefit plan. The assets of the plans are held separately from KPN in independently administered funds. The UK plan operates under the regulations of the UK Pensions Regulator and the US plan under the provisions of the Employee Retirement Income Security Act (ERISA). The deficit in the plans' funding must be recovered by the investment returns in the plans' assets and contributions by KPN. The pension plans in the UK and US expose KPN to a number of risks, which can have an impact on the future contributions by KPN and the liability recorded in its balance sheet. The most significant risks are summarized below:

- Asset volatility risk: the pension plans' assets are partially invested in equity securities and other return-seeking assets, so the plans' funding levels are exposed to equity market risks. The war in the Ukraine and increases in interest rates, for example caused significant volatility in 2022.
- Interest rate risk: a decrease in interest rates will increase the plans' liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.
- Inflation risk: the indexation of part of the accrued benefits in the UK is based on a combination of consumer and retail price indices, so the UK plan is exposed to inflation risk although the indexation is capped.

- Life expectancy risk: the plans provide benefits for the life of the participants, so increases in life expectancy will result in an increase in the plans' liabilities.

In the UK, guaranteed minimum pension (GMP) is a portion of pension that was accrued by individuals who were contracted out of the state second pension prior to 6 April 1997. At present there is an inequality of benefits between male and female members who have GMP. The High Court in the UK ruled in 2018 that equalization will be required for affected defined benefit pension schemes. A number of options can be used to equalize, which had not been finalized as at 31 December 2022. The estimated cost of equalization as at 31 December 2022 and 2021 for the UK plan is EUR 6m, which has been recognized as a past service cost in 2018. However, the cost to the UK plan for equalizing heavily depends on a complex interaction between the benefit design and membership profile as well as the method used to equalize, which must be determined by the trustees.

In 2022, an additional voluntary pension contribution of EUR 23m into the US plan was made. This will lead to lower contributions going forward and brings the plan closer to full funding and an eventual buyout.

Other

KPN has a number of other funded (insured) plans in the Netherlands which are all closed to new entrants. Based on Dutch law, KPN could be required to make contributions if participants of these plans require a value transfer to another pension fund or insurer. However, the risk related to these value transfers is limited and therefore no provision has been recognized for these plans.

In 2021, a final payment of EUR 7m for the unfunded transitional early retirement plan was made. In 2022, a new early retirement plan was implemented for a limited group of employees for which an expense of EUR 1m was recorded in 2022.

Provisions for retirement benefit obligations

The provisions for retirement benefit obligations consist of the net defined benefit liability regarding pension plans and early retirement plans, which are accounted for as defined benefit plans as described above. See the table below for a specification of the balance sheet position.

● Consolidated Financial Statements

€ million	Defined benefit obligation ¹		Fair value of assets		Net defined benefit liability (asset)	
	2022	2021	2022	2021	2022	2021
Balance at 1 January	574	651	-482	-499	92	152
Included in profit or loss						
Operating expense ²	-33	-56	37	58	4	2
Interest expense (income)	12	9	-10	-7	2	2
Included in OCI						
Remeasurements loss (gain):						
Actuarial loss (gain) ³	-141	-32	-	-	-141	-32
Return on plan assets excluding interest income	-	-	137	-20	137	-20
Effect of movements in exchange rates	-4	40	3	-31	-1	9
Total	-145	8	140	-51	-5	-43
Other						
Employer's contribution	-	-	-43	-21	-43	-21
Benefits paid	-28	-38	28	38	-	-
Balance at 31 December	380	574	-330	-482	49	92

1 The measurement date for all defined benefit plans is 31 December

2 Service costs were EUR 1m and administrative costs EUR 3m in 2022 and EUR 0m and EUR 3m in 2021. Operating expense in 2022 and in 2021 includes settlements (a loss of EUR 0m in 2022 and a gain of EUR 1m in 2021). The latter relates to a partial transfers of the retiree pension liabilities of the US pension fund to an insurance company in 2022 and in 2021 and a conversion into a non-profit-sharing agreement with regard to a Dutch insured pension plan in 2021

3 The actuarial loss (gain) in 2022 and 2021 consists of demographic assumptions (EUR 0m and EUR -5m), financial assumptions (EUR -154m and EUR -29m) and experience adjustments (EUR 13m and EUR 2m)

Defined benefit obligations

Actuarial assumptions

The key actuarial assumptions used in the calculation of the defined benefit obligations are as follows:

	31 December 2022			31 December 2021		
	Getronics UK	Getronics US	Other	Getronics UK	Getronics US	Other
Discount rate (%)	4.8	4.9	3.7	2.0	2.6	1.0
Expected salary increases (%)	N/a	N/a	2.0	N/a	N/a	2.0
Expected benefit increases/indexation (%)	2.3-2.9	N/a	0.0	2.5-3.1	N/a	0.0
Life expectancy for pensioners at retirement age:						
Male	21.8	20.7	21.7	22.1	20.6	21.4
Female	23.8	22.6	23.8	24.1	22.6	23.4

The discount rate is based on yield curves of AA corporate bonds with maturities equal to the duration of the benefit obligations and in the applicable currency. As at 31 December 2022, the (weighted) average duration of the defined benefit obligation was 10 years.

Assumptions regarding life expectancy are based on published statistics and mortality tables that include allowances for future improvement in mortality. The mortality table used in the Netherlands is the projected table AG 2022, which includes projected improvement rates varying by year of birth, corrected

for fund-specific circumstances. The mortality table used in the UK is the 102% for males and 107% for females of the SAPS S3PXA tables with CMI 2021 projection with a 1.25% long-term improvement, and in the US the Pri-2012 Total Dataset with Scale MP-2021. The life expectancy at the age of 65 is expected to increase in the next 20 years by between one and two years in the UK and the US.

● Consolidated Financial Statements

Sensitivity analysis

The following table shows the approximate impact on the defined benefit obligation of a change in the key actuarial assumptions of 0.5% and in the case of life expectancy of a change of one year.

€ million	31 December 2022		31 December 2021	
	Increase	Decrease	Increase	Decrease
Discount rate	-18	20	-35	39
Expected salary increases	-	-	-	-
Expected benefit increases	7	-8	16	-19
Life expectancy	13	-14	26	-26

Plan assets

The assets of all defined benefit pension plans as at 31 December 2022 and 2021 comprise of:

	31 December 2022	31 December 2021
Quoted in active markets:		
Equity securities	14%	21%
Fixed-income securities	55%	41%
Real estate ¹	0%	0%
Commodities ²	1%	1%
Other	5%	2%
Other:		
Equity securities	0%	6%
Fixed-income securities	0%	10%
Real estate ¹	5%	3%
Other ³	20%	16%

1 As at 31 December 2022, none of the investments in real estate were located in Europe

2 Includes investment funds which invest in financial instruments related to commodities such as energy, agricultural products and precious metals

3 Mainly sub-investment grade corporate credit funds, insurance contracts and hedge funds

Strategic investment policies

The strategic asset allocations of the defined benefit plans at year-end 2022 were as follows:

€ million	Getronics UK	Getronics US	Other plans
Equity securities	20%	0%	0%
Fixed-income securities (including inflation-linked bonds)	55%	100%	0%
Other	25%	0%	100%
Total	100%	100%	100%

In both the UK and the US, a roadmap is in place to move to more fixed-income exposure as the funded status improves. The Getronics UK pension fund partially hedges interest rate and inflation risks. The Getronics US pension fund fully hedges interest rate risks. As the UK pension fund invests in global investment funds, a minor part of these investments could be related to KPN equities. The pension funds do not have direct investments in KPN equities.

Expected contributions and benefits

In 2022, the total employer's contributions and benefit payments for all defined benefit and defined contribution plans amounted to EUR 122m, consisting of EUR 78m employer's premiums for defined contribution plans, EUR 43m contributions for funded defined benefit plans and EUR 1m payments for unfunded plans.

The amount of employer's contributions in 2023 for the remaining defined benefit pension plans is estimated to be EUR 17m for the funded plans. The total amount of employer's premiums to be paid in 2023 for the defined contribution plans is estimated to be EUR 81m.

● Consolidated Financial Statements

Accounting policy: Provisions for retirement benefit obligations (pension obligations)

The liability recognized in respect of all pension and early retirement plans that qualify as a defined benefit obligation is the present value of the defined benefit obligation less the fair value of plan assets. KPN uses actuarial calculations (projected unit credit method) to measure the obligations and the costs. For the calculation, actuarial assumptions are made about demographic variables (such as employee turnover and mortality) and financial variables (such as future indexation and the discount rate). The discount rate is determined by reference to market rates. These are interest rates of high-quality corporate bonds that are denominated in the currency in which the benefit will be paid and that have terms to maturity approximating the terms of the related liability. A net defined benefit asset may arise where a defined benefit plan has been overfunded. KPN recognizes a net defined benefit asset in such a case only when future economic benefits are available to KPN in the form of a reduction in future contributions or a cash refund. Actuarial gains and losses are recognized immediately in OCI.

Past service costs, curtailments and settlements are recognized immediately in the P&L.

The amount of pension costs included in operating expenses with respect to defined benefit plans consists of service cost, past service costs, curtailments and settlements, and administration costs. Net interest on the net defined benefit liability is presented as part of finance costs.

For pension plans that qualify as a defined contribution plan, KPN recognizes contributions as an expense when an employee has rendered service in exchange for those contributions.

[18] Provisions for other liabilities and charges

€ million	31 December 2022	31 December 2021
Restructuring provision	13	19
Asset retirement obligations	75	98
Other provisions	66	60
Total provisions for other liabilities and charges	154	177
of which: non-current	131	150
of which: current	23	27

● Consolidated Financial Statements

Statement of changes in provisions

€ million	Personnel	Contractual	Total restructuring	Asset retirement obligation	Other provisions	Total provisions
Balance at 1 January 2021	18	2	19	94	76	189
of which: current portion	18	-	18	4	17	38
Additions	38	-	38	8	8	54
Releases	-	-	-	-1	-7	-7
Usage	-38	-	-38	-4	-13	-55
Other movements, incl. discontinued operations	-	-	-	1	-5	-3
Balance at 31 December 2021	18	1	19	98	60	177
of which: current portion	18	-	18	2	7	27
Transition impact IAS 37 ¹	-	-	-	-	14	14
Additions	23	1	24	-	1	25
Releases	-	-	-	-20	-3	-24
Usage	-29	-	-30	-2	-7	-40
Other movements, incl. discontinued operations and new business combinations	-	-	-	-1	2	1
Balance at 31 December 2022	11	2	13	75	66	154
< 1 year	11	-	12	3	8	23
1-5 years	-	2	2	11	-	13
> 5 years	-	-	-	61	58	119

1 Cumulative effect of initially applying the amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets that specify which costs must be included when assessing whether a contract is onerous or loss-making using a 'directly related cost approach'

Restructuring provisions

Termination benefits are payable when employment is terminated before the normal retirement date, or whenever an employee accepts redundancy in exchange for these benefits.

Termination benefits are recognized when KPN is demonstrably committed either to terminating the employment according to a detailed formal plan without the possibility of withdrawal or to providing termination benefits as a result of an individual and accepted offer made to encourage redundancy. Benefits falling due more than 12 months after 31 December are discounted to present value.

Asset retirement obligations

The provision for asset retirement obligations (ARO) is based on assumptions of the estimated costs of removal, discount rate and estimated period of removal, which vary per type of asset. In 2022, EUR 20m was released from the ARO provision, mainly because of changes in the discount rates. Of this release, EUR 19m was recognised as a reduction of the carrying value of the activated asset retirement costs, which is included in plant and equipment.

As defined in the Telecommunications Act, the obligation for landlords to tolerate cables terminates as soon as those cables have been idle for a continuous period of 10 years. Because the date when the cables will become idle is uncertain and KPN is not able to predict whether and when a landlord will place a request for removal, KPN is not able to make a reliable estimate of the impact and therefore no provision was recognized at 31 December 2022 nor at 31 December 2021.

Other provisions

Includes provisions for claims and litigations, onerous contracts and warranties and provisions for long-term employee obligations related to jubilee or other long-service employee benefits, long-term disability benefits and, if they are not fully payable within 12 months after the end of the period, bonuses and deferred compensation. The expected costs of these benefits are accrued over the period of employment using an accounting method similar to that for defined benefit pension plans, except that actuarial gains and losses and past-service costs are recognized immediately in the P&L.

● Consolidated Financial Statements

Accounting policy: Provisions for other liabilities and charges

Provisions for asset retirement obligations, restructuring costs and legal claims are recognized when KPN has a present legal or constructive obligation as a result of past events and it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. When these criteria are not met, these positions are classified as contingent liabilities, unless the cash outflow is considered remote.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at balance sheet date. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability.

[19] Leasing

Right-of-use assets

€ million	Mobile network	Fixed network & data centers	Real estate	Vehicles	Other	Total
Accumulated cost	995	119	493	137	4	1,749
Accumulated depreciation & impairment	-429	-96	-288	-76	-3	-892
Balance as at 1 January 2021	566	23	205	61	1	857
Additions	8	-	3	7	8	27
Remeasurement & lease modifications	35	3	9	1	1	48
Depreciation	-57	-10	-31	-28	-2	-127
Impairments	-	-	-	-	-	-
Closing net book value	553	17	186	40	9	804
Accumulated cost	997	89	458	119	14	1,677
Accumulated depreciation & impairment	-445	-71	-272	-80	-5	-872
Balance as at 31 December 2021	553	17	186	40	9	804
Additions	26	0	3	25	4	58
Remeasurement & lease modifications	87	4	27	4	1	123
Depreciation	-57	-7	-31	-24	-3	-121
Impairments	-	-	-16 ¹	-	-	-16
Closing net book value	608	14	169	45	11	848
Accumulated cost	1,060	76	472	111	19	1,737
Accumulated depreciation & impairment	-451	-61	-303	-66	-7	-889
Balance as at 31 December 2022	608	14	169	45	11	848
Total estimated lease term at commencement of a lease (in years)	5-15	5-20	5-20	5-7	<5	

¹ In 2022, permanent vacancy in KPN's former head office in The Hague led to an impairment of EUR 16m

● Consolidated Financial Statements

Lease liabilities

€ million	Mobile network	Fixed network & data centers	Real estate	Vehicles	Other	Total
Non-current lease liability	531	19	202	35	-	787
Current lease liability	88	9	30	23	-	150
Balance as at 1 January 2021	618	27	232	58	1	937
Additions	8	1	3	7	8	27
Remeasurement & lease modifications	30	3	8	-	1	42
Interest	13	1	5	1	-	20
Redemptions	-73	-11	-40	-28	-2	-154
Closing net book value	597	20	210	37	9	873
Non-current lease liability	515	14	180	20	7	736
Current lease liability	83	6	30	17	2	137
Balance as at 31 December 2021	598	20	209	37	9	873
Additions	26	-	3	25	3	57
Remeasurement & lease modifications	81	4	27	4	2	117
Interest	12	1	5	-	-	18
Redemptions	-68	-9	-39	-24	-3	-142
Closing net book value	649	16	205	43	11	923
Non-current lease liability	551	10	174	27	8	770
Current lease liability	97	6	31	16	3	153
Balance as at 31 December 2022	649	16	205	43	11	923

The redemptions reflect the total payments made during the year for the lease fees included in the lease liability. The redemption consists of the repayments of the lease liabilities which are presented in the cash flow from financing activities (2022: EUR 124m, 2021: EUR 135m) and the interest paid during the year (2022: EUR 18m, 2021: EUR 20m), which is part of the cash flow from operating activities.

The maturity analysis of the lease liabilities can be found in Note 13.4.

KPN's lease portfolio consists of mobile network (mostly site rentals and mobile towers), fixed network & data centers (technical buildings), real estate (offices and shops), vehicles and other leased assets.

The following amounts are recognized in the profit or loss:

€ million	2022	2021
Depreciation right-of-use assets	-121	-127
Impairment (-) or impairment reversal right-of-use assets	-16	-
Gain or loss (-) on early terminations	7	5
Total depreciation & impairments presented in the P&L	-131	-123
Interest on lease liabilities	-18	-20
Total amount recognized in profit or loss	-149	-142

In 2022, KPN entered into sale and leaseback transactions for some of its technical buildings. The transactions resulted in a gain of EUR 2m in both 2022 and 2021, included in Other income. The leaseback periods are limited to a period of five years. The impact on the lease liability and right-of-use asset (fixed network) was limited.

The expenses related to short-term vehicle leases (included in Personnel expenses) are not material. KPN does not apply the low-value exemption and does not have contracts with variable lease payments other than variable lease payments dependent on an index or a rate.

● Consolidated Financial Statements

Most of KPN's lease contracts include extension (renewal) or termination options. KPN exercises significant judgment in determining whether these options are reasonably certain to be exercised (see Note 2). The assessments are updated annually or when a significant change in the economic circumstances occurs. Periods covered by renewal options deemed reasonably certain or early termination options that are reasonably certain not to be exercised are included in the total lease liability.

A significant number of KPN's contracts have an unlimited number of extension options. Only those deemed reasonably certain are included in the lease term and therefore the lease liability. A reliable estimate of the potential future lease payments related to periods beyond the lease terms reflected on the balance sheet cannot be provided. This affects mostly the mobile and fixed

network, as well as real estate. Vehicles are generally returned by the end of their term.

KPN as a lessor

KPN acts as a lessor in a limited number of real estate, mobile site contracts and some specific types of customer premises equipment, all classified as operating leases. These lessor contracts are not material to KPN Group, individually nor in aggregate. The terms are 1-10 years. All leases include a clause to enable upward revision of the lease fees (annual indexation). Rental income recognized in 2022 amounted to EUR 2m (2021: EUR 2m). The future minimum lease receivable under the non-cancellable operating leases as at 31 December 2022 is EUR 6m (31 December 2021: EUR 7m).

Accounting policy: Leases

KPN as lessee

Lease liabilities

At the commencement date of a lease (i.e. the date on which the underlying asset of the lease is available for use by KPN), KPN recognizes a lease liability measured at the present value of future lease payments to be made over the term of the lease. This includes fixed fees (including in-substance fixed payments), lease incentives (such as rent-free periods or fee discounts), variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. KPN does not have purchase options to be taken into account. Penalties for early termination of a lease are not included when KPN is reasonably certain that the related early termination will not take place.

All contracts of KPN that contain variable lease payments depend on a consumer price index or a rate. However, should other types of fees occur, these variable fees will be accounted for in the operating expenses.

After the commencement date, the lease liabilities increase due to the accrual of interest and decrease due to the payments of the fees due. The lease liabilities are remeasured when a change occurs in the fees due, the lease term deemed reasonably certain and/or changes to the scope of a lease. Upon remeasurement of the lease liability of a contract, the applied discount rate (incremental borrowing rate) is revised unless the

remeasurement relates to a fee change following a change in consumer price index or rate.

The total lease liability recognized is split into a non-current and a current portion. The current lease liabilities reflect only the part of the payments due within one year related to the repayment of the total lease liabilities.

Lease term

KPN determined the lease term as the non-cancellable term of a contract together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease if it is reasonably certain not to be exercised.

KPN applies judgment when assessing if the use of an option is reasonably certain. Factors included are KPN's asset and network strategy, technological developments, and other circumstances that may impose an economic incentive affecting the expected use of an underlying asset. For vehicles, renewal options are not included in the initial assessment of the lease term as KPN's policy prescribes the return of vehicles to the lessor at the end of the lease term.

After the commencement of a lease, KPN reassesses the lease term if there is a significant event or change in circumstances that is within KPN's control and effects KPN's ability to exercise or not to exercise the option to renew or to terminate a lease.

● Consolidated Financial Statements

Incremental borrowing rate

The implicit discount rates of KPN's leases are not readily available, with the exception for vehicles. KPN applies its applicable incremental borrowing rate to determine the discounted value of the lease liabilities. Upon modification of a lease, the lease liability is remeasured using the applicable discount rate at the date of the remeasurement. KPN's incremental borrowing rates are mainly determined using a risk-free rate combined with a spread reflecting KPN's credit risk. The applicable rate per contract is primarily dependent on the total expected term of a lease at its commencement date (new leases) or the total expected remaining lease term in case of a remeasurement of a lease.

Right-of-use assets

Right-of-use assets are recognized at commencement date of a lease as counterpart to the lease liabilities. The right-of-use assets are measured at cost, less accumulated depreciation and impairment losses, and adjusted for any remeasurement in the corresponding lease liabilities. The cost of the right-of-use assets includes the initially recognized amount of the corresponding lease liabilities, initial direct costs incurred in obtaining the lease (if any) and lease payments made at or before commencement of the lease. Lease incentives received are deducted from the carrying value of the right-of-use assets.

The right-of-use assets are depreciated on a straight-line basis over the shorter of the estimated useful life of the underlying asset and the lease term. Right-of-use assets are subject to impairment.

Short-term leases and leases of low-value assets

KPN does not apply the practical expedients for low-value leases (leases of an underlying asset with a value of less than EUR 5,000) and short-term leases (leases with a total expected term of less than 12 months) except for short-term rental vehicles.

Regarding vehicle leases, KPN applies the practical expedient not to separate non-lease components from lease components. Therefore, the full monthly lease fees are reflected in KPN's Statement of Financial Position. For all types of leased assets, electricity and fuel-related expenses remain part of operating expenses.

KPN as lessor

Leases where KPN as lessor retains a significant portion of the risk and rewards of ownership of the lease asset are classified as operating leases. The assets remain on the balance sheet and are depreciated over the assets' useful life.

Lease payments received from lessees are recognized as revenue on a straight-line basis over the lease period.

If KPN acts as a lessor in a finance lease, the transaction is accounted for as a normal sale and the present value of the lease payments is recognized as a receivable. The difference between the gross receivable and the present value of the receivable is deferred and recognized as interest over the lease term.

[20] Contract liabilities, trade and other payables

Trade and other payables

€ million	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Trade payables	591	-	514	-
Accrued interest	52	-	77	-
Accrued expenses	286	-	338	-
Social security and other taxes payable	184	-	220	-
Other payables	28	8	26	8
Total	1,140	8	1,176	8

Some of KPN's suppliers participate in Supplier Finance Programs giving suppliers the opportunity to receive earlier payment (from a financial institution), without modifying KPN's payment terms, or providing KPN an extended payment period. As the payment terms under these programs do not materially deviate from customary payment terms in the industry or from the terms agreed with suppliers who do not participate in these programs, the relating liabilities are classified as trade and other payables, and payments are classified as operating cash flow. The Supplier Finance Programs do not impact covenants or KPN's access to (future) borrowings from financial institutions. As at 31 December 2022, the total amount of payables under the three Supplier Finance Programs amounted to EUR 205m (2021: EUR 141m).

● Consolidated Financial Statements

Contract liabilities

€ million	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Contract liabilities	169	130	186	169
Of which variable considerations	-	86	-	86

The contract liabilities primarily relate to the consideration received from customers before satisfying performance obligations, such as advances for subscriptions and airtime. KPN recognizes a contract liability for postpaid and prepaid bundled minutes and data increasingly based on the passage of time of these bundles per proposition. The utilization percentage is the actual pro-rata period as a percentage of total credits granted for that period.

For the transition phase of projects for business customers which are treated as a separate performance obligation, a contract liability is recognized if the amount invoiced is higher than the amount of revenue allocated to these projects. A contract liability is also recognized for the mobile connection fees charged to the customer if the connection is not treated as a separate performance obligation.

Contract liabilities are recognized for variable considerations which are not deemed highly probable. The introduction of new mobile consumer propositions in August 2016 caused a change in the VAT calculation methodology, which resulted in a lower remittance of VAT from August 2016 until December 2018. KPN's view is not shared by the Dutch tax authorities. KPN concluded, based on the applicable regulations, that a positive outcome of this dispute is not highly probable and therefore recorded a contract liability for the VAT amount. Additionally, an amount for the corresponding interest amount has been accounted for. A potential final negative outcome of the current court procedure will lead to a negative cash flow in future years.

In 2022, EUR 4m revenue was recognized from variable considerations related to performance obligations satisfied (or partially satisfied) in previous years (in 2021: EUR 13m).

The year's revenues include the current portion of the contract liability balance at the beginning of the year.

Accounting policy: Contract liabilities, trade and other payables

Trade and other payables are classified as 'borrowings' within KPN's financial liabilities. For the accounting policy, see Note 13.

For the accounting policy regarding contract liabilities, see Note 4.

● Consolidated Financial Statements

Other notes to the Consolidated Financial Statements

[21] Business combinations and disposals

Disposals

	€ million	2022	2021
Amount of assets and liabilities in the subsidiaries or businesses over which control is lost:			
Property, plant and equipment		-	7
Trade and other receivables, prepayments and accrued income		-	17
Trade and other payables and accrued expenses		-	-24
Total net assets		-	-
Transaction costs ¹		-	7
Allocation of goodwill upon loss of control over a business		-	64
Total costs		-	71
Cash consideration		-	233
Contingent cash consideration		-	218
Interest in joint venture (50%)		-	451
Total consideration		-	902
Book gain before income tax		-	831
Income taxes		-	-190
Book gain after income tax		-	640

1 The transaction costs in 2021 include EUR 1m release of accruals related to disposals in previous years

Changes in consolidation in 2022

On 30 December 2022, KPN acquired 100% of the shares of Itzos B.V., a Dutch IT provider specializing in integrating healthcare systems and optimizing communication between healthcare providers. The transaction is accounted for as a business combination because the assets acquired and liabilities assumed constitute a business.

The preliminary purchase price allocation:

	€ million	2022
Recognized amounts of identifiable assets acquired and liabilities assumed:		
Intangible assets		9
Trade and other receivables, prepayments and accrued income		2
Net cash and cash equivalents		1
Non-current liabilities		-3
Trade and other payables and accrued expenses		-2
Total net assets		7
Total transaction costs		
Cash consideration		13
Contingent cash consideration		1
Total consideration		14
Goodwill		7

The impact of the acquisition on KPN's Group revenues, EBITDA AL and net profit in 2022 is negligible, also if the acquisition had taken place at the beginning of the year.

Changes in consolidation in 2021

Joint venture Glaspoort

On 9 June 2021, KPN sold 50% of the shares of its subsidiary Glaspoort B.V. to Drepuna Investments Holding B.V., an investment entity managed by APG. At the same time, KPN entered into a joint venture agreement with Drepuna Investments Holding B.V. regarding Glaspoort. Glaspoort is a network company, pursuing an open-access wholesale strategy based on non-discriminatory terms, fostering competition and innovation in the Netherlands. The total consideration upon sale of the 50% interest in Glaspoort consists of a cash consideration received upon deal close of EUR 238m (later adjusted to EUR 233m) and a contingent cash receivable of EUR 234m to be received in annual installments based on the roll-out progress of Glaspoort. The contingent cash receivable classifies as a financial asset initially recognized at fair value (EUR 218m) and is subsequently measured at fair value through profit or loss (see Note 131). On the closing date, both joint venture partners paid a share premium contribution of EUR 39m to Glaspoort's equity.

Following the requirements of IFRS, KPN initially recognized its interest in the joint venture at its fair value (EUR 456m), based on the total consideration, consisting of the initial cash consideration (EUR 238m) and the fair value of the deferred consideration (EUR 218m), and corroborated by internal valuation models. In December 2021, the initial cash consideration was adjusted by EUR 5m to EUR 233m and the fair value of KPN's interest in the

● Consolidated Financial Statements

joint venture was adjusted for the same amount to EUR 451m. See Note 12 for further information on Glaspoort.

Due to the limited relative size of Glaspoort to the KPN Group, Glaspoort did not qualify as a discontinued operation. Therefore, the results and cash flows of Glaspoort remained included in KPN's consolidated income and cash flow statements until the date of completion of the transaction, whereas its assets and liabilities were classified on KPN's consolidated balance sheet as part of the 'assets held for sale'.

The transaction was subject to closing conditions and the regulatory approvals were obtained on 12 May 2021. The transaction resulted in a net book gain of EUR 639m, consisting of a book gain on the transaction of EUR 830m, included in other income (see Note 4.2), and a tax expense of EUR 190m. KPN's 50% share in the result of Glaspoort in the period between the transaction and 31 December 2021 was EUR -2m.

Accounting policy: Business combinations

KPN uses the acquisition method to account for business combinations. The consideration paid is measured at the fair value of the assets transferred, equity instruments issued and liabilities incurred or assumed at the date of exchange.

Identifiable assets acquired and liabilities and contingent liabilities assumed are measured at their fair values at the acquisition date. When a business combination is achieved in stages, any previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognized in the P&L.

Contingent considerations are recognized at fair value at acquisition date and subsequent changes to the fair value

The transaction resulted in a net cash inflow of EUR 196m in 2021, classified as cash flow from investing activities in the Consolidated Statement of Cash Flows. This amount consists of the cash consideration received for the shares (EUR 233m), the transferred assets at closing (EUR 24m), less the share premium contribution (EUR 39m), transaction costs paid (EUR 8m) and EUR 15m for invoices paid by KPN regarding transferred assets.

Due to the specific nature, this transaction is not tax exempt. The total tax paid on the transaction during 2021 was EUR 197m based on preliminary tax assessments. As these tax payments are directly related to the transaction, KPN presents these taxes paid as part of the cash flows from investing activities due to separate identifiability.

are recognized in the P&L. Contingent considerations classified as equity are not remeasured and subsequent settlement is counted for within equity.

For each business combination, KPN elects to recognize any non-controlling interest in the acquiree either at fair value or at the proportionate share in the acquiree's net assets.

Acquisition-related costs are expensed as incurred.

The excess of the consideration paid, non-controlling interests recognized and the acquisition date fair value of any previous equity interests in the acquiree over the fair value of KPN's share of the net assets acquired is recorded as goodwill. If negative goodwill occurs (bargain purchase), the difference is recognized directly in the P&L.

[22] Commitments, contingencies and legal proceedings

Commitments

€ million	Less than 1 year	1-5 years	More than 5 years	Total 31 December 2022	Total 31 December 2021
Capital and purchase commitments	799	268	7	1,074	1,291
Guarantees and other	3	-	132	135	131
Total commitments	802	269	139	1,209	1,422

The capital and purchase commitments mainly relate to minimum contractual obligations with regard to network operations, mobile

handsets and telco services, and lease contracts that have not yet commenced.

● Consolidated Financial Statements

Guarantees consist of financial obligations of group companies under certain contracts guaranteed by KPN. A total amount of EUR 135m relates to parent guarantees (2021: EUR 131m). The table presented above does not include KPN's commitment on share premium contributions regarding Glaspoort of EUR 163m (31 December 2021: EUR 187m). See Note 12.

Contingent liabilities

KPN is involved in a number of legal and tax proceedings that have arisen in the ordinary course of its business and in discontinued operations, including commercial, regulatory or other proceedings. KPN periodically carefully assesses the likelihood that legal and tax proceedings may lead to a cash outflow and recognizes provisions in such matters if and when the chance of a cash outflow is estimated as probable and a reliable estimate of the cash outflow can be made. When these criteria are not met, such matters are classified as contingent liabilities, unless the cash outflow is considered remote.

However, the outcome of such proceedings can be difficult to predict with certainty and KPN can offer no assurances in this regard. In some cases, the impact of a legal proceeding may be more strategic than financial and such impact cannot properly be quantified. Below is a description of legal related contingent liabilities that could have a material impact for KPN.

Idle cables

See Note 18 for a contingent liability related to idle cables and the accounting policy of provisions.

Indemnification

In KPN's Articles of Association and in a further decision by the Board of Management, which was approved by the Supervisory Board, KPN has indemnified the members and former members of KPN's Board of Management and Supervisory Board, as well as a number of KPN's officers and directors and former officers and directors, against liabilities, claims, judgments, fines and penalties incurred by such officer or director as a result of any threatened, pending or completed action, investigation or proceeding (whether civil, criminal or administrative) brought by a third party in relation to acts or omissions in or related to their capacity as officer or director.

The indemnification does not apply to claims and expenses reimbursed by insurers nor to an officer or a director adjudged to be liable for willful misconduct ('opzet') or intentional recklessness ('bewuste roekeloosheid').

[23] Related-party transactions

KPN considers none of the related-party transactions to be material on an individual basis. Transactions between group

companies are not included in the description below as these are eliminated in the Consolidated Financial Statements.

Transactions with shareholders

On 14 February 2023, América Móvil, S.A.B. de C.V. (AMX) published in its fourth quarter 2022 report that it owned 18.3% of KPN's ordinary share capital as at 31 December 2022. The total value of sales and purchase transactions by the continuing operations of KPN in 2022 with AMX, its subsidiaries and associated companies is estimated to be less than EUR 1m and less than EUR 2m respectively (2021: less than EUR 1m) and total trade receivables and payables as at 31 December 2021 and 2022 are estimated to be less than EUR 1m.

Other shareholdings equaling or exceeding 3% of the issued capital:

- On 23 December 2022, BlackRock, Inc. notified the AFM that it held 4.91% of the shares and 5.98% of the voting rights related to KPN's ordinary share capital.
- On 16 December 2022, Amundi Asset Management notified the AFM that it held 4.57% of the shares and voting rights related to KPN's ordinary share capital.
- On 2 August 2022, Capital Research and Management Company notified the AFM that it held 9.70% of the voting rights related to KPN's ordinary share capital.
- On 2 June 2022, The Income Fund of America notified the AFM that it held 4.97% of the shares and voting rights to KPN's ordinary share capital.

To KPN's knowledge, no other shareholder owned 3% or more of KPN's issued share capital as at 31 December 2022. KPN did not enter into agreements with AMX or other shareholders that could have a material impact on KPN's Financial Statements.

Transactions with associated companies and joint ventures

On 9 June 2021, KPN sold 50% of the shares of its subsidiary Glaspoort B.V. and entered into a joint venture agreement with APG (see Note 12). As of 9 June 2021, KPN's remaining 50% interest in Glaspoort is classified as a joint venture and accounted for using the equity method. KPN is the anchor tenant on the network of Glaspoort and also supplies services to Glaspoort. The value of the services delivered to and acquired from Glaspoort amounted to EUR 15m and EUR 16m respectively in 2022 (EUR 5m and EUR 3m respectively in the period between completion of the sale and 31 December 2021). Furthermore, in December 2021, KPN, Drepuna and Glaspoort signed an agreement to extend the scope of the fiber roll-out of Glaspoort. KPN will receive EUR 170m (pre-tax) from Glaspoort for the sale of the additional scope projects. Of this amount, EUR 60m has been received in cash upon closing of the transaction and the remaining amount will be received in annual installments based on the fiber roll-out starting in 2023. Trade and other receivables with respect to Glaspoort as at 31 December 2022 amounted to EUR 1m (2021: EUR 36m),

● Consolidated Financial Statements

trade payables EUR 2m (2021: nil), non-current contract assets EUR 29m (2021: EUR 20m), current contract assets EUR 51m (2021: nil) and non-current contract liabilities EUR 16m (2021: EUR 49m).

The following table provides the total value of the transactions by KPN with other associated and non-consolidated companies for the relevant year:

€ million	2022	2021
Sales in the year	39	23
Purchases in the year	<1	1
Trade receivables at 31 December	2	<1
Trade payables at 31 December	<1	<1

Transactions with directors and related parties

For details of the relationship between directors and the company, see the Remuneration Report section of this Integrated Annual Report. Directors in this respect are defined as key management and relate to those having authority and responsibility for planning, directing, and controlling the activities of an entity, either directly or indirectly. At KPN, key management consists of the members of the Board of Management and the Supervisory Board.

The members of KPN's Board of Management and Supervisory Board or close members of their families are also members of supervisory boards or management boards of other companies or are shareholders of other companies, without having (joint) control, with which KPN maintains relations in the ordinary course of business. All transactions with these companies are performed on an arm's length basis.

[24] Legal structure

Name of significant subsidiaries and other principal interests	Country of incorporation
KPN B.V.	
- Broadband Hosting B.V.	Netherlands
- CAM IT Solutions B.V.	Netherlands
- E-Zorg B.V.	Netherlands
- Glaspoort B.V.	Netherlands
- GroupIT B.V.	Netherlands
- Inspark Holding B.V.	Netherlands
- KPN Finance B.V.	Netherlands
- Reggefiber Group B.V.	Netherlands
- Solcon Internetdiensten B.V.	Netherlands
- XS4ALL Internet B.V.	Netherlands
KPN Mobile N.V.	Netherlands
- KPN Mobile International B.V.	Netherlands
KPN Ventures B.V.	Netherlands
Getronics B.V.	Netherlands
- Getronics Finance Holdings B.V.	Netherlands
- Getronics Pensions UK Ltd.	UK
- Getronics US Operations, Inc.	US
KPN Insurance Company DAC	Ireland

The percentage ownership/voting interest of these entities is 100%, except the joint venture Glaspoort B.V. in which KPN has an interest of 50%.

[25] Proposed appropriation of result

On outstanding Class B preferred shares, a dividend is paid out equal to the average of the 12-month Euribor increased by 1%. If the 12-month Euribor is no longer determined, the dividend on preference shares will be calculated based on the yield on state loans. Subsequently, subject to the approval of the Supervisory Board, the Board of Management will determine what proportion of net income remaining after payment of the dividend on any Class B preferred shares will be appropriated to the reserves. The part of the profit remaining after the appropriation to the reserves shall be at the disposal of the AGM. No Class B preferred shares were outstanding on 31 December 2022.

The profit of the financial year 2022 that is attributable to equity holders of the company amounts to EUR 760m. On 4 August 2022, a regular interim dividend of EUR 4.8ct per ordinary share was paid (total amount of EUR 196m). On 23 February 2023, the Board of Management, with the approval of the Supervisory Board, appropriated EUR 181m of the profit 2022 to the other reserves. Taking into account the interim dividend that was paid

● Consolidated Financial Statements

in August 2022, the remaining part of the profit is available for payment of a final dividend in respect of 2022. The Board of Management, with the approval of the Supervisory Board, will propose to the AGM to pay a final regular dividend of EUR 9.5ct per ordinary share in respect of 2022 (in total EUR 383m based on the number of outstanding shares at 31 December 2022 less Treasury shares held by KPN).

[26] Subsequent event

KPN has evaluated events up to publication date of these Financial Statements of this Integrated Annual Report and determined that no subsequent event activity required disclosure.



● Corporate Financial Statements

Corporate Statement of Profit or Loss

For the year ended 31 December

€ million	Notes	2022	2021
Total revenues and other income		-	-
Other operating expenses		-8	-14
Total operating expenses		-8	-14
Operating profit		-8	-14
Finance income		-1	-3
Finance costs		-193	-195
Other financial results		-2	-7
Intercompany interest (net)		23	-132
Financial income and expenses	[A]	-172	-336
Income from subsidiaries		884	1,531
Profit before income tax		704	1,181
Income taxes	[B]	56	107
Profit for the year		760	1,288

● Corporate Financial Statements

Corporate Statement of Financial Position

Before appropriation of current year result

Assets

€ million	Notes	31 December 2022	31 December 2021
Non-current assets			
Financial fixed assets			
Investments in subsidiaries		10,785	9,883
Loan to subsidiary		-	60
Derivatives		125	212
Deferred taxes		326	566
Other fixed financial assets		76	59
Total non-current assets	[B]	11,313	10,780
Current assets			
Accounts receivable from subsidiaries	[F]	1,850	1,805
Loan to subsidiary	[B]	60	-
Other receivables and accrued income		10	20
Derivatives		23	-
Income tax receivable		75	-
Other current financial assets		101	300
Cash and cash equivalents		314	708
Total current assets		2,433	2,834
Total assets		13,746	13,613

● Corporate Financial Statements

Equity and liabilities

€ million	Notes	31 December 2022	31 December 2021
Equity			
Subscribed capital stock		161	168
Additional paid-in capital		7,960	8,445
Treasury shares reserve		-37	-248
Hedge reserve		-86	-125
Legal reserves	[C]	670	516
Retained earnings	[C]	-6,769	-7,311
Equity attributable to holders of perpetual capital securities		990	496
Profit (loss) current year		760	1,288
Total equity attributable to equity holders		3,650	3,228
Provisions			
Provisions for retirement benefit obligations		1	-
Other provisions		20	23
Total provisions	[D]	21	24
Non-current liabilities			
Loans from subsidiaries	[E]	50	50
Borrowings	[E]	4,720	5,648
Derivative financial instruments		366	64
Other non-current liabilities	[G]	455	424
Total non-current liabilities		5,591	6,186
Current liabilities			
Accounts payable to subsidiaries	[F]	4,129	3,300
Borrowings	[E]	196	676
Derivative financial instruments		1	-
Income tax payable		-	17
Other current liabilities	[G]	101	102
Accruals and deferred income		58	81
Total current liabilities		4,485	4,176
Total equity and liabilities		13,746	13,613

● Corporate Financial Statements

Notes to the Corporate Financial Statements

The principles for the recognition and measurement of assets and liabilities and determination of the result (hereafter referred to as 'accounting policies') of the Corporate Financial Statements of Koninklijke KPN N.V. are the same as those applied to the Consolidated Financial Statements under IFRS (applying the option provided in Article 362 sub 8, Part 9, Book 2 of the Dutch Civil Code). The Consolidated Financial Statements have been prepared in accordance with the IFRS (see Notes to the Consolidated Financial Statements).

Investments in consolidated subsidiaries are measured at net asset value. Net asset value is based on the measurement of assets (including goodwill), provisions and liabilities, and the determination of profit based on the principles applied in the Consolidated Financial Statements.

Expected credit losses, if any, with respect to loans granted to and receivables from consolidated subsidiaries are not recognized in these Corporate Financial Statements.

Directors' remuneration

See Note 5 Personnel expenses to the Consolidated Financial Statements.

[A] Financial income and expenses

€ million	2022	2021
Finance income	-1	-3
Interest on borrowings	-190	-192
Other	-3	-3
Finance costs	-193	-195
Amortizable part of hedge reserve	-15	-15
Amortization discontinued fair value hedges	18	21
Derivative financial instruments not qualified for hedge accounting	-11	-17
Hedge ineffectiveness	10	-
Other	-4	3
Other financial results	-2	-7
Intercompany interest (net)	23	-132
Total	-172	-336

Finance income included negative interest on cash balances.

Intercompany interest (net) mainly includes interest of 8.5% on an intercompany loan provided by KPN Mobile N.V. In the course of 2021 this loan was waived (see Note E).

● Corporate Financial Statements

[B] Non-current assets

€ million	Investments in subsidiaries companies	Loan to subsidiary ¹	Derivatives	Deferred taxes	Other financial fixed assets ²	Total
Balance at 1 January 2021	16,721	60	191	640	117	17,729
Exchange rate differences	-11	-	-	-	-	-11
Income from group companies after taxes	1,531	-	-	-	-	1,531
Decrease due to waiver ³	-8,414	-	-	-	-	-8,414
Capital contributions	2	-	-	-	-	2
Movements paid collaterals	-	-	-	-	-61	-61
Fair value adjustments	-	-	21	-	-	21
Use of tax loss carry forward	-	-	-	-73	-	-73
Other	55	-	-	-2	3	56
Total changes	-6,838	-	21	-75	-58	-6,949
Balance at 31 December 2021	9,883	60	212	566	59	10,780
Exchange rate differences	12	-	-	-	-	12
Income from group companies after taxes	884	-	-	-	-	884
Movements paid collaterals	-	-	-	-	18	18
Capital contributions	1	-	-	-	-	1
Reclassification to current	-	-60	-	-	-	-60
Fair value adjustments	-	-	-86	-	-	-86
Use of tax loss carry forward	-	-	-	-224	-	-224
Other	5	-	-	-16	-	-11
Total changes	902	-60	-86	-240	18	534
Balance at 31 December 2022	10,785	-	125	326	76	11,313

1 Loan to KPN Finance B.V., which is repayable on 28 September 2023 at the latest and is subordinated to all other loans, obligations and creditors. Annual interest is 4.6%. At 31 December 2022 this loan has been reclassified as a current asset

2 Other financial fixed assets mainly includes paid collaterals regarding derivative financial instruments and energy contracts

3 Decrease relates to the waiver of the loan payable to KPN Mobile N.V. (see Note E)

Taxation

The Corporate Financial Statements on behalf of Koninklijke KPN N.V. are prepared as if the company is independently subject to corporate income tax, so excluding the offset of profits within the tax group, of which the entity is the parent.

As a result, the company reports a tax benefit for the tax-deductible interest and no tax on the result of consolidated entities as the tax of these entities is booked at the level of the entity itself.

The company's deferred tax asset represents the future tax relief on taxable profits (within the tax group) due to available losses and is higher than reported on consolidated level, since the asset

can be offset against deferred tax liabilities reported in other entities that are part of the same tax group.

[C] Equity attributable to equity holders

For a breakdown of equity attributable to equity holders, see the Consolidated Statement of Changes in Equity and related Notes. On 8 November 2019, KPN issued a EUR 500m hybrid bond with a 2.00% coupon and on 13 September 2022 a EUR 500m hybrid bond with a coupon of 6.00%, both with a perpetual maturity. These bonds are classified as equity and valued at net proceeds (see Note 13.2).

● Corporate Financial Statements

Legal reserves (net of tax)

€ million	Revaluation reserves ¹	Cumulative translation adjustments	Capitalized software development costs ²	Fair value reserve equity investments	Solvency capital requirement ³	Total
Balance at 1 January 2021	14	22	90	8	15	149
Addition/release (-) retained earnings	350	-	19	5	-	374
Exchange rate differences	-	-7	-	-	-	-7
Balance at 31 December 2021	364	15	109	13	15	516
Addition/release (-) retained earnings	-6	-	139	14	5	152
Exchange rate differences	-	2	-	-	-	2
Balance at 31 December 2022	358	17	248	27	20	670

1 Relates to the equity investment in Glaspoort (see Note 21 of the Consolidated Financial Statements) and property, plant and equipment of EUR 347m and EUR 11m respectively at 31 December 2022 (2021: EUR 352m and EUR 12m respectively). All amounts net of tax

2 In 2022, the method to determine the reserve for capitalised development costs was amended and now also includes the costs charged by third parties

3 This is the amount of funds that KPN Insurance Company DAC is required to hold under the European Union's Solvency II directive

Pursuant to Dutch law, there are limitations on the distribution of equity attributable to equity holders. Such limitations relate to the subscribed capital stock as well as to legal reserves required by Dutch law as presented above. Dutch law also requires that in determining the amount for distribution, the company's ability to continue to pay its debt must be taken into account. The total distributable reserves, which include the perpetual capital securities, amounted to EUR 2,818m as at 31 December 2022 (2021: EUR 2,545m).

Retained earnings

Movements in retained earnings

€ million	2022	2021
Balance at 1 January	-7,311	-6,977
Change in accounting policy	-11	-
Profit of previous year	1,288	560
Coupon perpetual hybrid bond	-17	-10
Dividend ordinary shares	-571	-554
Actuarial gain/loss pensions and other post-employment plans (net of tax)	5	52
Fair value adjustment equity investments	10	5
Release/addition legal reserves (except cumulative translation adjustments)	-152	-374
Share-based compensation	-9	-14
Balance at 31 December	-6,769	-7,311

Retained earnings reconciled with the Consolidated Statement of Financial Position

€ million	2022	2021
Retained earnings as per Consolidated Statement of Financial Position	-5,356	-5,523
Revaluation reserves	-358	-364
Capitalized software development costs	-248	-109
Fair value reserve equity investments	-27	-13
Other non-distributable reserves	-20	-15
Profit for the year	-760	-1,288
Retained earnings as per Corporate Statement of Financial Position	-6,769	-7,311

● Corporate Financial Statements

[D] Provisions

Movements in provisions

€ million	Retirement benefit obligations	Other provisions	Total
Balance at 1 January 2021	7	24	31
Additions/releases to income	-	3	3
Usage	-7	-3	-10
Balance at 31 December 2021	-	23	23
Additions/releases to income	1	3	4
Usage	-	-6	-6
Balance at 31 December 2022	1	20	21

The provisions for retirement benefit obligations relate to early retirement plans (see Note 17 to the Consolidated Financial Statements).

[E] Loans from subsidiaries and borrowings

Loans from subsidiaries (non-current) included a loan payable to KPN Mobile N.V., which bore interest of 8.5% and had to be repaid in full, including accrued interest, in 2034. In 2021, an amount of EUR 8,414m was waived, after which there is no further amount outstanding. The balance as at 31 December 2022 of EUR 50m consists of a short-term roll-over loan from KPN Insurance Company DAC, which bears an interest of 6-month EURIBOR plus 0.3%.

Non-current borrowings as at 31 December 2022 include senior bonds outstanding for EUR 4,720m (2021: EUR 5,120m) and no hybrid bonds outstanding (2021: EUR 529m). Current borrowings as at 31 December 2022 include no senior bonds outstanding (2021: EUR 616m) and hybrid bonds outstanding for EUR 136m (2021: no hybrid bonds outstanding). On 1 March 2022, KPN redeemed the 4.25% EUR 616m senior bond in line with its scheduled maturity. No new senior bonds have been issued during the year. On 21 September 2022, KPN tendered the 7% USD 600m hybrid bond and repurchased USD 454m notional amount, with USD 146m remaining outstanding after the tender offer. The hybrid bond had been swapped to a principal amount of EUR 465m and KPN effectively retired EUR 352m notional amount. Furthermore, borrowings increased by EUR 20m due to exchange differences and decreased by EUR 359m due to fair value adjustments. See also Note 13.2 to the Consolidated Financial Statements for further information about KPN's senior and hybrid bonds outstanding.

KPN set up a Euro-Commercial Paper Program under which KPN can issue short-term debt instruments for up to EUR 1 billion. As at 31 December 2022, current borrowings include the outstanding balance of commercial paper of EUR 60m (2021: EUR 60m).

[F] Accounts receivable from and accounts payable to subsidiaries

Koninklijke KPN N.V. operates a cash pool for the KPN Group, which leads to accounts receivable from and accounts payable to subsidiaries. In 2022, accounts receivable from subsidiaries increased, mainly due to Capex and other investments made by subsidiaries. Accounts payable to subsidiaries also increased, mainly due to cash flows from operating activities generated by subsidiaries. Accounts receivable from subsidiaries (net) at 31 December 2022 includes a current income tax position of the subsidiaries which are included in the fiscal unity of Koninklijke KPN N.V. of EUR 79m. Accounts payable to subsidiaries (net) at 31 December 2022 is offset by a current income tax position of the subsidiaries, which are included in the fiscal unity of Koninklijke KPN N.V. of EUR 188m.

Most of these current accounts have an indefinite duration. The interest is determined annually and based on the 12-month Euribor increased by 0.15% and a risk premium attached by the market to the specific KPN credit risk.

[G] Other non-current and current liabilities

Other non-current liabilities includes a EUR 300m credit facility from the European Investment Bank, which KPN has fully drawn at year-end 2022 and 2021. This loan has a floating interest rate referenced to 3-month Euribor and a single repayment on 2 August 2027. The interest for the current interest period was fixed at 2.64% per annum. Also included at 31 December 2022 is EUR 103m of collateral received (2021: EUR 70m) as security under derivative financial instruments and energy contracts, both in 2022 and 2021, EUR 49m borrowings under private placements.

Current liabilities consists of VAT payable of the KPN fiscal unity.

● Corporate Financial Statements

[H] Commitments and contingencies

Commitments by virtue of guarantees amounted to EUR 135m (2021: EUR 131m).

KPN has issued several declarations of joint and several liabilities for various group companies in compliance with Article 403, Book 2 of the Dutch Civil Code. These declarations of joint and several liabilities for group companies are included in a complete list of subsidiaries and participating interests, which is available at the offices of the Chamber of Commerce in Rotterdam.

Rotterdam, 23 February 2023

Board of Management	Supervisory Board
Joost Farwerck	Gerard van de Aast
Chris Figuee	Catherine Guillouard
Jean-Pascal Van Overbeke	Peter Hartman
Marieke Snoep	Kitty Koelmeijer
Babak Fouladi	Edzard Overbeek
Hilde Garssen	Alejandro Plater
	Jolande Sap
	Chantal Vergouw

● Other information

Statutory provisions on allocation of profit

Under Article 31 of the Articles of Association of KPN, a dividend shall first be paid out on outstanding (if any) Class B preferred shares, equal to the average of the 12-month Euribor increased by 1%. Subsequently, subject to the approval of the Supervisory Board, the Board of Management will determine what proportion of net income remaining after payment of the dividend on any Class B preferred shares will be appropriated to the reserves. The part of the profit remaining after the appropriation to the reserves shall be at the disposal of the AGM. The Board of Management, subject to the approval of the Supervisory Board, shall make a proposal to the AGM for the dividend to be paid. The Board of Management, subject to the approval of the Supervisory Board, may also resolve to distribute an interim dividend. The relevant provisions of Dutch law remain applicable.

● Other information

Combined independent auditor's report and assurance report

To: Shareholders and members of the Supervisory Board of Koninklijke KPN N.V. (KPN),

Report on the financial statements 2022, including the country-by-country reporting, and sustainability information included in the KPN Integrated Annual Report 2022

Our conclusions

Our opinion on the financial statements

We have audited the financial statements 2022 of Koninklijke KPN N.V. based in Rotterdam, the Netherlands (hereinafter: KPN or the company). The financial statements comprise the consolidated and corporate financial statements.

In our opinion:

- The accompanying consolidated financial statements give a true and fair view of the financial position of KPN as at 31 December 2022 and of its result and its cash flows for 2022 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code
- The accompanying corporate financial statements give a true and fair view of the financial position of KPN as at 31 December 2022 and of its result for 2022 in accordance with Part 9 of Book 2 of the Dutch Civil Code

Our opinion on the country-by-country reporting included in the financial statements

We have audited the country-by-country reporting 2022 of Koninklijke KPN N.V. based in Rotterdam, the Netherlands included in the financial statements as disclosed in Appendix 12: Tax overview for continuing operations per country.

In our opinion the country-by-country reporting 2022 of KPN is prepared, in all material respects, in accordance with the reporting requirements under Disclosure 207-4 of Standard 207: Tax of the Global Reporting Initiative (GRI) as issued by the Global Sustainability Standards Board.

Our conclusions on the sustainability information

We have reviewed the sustainability information in the accompanying KPN Integrated Annual Report 2022 (hereinafter: the Integrated Annual Report). A review is aimed at obtaining a limited level of assurance.

Based on our review procedures performed, nothing has come to our attention that causes us to believe that the sustainability information in scope does not present, in all material respects, a reliable and adequate view of:

- the policy and business operations with regard to sustainability; and
- the thereto related events and achievements for 2022

in accordance with the reporting criteria as included in the section "Reporting criteria" of our report.

Furthermore, we have audited the CO₂e emission data 2022 (Scope 1 and 2) of KPN's own operations in the Netherlands and the underlying energy data. The scope of our engagements is described in the section "The scope of our engagements" of our report.

In our opinion, the CO₂e emission data 2022 (Scope 1 and 2) of KPN's own operations in the Netherlands and the underlying energy data as presented in table "CO₂e emissions and energy management" on page 52 of the Integrated Annual Report are prepared, in all material respects, in accordance with the reporting criteria as included in the section "Reporting criteria" of our report.

The scope of our assurance engagements is described in the section "The scope of our Engagements" of our report.

Basis for our conclusions

We conducted our assurance engagements in accordance with Dutch law, including the Dutch Standards on Auditing and the Dutch Standard 3810N, "Assurance engagements relating to sustainability reports", which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance engagements other than audits or reviews of historical financial information". Our responsibilities under these standards are further described in the section "Our responsibilities" of our report.

We believe the assurance evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Our independence

We are independent of KPN in accordance with the EU Regulation on specific requirements regarding statutory audit of public-interest entities, the Wet toezicht accountantsorganisaties (Wta, Audit firms supervision act), the Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten (ViO, Code of Ethics for Professional Accountants, a regulation

● Other information

with respect to independence) and other relevant independence regulations in the Netherlands. This means that we do not perform any activities that could result in a conflict of interest with our independent assurance engagements. Furthermore, we have complied with the Verordening gedrags- en beroepsregels accountants (VGBA, Dutch Code of Ethics).

Reporting criteria

The information in the scope of our engagements needs to be read and understood together with the reporting criteria. The reporting criteria used for the preparation of the Integrated Annual Report are described below.

The absence of an established practice on which to draw, to evaluate and measure sustainability information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

Consolidated Financial Statements:	International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and Part 9 of Book 2 of the Dutch Civil Code.
Corporate Financial Statements	Part 9 of Book 2 of the Dutch Civil Code.
Country-by-country reporting included in the financial statements	The reporting requirements under Disclosure 207-4 of Standard 207: Tax of the Global Reporting Initiative (GRI) as issued by the Global Sustainability Standards Board.
Sustainability information including the CO₂e emission data 2022 (Scope 1 and 2) and the underlying energy data	The Sustainability Reporting Standards of the GRI (GRI Standards), the Regulation (EU) 2020/852 as supplemented with Commission Delegated Regulation (EU) 2021/2139 and Commission Delegated Regulation (EU) 2021/2178 (hereinafter: EU Taxonomy) and the applied supplemental KPN reporting criteria as disclosed in Appendix 1: About this report, Appendix 3: Materiality assessment and section "Scoping and calculation methodologies" in Appendix 11: Environmental figures of the Integrated Annual Report 2022. The GRI Standards used are listed in the GRI Content Index as disclosed in Appendix 13: GRI Index of the Integrated Annual Report 2022.

The scope of our engagements

Our engagements scope

The Integrated Annual Report 2022 consists of the financial statements and other information (including the Report by the Board of Management, Governance and the Report by the Supervisory Board), that provide altogether an overview of the policies, activities, events and performances related to both the financial position, results, cash flow, remuneration as well as the sustainable development of KPN and other non-financial information.

The following information in the Integrated Annual Report 2022 has been in scope for our assurance engagements:

- The consolidated financial statements, comprising:
 - The Consolidated Statement of Financial Position as at 31 December 2022
 - The Consolidated Statements of Profit or Loss, Other Comprehensive Income, Changes in Equity and Cash Flows for 2022
 - The Notes comprising a summary of the significant accounting policies and other explanatory information
- The corporate financial statements, comprising:
 - The Corporate Statement of Financial Position as at 31 December 2022
 - The Corporate Statement of Profit or Loss for 2022
 - The Notes comprising a summary of the accounting policies and other explanatory information
 - The country-by-country reporting 2022 included in the financial statements as disclosed in Appendix 12: Tax overview for continuing operations per country
- The sustainability information 2022 in scope comprising:
 - Reasonable assurance - The CO₂e emission data 2022 (Scope 1 and 2) of KPN's own operations in the Netherlands and the underlying energy data as presented in table "CO₂e emissions and energy management" on page 52 of the Integrated Annual Report 2022
 - Limited assurance - The sustainability information in the following chapters and appendices:
 - Chapter: 'Report by the Board of Management'
 - Appendices: Appendix 1, 3, 4, 5, 6, 7, 9, 10, 11, 13 and 15 of the Integrated Annual Report 2022

● Other information

Limitations to the scope of our assurance engagement on the sustainability information

The sustainability information in scope includes prospective information, such as ambitions, strategy, plans, expectations, estimates and risk assessments. Inherent to prospective information, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the sustainability information in scope.

We refer to the inherent measurement uncertainty relating to the quantification of CO₂e emissions described in Appendix 11: Environmental figures in the Integrated Annual Report 2022. Quantification of CO₂e emissions is subject to inherent measurement uncertainty due to the use of variables such as emissions factors that are used in mathematical models to calculate CO₂e emissions, and the inability of those models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant CO₂e emissions.

The references to external sources or websites in the sustainability information are not part of the sustainability information as assured by us. We therefore do not provide assurance on this information.

Our conclusions are not modified in respect of these matters.

Information in support of our opinion on the financial statements and the country-by-country reporting included in the financial statements

We designed our audit procedures in the context of our audit of the financial statements as a whole and in forming our opinion thereon. The following information in support of our opinion and any findings were addressed in this context, and we do not provide a separate opinion or conclusion on these matters.

Our understanding of the business

KPN is a telecommunications and IT provider in the Netherlands, offering fixed and mobile telephony, fixed and mobile broadband internet and TV to retail and business customers. KPN offers in the Netherlands infrastructure and network-related IT solutions to business customers. KPN also provides wholesale network services to third parties. KPN is head of a group of entities, both in the Netherlands and abroad. The Dutch entities and segments thereby form the majority of the business. We have tailored our group audit approach accordingly. We paid specific attention in our audit to a number of areas driven by the operations of the group and our risk assessment.

We determined materiality and identified and assessed the risks of material misstatement of the financial statements, whether due

to fraud or error in order to design audit procedures responsive to those risks and to obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Materiality

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements and the country-by-country reporting included in the financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

Materiality	EUR 45,000,000
Benchmark used	2.0% of adjusted earnings before interest, tax, depreciation and amortization after lease (EBITDA AL).
Additional explanation	The users of the financial statements of a for-profit entity typically focus on operating performance, particularly profit before tax. Over the past years KPN's profit before tax heavily fluctuated, resulting from the impact of the discontinuance of operations and other non-recurring transactions. Furthermore, we note that in KPN's external communications, adjusted earnings before interest, tax, depreciation and amortization after lease (EBITDA AL) is commonly used to report on financial performance. Considering these aspects, we have concluded that EBITDA AL is the most appropriate and stable benchmark for KPN to base our materiality upon. We determined materiality consistent with last year.

We have also taken into account misstatements and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Supervisory Board that misstatements in the financial statements in excess of EUR 2.25 million, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

Our scope for the group audit of the financial statements

KPN is head of a group of entities, both in the Netherlands and abroad. The financial information of all these entities has been included in the consolidated financial statements.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which

● Other information

an audit or review had to be carried out on the complete set of financial information or specific items.

Our group audit mainly focused on the more significant segments, including Consumer, Business, Wholesale and Network, Operations and IT ("NOI"). We performed full scope audit procedures on the financial information of these segments.

At other group entities we performed specific audit procedures or review procedures. We audited the group consolidation, financial disclosures and a number of complex items ourselves at the company's head office. These included revenue assurance, taxation including tax related contingent liabilities, fixed assets and goodwill impairment, pensions, derivative financial instruments, hedge accounting, joint venture accounting and share-based payments. We involved several EY specialists to assist the audit team, including specialists from our tax, valuations, actuarial and treasury departments.

By performing audit procedures at segment and at corporate level as mentioned above, we have been able to obtain sufficient and appropriate audit evidence about the group's financial information to provide an opinion about the consolidated financial statements.

Our focus on climate risks and the energy transition

Climate change and the energy transition are high on the public agenda. Issues such as CO₂ reduction impact financial reporting, as these issues entail risks for the business operation, the valuation of assets ("stranded assets") and provisions or the sustainability of the business model and access to financial markets of companies with a larger CO₂ footprint.

Management summarized KPN's commitments and obligations, and reported in the Report by the Board of Management how KPN is addressing climate-related and environmental risks. As part of our audit of the financial statements, we evaluated the extent to which climate-related risks and the effects of the energy transition and the company's commitments and (constructive) obligations, are taken into account in estimates and significant assumptions as well as in the design of relevant internal control measures by KPN. Furthermore, we read the Report by the Board of Management and considered whether there is any material inconsistency between the non-financial information in the sections "Our value for stakeholders", "Our performance" and in Appendix 3: Materiality Assessment, and the financial statements.

Based on the audit procedures performed, we do not deem climate-related risks to have a material impact on the financial reporting judgements, estimates or significant assumptions as at 31 December 2022.

Our focus on fraud and non-compliance with laws and regulations

Our responsibility

Although we are not responsible for preventing fraud or non-compliance and we cannot be expected to detect non-compliance with all laws and regulations, it is our responsibility to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether caused by fraud or error. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

Our audit response related to fraud risks

We identify and assess the risks of material misstatements of the financial statements due to fraud. During our audit we obtained an understanding of the company and its environment and the components of the system of internal control, including the risk assessment process and the Board of Management's (hereinafter: management) process for responding to the risks of fraud and monitoring the system of internal control and how the supervisory board exercises oversight, as well as the outcomes.

We refer to section "Compliance and Risk" of the Board of Management report for management's fraud risk assessment and section "Audit Committee" of the "Supervisory Board Report" in which the Supervisory Board reflects on the fraud risk assessment.

We evaluated the design and relevant aspects of the system of internal control and in particular the fraud risk assessment, as well as the code of conduct, whistle blower procedures and incident registration. We evaluated the design and the implementation and, where considered appropriate, tested the operating effectiveness, of internal controls designed to mitigate fraud risks.

As part of our process of identifying fraud risks, we evaluated fraud risk factors with respect to financial reporting fraud, misappropriation of assets and bribery and corruption in close co-operation with our forensic specialists. We evaluated whether these factors indicate that a risk of material misstatement due to fraud is present.

We incorporated elements of unpredictability in our assurance engagements. We considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance.

As in all our audits, we addressed the risks related to management override of controls. For these risks we have performed procedures among others to evaluate key accounting estimates for management bias that may represent a risk of material misstatement due to fraud, in particular relating to important judgment areas and significant accounting estimates as disclosed

● Other information

in section "Significant accounting estimates, judgments and assumptions made by management" of Note 2 to the financial statements. We have also used data analysis to identify and address high-risk journal entries and evaluated the business rationale (or the lack thereof) of significant extraordinary transactions, including those with related parties.

When identifying and assessing fraud risks we presumed that there are risks of fraud in revenue recognition. We considered that this risk would primarily impact the corporate clients revenue cycle within the business segment and we designed and performed our audit procedures relating to revenue recognition responsive to this presumed fraud risk. These risks did however not require significant auditor's attention during our audit.

We considered available information and made enquiries of relevant executives, directors (including the CFO, KPN Audit, KPN Risk Management, legal, compliance, human resources and segment management) and the Supervisory Board.

The fraud risks we identified, enquiries and other available information did not lead to specific indications for fraud or suspected fraud potentially materially impacting the view of the financial statements.

Our audit response related to risks of non-compliance with laws and regulations

We performed appropriate audit procedures regarding compliance with the provisions of those laws and regulations that have a direct effect on the determination of material amounts and disclosures in the financial statements. Furthermore, we assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general industry experience, through discussions with management, reading minutes, inspection of internal audit and compliance reports, and performing substantive tests of details of classes of transactions, account balances or disclosures.

We also inspected lawyers' letters and correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. Finally, we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us.

Our audit response related to going concern

As disclosed in section "Basis of preparation" in Note 2 to the financial statements, the financial statements have been prepared on a going concern basis. When preparing the financial statements, management made a specific assessment of the company's ability to continue as a going concern and to continue

its operations for at least the next 12 months after the preparation of the Integrated Annual Report.

We discussed and evaluated the assessment with management exercising professional judgment and maintaining professional skepticism. We considered whether management's going concern assessment, based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, contains all events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion.

Based on our procedures performed, we did not identify serious doubts on KPN's ability to continue as a going concern for the next 12 months. Our conclusions are based on the audit evidence obtained up to the date of our combined independent auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

The key audit matter "Accounting treatment Joint Venture Glaspoort", which was included in our last year's auditor's report, is not considered a key audit matter for this year as this was related to one off transactions with Drepuna Investments Holding B.V., an investment entity managed by APG. Instead, we added a key audit matter on the Valuation of the Joint Venture Glaspoort.

General observation

For the audit of the financial statements, we make use of KPN's internal control framework and its governance. The framework is maintained by the business and continuously tested by KPN Risk Management and KPN Audit. The Management Board and Audit Committee are being informed of the outcome of the tests performed on a quarterly basis. For purposes of our audit, we assessed the adequacy of the framework and we test the work of KPN Risk Management and KPN Audit. We believe that KPN's internal control framework meets the required criteria and it allows us to perform a system-based audit in an effective manner.

The key audit matters addressed below are all covered by KPN's internal control framework and have been audited by us with satisfactory results. We highlight the most important elements we focused on in 2022.

● Other information

Key audit matter	Our audit approach	Key observations
Valuation of (in)tangible assets, including goodwill		
Under IFRS, it is required to annually test the amount of goodwill and other intangible assets with an indefinite life for impairment. KPN's disclosures about goodwill and other intangible assets are included in Note 11.	We compared forecasted revenue and profit margins for all (Groups of) cash generating units with the approved KPN strategic plan. We also verified the assumptions to which the outcome of the impairment test is most sensitive and reviewed the company's statement that the headroom of the (Groups of) CGU's is more than sufficient and therefore no sensitivity analysis needs to be disclosed.	We concur with management that there is no need for impairments of goodwill and other (in)tangible assets with (in)definite life (other than already recorded during 2022) and agree with the disclosures.
No impairments of goodwill and other intangible assets with indefinite life were recorded during 2022.		We concur with management on the impairments recorded.
On assets with finite lives an impairment test has to be performed if indications of impairment exist.	Our audit procedures included, among others, using EY valuation specialists to assist us in verifying the assumptions and methodologies used by KPN and evaluating the historical accuracy of management's estimates that drive the assessment, such as strategic plans and expected growth rates.	
Some triggering events were identified, for example in the area of hardware and software that required impairment testing and for which minor impairments were recorded, as included in Note 10 and 11.		
The valuation of (in)tangible assets, including goodwill is considered a key audit matter as the impairment tests were important for our audit as the related asset amounts are significant and the assessment process itself is complex and requires judgment. The impairment test includes assumptions about future market or economic conditions.		
Recognition of deferred tax assets		
At 31 December 2022 deferred tax assets (DTA) of EUR 261 million are recognized and related disclosures are included in Note 8 to the financial statements.	Our audit procedures related to the deferred tax assets included, amongst others, using EY tax specialists to assist us in verifying and interpreting the agreements (Vaststellingsovereenkomsten) and other agreements reached with the Dutch Tax Authorities as well as evaluating the assumptions, such as expected future taxable income and methodologies used by the company. In addition, the EY tax specialists assessed whether DTAs are at risk due to exposures which could lead to adjustments of the Net Operating Losses.	We concur with the recorded deferred tax assets and the disclosures.
KPN assessed whether the DTA can be recovered and sufficient sources of income are available. KPN provided a recoverability analysis based on the current loss compensation rules. The outcome of the analyses is that the DTA can be recognized for the full amount, with the exception of losses relating to foreign jurisdictions that are not expected to materialize in foreseeable future, as disclosed in Note 8.	This entailed reviewing KPN's latest approved strategic plan. We discussed this plan with management and determined the reasonableness of the assumptions used regarding the recoverability of the deferred tax assets and assessed the plan's assumptions and sensitivities and evaluating the historical accuracy of management's estimates that drive the assessment taking into account the specific requirements stated in IAS12.	
The recognition of deferred tax assets is considered a key audit matter as the assessment process is complex and judgmental and is based on assumptions about expected future market or economic conditions.		
Reliability of IT systems, including security, cybercrime and data privacy		
At KPN, processes are highly automated and KPN continuously invests in simplification and improvement of IT systems.	As part of our audit, we have reviewed the quality of KPN's IT systems and the controls embedded therein with a purpose to express an opinion on the financial statements.	In a few instances with respect to our IT general control testing, we identified situations where controls needed improvement. KPN has set up remediation procedures that we have also reviewed and tested with satisfactory results.
Reliability and security of IT systems are thereby high on the agenda of KPN and for that purpose KPN's internal control framework includes several controls to ensure, inter alia, proper identity, access and change management of its IT systems.	With respect to cybersecurity, we obtained an understanding of KPN's security and privacy organization as well as cyber risk management in relation to KPN's cyber threat landscape. For this purpose, we performed our own procedures and reviewed and tested the work done by KPN Risk Management and KPN Audit. Since this is highly specialized work, our audit team includes IT specialists.	
The reliability of IT systems, including security, cybercrime and data privacy is considered a key audit matter as it is key for KPN's activities and financial reporting.		
Accounting treatment Joint Venture Glaspoort		
On 9 June 2021 the transaction with Drepana Investments Holding B.V., an investment entity managed by APG, was closed which related to the participation in a joint venture, Glaspoort B.V., to roll out a fiber network in specifically identified areas in the Netherlands. The goodwill and intangibles relating to Glaspoort B.V. are included in the carrying amount of Glaspoort	We compared forecasted revenue and profit margins for Glaspoort with the approved Glaspoort business plan. We also challenged the assumptions to which the outcome of the impairment test is most sensitive and reviewed the company's statement that the headroom is more than sufficient and therefore no sensitivity analysis needs to be disclosed. Our audit procedures included, among others, using EY	We concur with the accounting treatment and the disclosures.

● Other information

Key audit matter	Our audit approach	Key observations
(EUR 489 million).	valuation specialists to assist us in verifying the assumptions and methodologies used by Glaspoort and KPN and evaluating the historical accuracy of management's estimates that drive the assessment, such as strategic plans and expected growth rates.	

As disclosed in Note 12, KPN determines whether there is objective evidence that the investment in the joint venture is impaired and then determines whether the recoverable amount is lower than the carrying amount. Taking into consideration the new and improved fiber offering that the ACM declared binding, the valuation of the joint venture Glaspoort is considered a key audit matter. Incorrect application of valuation models and/or key assumptions when determining the valuation may result in significant misstatements in the valuation of the joint venture and resulting impairment losses, if any.

Information in support of our conclusions on sustainability information

Materiality

The scope of our assurance procedures is influenced by the application of materiality. Our assurance engagements aim to provide assurance about whether the sustainability information in scope is free from material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the (economic) decisions of users taken on the basis of the Integrated Annual Report. The materiality affects the nature, timing and extent of our assurance procedures and the evaluation of the effect of identified misstatements on our conclusions.

Based on our professional judgment we determined materiality levels for each relevant part of the sustainability information and for the sustainability information as a whole. When evaluating our materiality levels, we have taken into account quantitative and qualitative considerations as well as the relevance of information for both stakeholders and the company.

We agreed with the Supervisory Board that misstatements which are identified during our assurance engagement and which in

our view must be reported on quantitative or qualitative grounds, would be reported to them.

Key assurance matters

Key assurance matters are those matters that, in our professional judgement, were of most significance in our assurance engagement of the sustainability information in scope. We have communicated the key assurance matters to the Supervisory Board. The key assurance matters are not a comprehensive reflection of all matters discussed.

The key assurance matter Disclosure of methodology for RepTrak Reputation score and Net Promoter Score in the Netherlands (customer satisfaction), which was included in our last year's combined auditor's and assurance report, is not considered a key assurance matter for this year as we lowered the assessed risks of material misstatement as result of having no findings on this topic in recent years.

For the assurance procedures concerning the sustainability information in scope, we identified the following key assurance matter:

Key assurance matter	Our review approach	Key observations
Estimations and assumptions in Scope 3 (CO₂e emissions) and energy savings by customers	Our review procedures focused on evaluating the suitability and consistent application of the reporting criteria and assessing the reasonableness of the assumptions made. We have also reviewed whether the disclosures in the Report are adequate. Furthermore we reviewed the restated Scope 3 emissions, including the related disclosures. We have also reviewed whether the disclosures in the Integrated Annual Report are accurate.	We assessed the reporting criteria as suitable and consistently applied and the assumptions made to be reasonable. Nothing has come to our attention that causes us to believe that the calculation method and the restatement to Scope 3 (CO ₂ e emissions) in prior years are inaccurate and insufficiently disclosed in Appendix 11: Environmental Figures of the KPN Integrated Annual Report 2022.

Inherent to the nature of information on Scope 3 (CO₂e emissions) and energy savings by customers, is that they are to a large extent based on the use of estimates and underlying assumptions as disclosed in Appendix 11: Environmental Figures of the KPN Integrated Annual Report 2022. As such these calculations are complex and some degree of uncertainty will remain. For 2022 KPN restated the previously reported Scope 3 emissions, due to inflation adjustments in the spend-based approach and refinements of data used in the calculation method.

● Other information

Report on other information included in the Integrated Annual Report

The Integrated Annual Report contains other information in addition to the financial statements, the country-by-country reporting included in the financial statements, the sustainability information in scope and our combined independent auditor's report.

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code for the management report and the other information as required by Part 9 of Book 2 of the Dutch Civil Code; and as required by Sections 2:135b and 2:145 sub-section 2 of the Dutch Civil Code for the remuneration report
- Contains the information as required under Disclosure 207-1, Disclosure 207-2 and Disclosure 207-3 of GRI 207: Tax.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements and the country-by-country reporting included in the financial statements, our assurance procedures on the sustainability information in scope or otherwise, we have considered whether the other information contains material misstatements. By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code, the Dutch Standard 720. The scope of the procedures performed is substantially less than the scope of those performed in our audit of the financial statements and the country-by-country reporting included in the financial statements and our assurance procedures on the sustainability information in scope.

The Board of Management is responsible for the preparation of the other information, including the management report in accordance with Part 9 of Book 2 of the Dutch Civil Code and other information required by Part 9 of Book 2 of the Dutch Civil Code, and including the management approach disclosures in accordance with the reporting requirements under Disclosure 207-1, Disclosure 207-2 and Disclosure 207-3 of GRI 207: Tax. The Board of Management and the Supervisory Board are responsible for ensuring that the remuneration report is drawn up and published in accordance with Sections 2:135b and 2:145 sub section 2 of the Dutch Civil Code.

Report on other legal and regulatory requirements and ESEF

Engagement

We were engaged by the Supervisory Board as auditor of Koninklijke KPN N.V. on 9 April 2014, as of the audit for the year 2015 and have operated as statutory auditor since that date.

No prohibited non-audit services

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audit of public-interest entities.

European Single Electronic Reporting Format (ESEF)

KPN has prepared the Integrated Annual Report in ESEF. The requirements for this are set out in the Delegated Regulation(EU) 2019/815 with regard to Regulatory Technical Standards on the specification of a single electronic reporting format (hereinafter: the RTS on ESEF).

In our opinion, the Integrated Annual Report, prepared in the XHTML format, including the partially marked-up consolidated financial statements, as included in the reporting package by KPN, complies in all material respects with the RTS on ESEF.

Management is responsible for preparing the Integrated Annual Report, including the financial statements, in accordance with the RTS on ESEF, whereby management combines the various components into a single reporting package.

Our responsibility is to obtain reasonable assurance for our opinion whether the Integrated Annual Report in this reporting package complies with the RTS on ESEF.

We performed our examination in accordance with Dutch law, including Dutch Standard 3950N "Assurance-opdrachten inzake het voldoen aan de criteria voor het opstellen van een digitaal verantwoordingsdocument" (Assurance engagements relating to compliance with criteria for digital reporting). Our examination included amongst others:

- obtaining an understanding of KPN's financial reporting process, including the preparation of the reporting package
- Identifying and assessing the risks that the Integrated Annual Report does not comply in all material respects with the RTS on ESEF and designing and performing further assurance procedures responsive to those risks to provide a basis for our opinion, including:
 - Obtaining the reporting package and performing validations to determine whether the reporting package containing the Inline XBRL instance document and the XBRL extension taxonomy files has been prepared in accordance with the technical specifications as included in the RTS on ESEF
 - Examining the information related to the consolidated financial

● Other information

statements in the reporting package to determine whether all required mark-ups have been applied and whether these are in accordance with the RTS on ESEF.

Description of responsibilities

Responsibilities of Board of Management and the Supervisory Board

The Board of Management (hereafter: management) is responsible for:

- the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code.
- the preparation of the country-by-country reporting included in the financial statements in accordance with the reporting requirements under Disclosure 207-4 of GRI 207: Tax.
- the preparation of reliable and adequate sustainability information in accordance with the reporting criteria as included in the section "Reporting criteria", including the identification of stakeholders and the definition of material matters. Management is also responsible for selecting and applying the reporting criteria and for determining that these reporting criteria are suitable for the legitimate information needs of stakeholders, taking into account applicable law and regulations related to reporting. The choices made by management regarding the scope of the sustainability information and reporting policy are included in the section entitled Appendix 1: "About this report" and Appendix 3: "Materiality assessment" in the Integrated Annual Report.

Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements, the preparation of the country-by-country reporting included in the financial statements and the sustainability information in scope that is free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, management is responsible for assessing the company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so. Management should disclose events and circumstances that may cast significant doubt on the company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the KPN's reporting process.

Our responsibilities

Our objective is to plan and perform the assurance engagements in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusions.

Our assurance procedures aimed at obtaining reasonable assurance have been performed with a high, but not absolute, level of assurance, which means we may not detect all material errors and fraud during our audits.

Our review of the sustainability information is aimed at obtaining a limited level of assurance. The assurance procedures performed to obtain a limited level of assurance are aimed on the plausibility of information and vary in nature and timing from, and are less in extent, than for a reasonable assurance engagement. The level of assurance obtained in a review is therefore substantially less than the assurance obtained in an audit.

We apply the Nadere voorschriften kwaliteitssystemen (NVKS, Regulations for Quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and other applicable legal and regulatory requirements.

In addition to the "Information in support of our opinion on the financial statements and our opinion on the country-by-country reporting included in the financial statements" and the "Information in support of our conclusions on sustainability information" sections above, an informative summary of the work performed as the basis of our conclusions is included in the Annex to the combined independent auditor's report.

Amsterdam, 23 February 2023

Ernst & Young Accountants LLP

signed by J. Verhagen

● Other information

Annex to the combined independent auditor's and assurance report

Work performed

Our audit to obtain reasonable assurance about the financial statements (consolidated and corporate) and the tax information embedded further included the following:

- Identifying and assessing the risks of material misstatement of the financial statement and the country-by-country reporting included in the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Our review to obtain limited assurance about the sustainability information in scope included amongst others:

- Performing an analysis of the external environment and obtaining an understanding of relevant sustainability themes and issues and the characteristics of the company.
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the sustainability information. This includes the evaluation of the results of the stakeholders' dialogue and the reasonableness of estimates made by management.
- Obtaining through inquiries a general understanding of internal control, reporting processes and information systems relevant for the preparation of the sustainability information, without obtaining evidence about implementation or testing the operating effectiveness of controls
- Reconciling the relevant financial information with the financial statements.
- Obtaining an understanding of the procedures performed by the internal audit department of KPN.
- Identifying areas of the sustainability information with a higher risk of misleading or unbalanced information or material misstatements, whether due to error or fraud.
- Designing and performing further assurance procedures aimed at determining the plausibility of the sustainability information responsive to this risk analysis. These procedures consisted amongst others of:
 - Interviewing management and relevant staff at corporate level responsible for the sustainability strategy, policies and results.
 - Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures on, and consolidating the data in the sustainability information.
 - Obtaining assurance information that the sustainability information reconciles with underlying records of the company.
 - Reviewing, on a limited test basis, relevant internal and external documentation.
 - Performing an analytical review of the data and trends in the information submitted for consolidation at corporate level.
- Evaluating the consistency of the sustainability information in scope with the information in the Integrated Annual Report which is not included in the scope of our assurance engagement.
- Evaluating the overall presentation and content of the sustainability information in scope.
- Considering whether the sustainability information as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

In addition to the procedures mentioned above, for the CO₂e emission data 2022 (Scope 1 and 2) of own operations in the Netherlands and the underlying energy data we designed and performed further audit procedures responsive to the risks identified, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk that the CO₂e emission data 2022 (Scope 1 and 2) of own operations in the Netherlands and the underlying energy data are misleading or unbalanced, or the risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from errors. Fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. These procedures included consisted amongst others of:

- Obtaining a more detailed understanding of systems and processes for collecting, reporting and consolidating information, including obtaining an understanding of internal control relevant to our audit, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluating the design and implementation of the relevant internal controls during the reporting year.
- Conducting more in-depth analytical procedures and substantive testing procedures on the relevant data. Evaluating relevant internal and external documentation, on a test basis, to determine the reliability of the CO₂e emission data 2022 (Scope 1 and 2) of own operations in the Netherlands and the underlying energy data.

Communication

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the assurance procedures and significant findings, including any significant findings in internal control that we identify during our assurance engagements. In this respect we also submit an additional report to the Audit Committee of the Supervisory Board in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Supervisory Board, we determine the key audit matters: those matters that were of most significance in the audit of the financial statements and the country-by-country reporting included in the financial statements, and the key assurance matters: those matters that were of most significance in the review of the sustainability information in scope and the audit of the CO₂e emission data 2022 (Scope 1 and 2) of KPN's own operations in the Netherlands and the underlying energy data of the current period. We describe these matters in our combined independent auditor's report and assurance report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not mentioning it is in the public interest.

● Appendices

Appendix 1: About this report

Scope

The Integrated Annual Report was published on 24 February 2023.

The scope of the information in this report covers the KPN Group and subsidiaries in which KPN has a majority shareholding. This scope is the same as the previous year's report. Unless stated otherwise, references to KPN should be read as referring to the KPN Group. The entities that KPN reports on financially are the same as those it reports on non-financially. For our non-financial information, we include new acquisitions in our report as of the first full year of ownership. Non-financial information for divestments that occurred during the reporting year is excluded for the full year. A full list of entities included in KPN's Integrated Annual Report can be found in this appendix.

The data in this report refers to KPN's performance and not to that of our subcontractors, unless stated otherwise. The full scope of the financial information is reported in the Financial Statements (p. 101). The reporting frequency of this report, in which KPN's financial and non-financial reporting are merged, is annual and the current period runs from 1 January 2022 to 31 December 2022. The report specifically reviews developments and performance in 2022 and is based on topics identified as highly material for KPN. The described scope applies to all material topics. Aspects of a more static nature (such as management approaches to our ESG themes and our stakeholders) or with less reporting priority (such as the list of external memberships) are included in the GRI index (p. 230).

The Report of the Board of Management consist of pages 4 to 79 and Appendix 8.

Reporting criteria

The purpose of this report is to inform stakeholders about KPN's role in society, in connection with the main strategic objectives and targets. Stakeholders are defined as all people and organizations affected by KPN's operations or with whom a relationship is maintained, such as employees, governments and regulators, the investor community, suppliers, customers and society. The section Stakeholder dialogue in this appendix provides more information on stakeholder approach for specific stakeholder groups.

In preparing this Integrated Annual Report, we have taken the principles of the International Integrated Reporting Council (IIRC) into account. We comply with the EU Directive Non-Financial Reporting (NFRD) and, where possible, have already considered the Corporate Sustainability Reporting Directive (CSRD), which is expected to become effective as of 2024.

We have also taken the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) into account. For the sustainability information included in this report, KPN follows the Global Reporting Initiative (GRI) Standards - Option 'in accordance with', the Regulation (EU) 2020/852 as supplemented with Commission Delegated Regulation (EU) 2021/2139 and Commission Delegated Regulation (EU) 2021/2178 (hereinafter; EU Taxonomy) and self-developed reporting criteria as disclosed in this appendix and Appendix 15: Glossary. The Option - 'in accordance with' of the GRI Standards means that KPN reports on all general standard disclosures and all specific standard disclosures related to identified material topics. We have taken the SASB standards into account, see Appendix 14 SASB index (p.239). KPN recognizes the importance of disclosure on environmental, social and governance matters. We do so by integrating disclosure of this information with other financial and non-financial information, based on materiality considerations, in this Integrated Annual Report.

The process for defining the material topics and report content, as well as the list of material topics, is described in the materiality determination (see Appendix 3 Materiality assessment (p.191)). The results of this assessment (list of material topics for KPN, including their reporting priority) determine which GRI standards are set out in this report and which indicators are featured only on the website or in the GRI index. The overview can be found in the GRI index (p. 230).

Quantitative data concerning the workforce and financial results set out in this report has been collected using our financial data management system. The remaining data has been collected using a standardized questionnaire that was completed with data from information management systems by the responsible business units. The Internal Audit and Corporate Control departments used the consistency and availability of supporting evidence as the basis for their assessment of the data reported at group level. Validation criteria set out in advance were also used to assess the data.

External assurance

EY was engaged as an independent assurance provider to perform an assurance engagement with the aim of obtaining reasonable assurance on CO₂e emission data 2022 (scope 1 and 2) of own operations in the Netherlands and the underlying energy data presented in this report, as well as KPN's country-by-country reporting (Appendix 12) and limited assurance on other sustainability information as disclosed in the following chapters and appendices:

- Chapters in the 'Report by the Board of Management'

● Appendices

- Appendices 1: About this report, 3: Materiality assessment, 4: Non-financial information, 5: TCFD, 6: NFRD, 7: EU Taxonomy, 9: Social figures, 10: Supply chain, 11: Environmental figures, 13: GRI index and 15: Glossary.

The key social and environmental figures, which are available in Appendices 9 and 11, are also part of this report. This report provides more detailed numbers on key figures that reflect on high material topics within the report (such as CO₂e emissions and electricity consumption). This report also contains prospective information, such as ambitions, strategy, targets and expectations. Inherent to this information is that actual future results may be different from the prospective information and as such may be uncertain. Therefore, the assumptions and feasibility of this prospective information are not covered by the external assurance.

The Audit Committee approved every engagement of the external auditor, after pre-approval by the internal auditor, in order to avoid potential breaches of the external auditor's

independence. For more details we refer to the Combined independent auditor's report and assurance report (p. 176).

Reporting ambitions

KPN adheres to several reporting benchmarks, such as MSCI, Sustainalytics and the CDP. In this way, our performance and way of reporting can be compared to peers and expectations from the industry and other stakeholders. We have long been a constituent of the World Index of the Dow Jones Sustainability Index, but in the past years increasingly learnt that investors and analysts value other benchmarks even more. We therefore decided to shift our focus more to those benchmarks. Besides meeting all legal reporting requirements such as the expected CSRD, our reporting ambitions for the coming years are: to keep reporting in line with the IIRC framework and in accordance with GRI standards and SASB; to keep reporting on high material topics; to report more on qualitative and quantitative value creation for society; and to maintain a leading position in several benchmarks like the MSCI, Sustainalytics and CDP.

KPN subsidiaries and significant participations per 31-12-2022

LEGAL ENTITY NAME	COUNTRY OF RESIDENCE	(ULTIMATE) OWNERSHIP (%)	TYPE	NUMBER OF OWN PERSONNEL (FTE)
KPN B.V.	Netherlands	100%	Operational company	5,001-10,000
Broadband Hosting B.V.	Netherlands	100%	Operational company	11-100
CAM IT Solutions B.V.	Netherlands	100%	Operational company	11-100
Digittenne B.V.	Netherlands	100%	Operational company	-
E-Zorg B.V.	Netherlands	100%	Operational company	-
Getronics PinkRoccade Overheidspersoneel B.V.	Netherlands	100%	Operational company	<10
GroupIT B.V.	Netherlands	100%	Holding company	-
Inspark Holding B.V.	Netherlands	100%	Holding company	-
InSpark B.V.	Netherlands	100%	Operational company	101-500
IS Group LLC	US	100%	Dormant	-
Itzos B.V.	Netherlands	100%	Operational company	11-100
KPN Finance B.V.	Netherlands	100%	Finance / Insurance company	-
KPN Mobile The Netherlands B.V. i.L. ¹	Netherlands	100%	Dormant	-
KPN Public Safety Services B.V.	Netherlands	100%	Holding company	-
Routit B.V.	Netherlands	100%	Operational company	-
Routit GmbH i.L. ¹	Germany	100%	Operational company	-
Solcon Internetdiensten B.V.	Netherlands	100%	Operational company	11-100
Talk & Vision Holding B.V.	Netherlands	100%	Holding company	-
Talk & Vision B.V.	Netherlands	100%	Operational company	-
Talos Labs B.V.	Netherlands	100%	Operational company	-
TetraNed v.o.f.	Netherlands	100%	Operational company	-
XS4ALL Internet B.V.	Netherlands	100%	Operational company	-
Reggefiber Group B.V.	Netherlands	100%	Holding company	-
Reggefiber Operator B.V.	Netherlands	100%	Operational company	-
Reggefiber ttH B.V.	Netherlands	100%	Operational company	-
Glasvezelnet Amsterdam B.V.	Netherlands	100%	Operational company	-

● Appendices

LEGAL ENTITY NAME	COUNTRY OF RESIDENCE	(ULTIMATE) OWNERSHIP (%)	TYPE	NUMBER OF OWN PERSONNEL (FTE)
Netwerk Exploitatiemaatschappij B.V.	Netherlands	100%	Operational company	-
Netwerk Exploitatiemaatschappij Nuenen B.V.	Netherlands	5%	Operational company	-
Netwerkexploitatiemaatschappij Berg en Dal B.V.	Netherlands	100%	Operational company	-
Netwerkexploitatiemaatschappij Lingewaard B.V.	Netherlands	100%	Operational company	-
Netwerkexploitatiemaatschappij Westerveld B.V.	Netherlands	100%	Operational company	-
Glaspoort B.V.	Netherlands	50%	Operational company	11-100
Getronics B.V.	Netherlands	100%	Holding company	-
Getronics Finance Holdings B.V.	Netherlands	100%	Holding company	-
Getronics Pensions UK Ltd	UK	100%	Pension company	-
Getronics Pensions UK Trustee Ltd	UK	100%	Pension company	-
Getronics US Services, Inc.	US	100%	Holding company	-
Getronics US Operations, Inc.	US	100%	Pension company	-
CSC CompuCom Systems Holding Co-Investment LLC	US	77,42%	Dormant	-
KPN Insurance Company DAC	Ireland	100%	Finance / Insurance company	-
KPN Mobile Holding B.V.	Netherlands	100%	Holding company	-
E-PCPM Geschäftsführungs GmbH iL. ¹	Germany	100%	Dormant	-
KPN Mobile N.V.	Netherlands	100%	Holding company	-
KPN Mobile International B.V.	Netherlands	100%	Holding company	-
KPN Mobile Germany III B.V.	Netherlands	100%	Holding company	-
E-PCPM GmbH & Co KG	Germany	100%	Dormant	-
KPN Ventures B.V.	Netherlands	100%	Holding company	-

1 In liquidation

● Appendices

Appendix 2: Alternative performance measures

In the discussion of KPN's financial results, a number of alternative performance measures (non-GAAP figures) are used to provide readers with additional financial information that is regularly reviewed by management. These non-GAAP figures should not be viewed as a substitute for KPN's financial results as determined in accordance with IFRS, which are presented in KPN's Consolidated Financial Statements. Also, the additional information presented is not uniformly defined by all companies, including KPN's peers. Therefore, the non-GAAP figures presented may not be comparable with similarly named numbers and disclosures by other companies. In addition, readers should be aware that certain information presented is derived from amounts determined under IFRS, but is not in itself an expressly defined GAAP measure. Such non-GAAP measures should not be viewed in isolation or as an alternative to an equivalent GAAP measure.

KPN's management considers these non-GAAP figures, combined with GAAP performance measures and in conjunction with each other, the most appropriate to measure the performance of the group and its segments. The non-GAAP figures are used by management for planning, reporting (internal and external) and incentive purposes.

All non-GAAP figures are based on continuing operations unless stated otherwise. KPN's main non-GAAP figures are explained hereafter.

EBITDA

KPN defines EBITDA as operating result before depreciation (including impairments) of PP&E and amortization (including impairments) of intangible assets. Note that KPN's definition of

EBITDA deviates from the literal definition of earnings before interest, taxes, depreciation and amortization and should not be considered in isolation or as a substitute for analyses of the results as reported under IFRS as adopted by the European Union.

	2022	2021 (restated)
€ million		
Total revenues and other income	5,374	6,122
Cost of goods & services	1,379	1,325
Personnel expenses	809	844
Information technology/Technical infrastructure	298	307
Other operating expenses	328	324
Total operating expenses (excl. D&A)	2,814	2,800
EBITDA	2,560	3,322

Adjusted revenues and adjusted EBITDA after leases (Adjusted EBITDA AL)

Adjusted revenues are derived from revenues (including other income), adjusted for the impact of incidentals. Incidentals are non-recurring transactions which are not directly related to day-to-day operational activities at or over EUR 5m, unless significant for the specific reportable segment.

Adjusted EBITDA AL is derived from EBITDA, adjusted for the impact of restructuring costs and incidentals ('adjusted') and for lease-related expenses ('after leases' or 'AL'). Lease-related expenses in this definition are the depreciation and impairment expenses of right-of-use assets and interest on lease liabilities, as well as the gains or losses arising upon remeasurement or (early) termination of a lease.

Key items between reported and adjusted revenues

€ million	FY 2022 reported	FY 2022 Incidentals	FY 2022 adjusted	FY 2021 reported	FY 2021 Incidentals	FY 2021 adjusted	y-on-y reported	y-on-y adjusted
Consumer	2,857	-	2,857	2,857	-	2,857	0.0%	0.0%
Business	1,798	-	1,798	1,762	-	1,762	2.1%	2.1%
Wholesale	689	-	689	684	21	663	0.7%	3.9%
Network, Operations & IT	72	47	25	34	15	19	114%	36%
Other (incl. eliminations)	-43	-	-43	785	830	-45	n.m.	-6.4%
KPN Group	5,374	47	5,327	6,122	866	5,255	-12%	1.4%

● Appendices

Revenue incidentals

€ million	Segment	2022	2021
Book gain on sale of joint venture (Glaspoort BV)	Other	-	830
Book gain on sale of assets to joint venture (Glaspoort BV)	NOI	47	15
Release of revenue related provisions	Wholesale	-	21
Total revenue incidentals		47	866

The program has generated net indirect Opex savings of EUR 364m by the end of 2022.

Free cash flow (FCF)

FCF is defined as cash flow from continuing operating activities plus proceeds from disposals of property, plant & equipment (PP&E) minus capital expenditure (Capex) and adjusted for repayments of lease liabilities. KPN defines Capex as investments in PP&E and software. Please note that KPN's Capex definition differs from Capex as defined by the EU Taxonomy discussed in Appendix 7.

Key items between reported and adjusted EBITDA AL

€ million	2022	2021	y-on-y
EBITDA	2,560	3,322	-23%
Incidentals	31	870	>100%
Restructuring	-24	-38	-36%
Lease-related expenses			
Depreciation right-of-use assets	-131	-123	6.7%
Interest lease liabilities	-18	-20	-8.4%
Adjusted EBITDA after leases	2,404	2,347	2.4%

€ million	2022	2021
Net cash flow provided by operating activities from continuing operations	2,188	2,129
Capex	-1,206	-1,216
Proceeds from real estate	4	6
Repayments of lease liabilities	-124	-135
Free cash flow from continuing operations	862	784

EBITDA AL incidentals

€ million	Account	2022	2021
Book gain on sale of joint venture (Glaspoort BV)	Revenue	-	830
Book gain on sale of assets to joint venture (Glaspoort BV)	Revenue	47	15
Release of revenue related provisions	Wholesale	-	21
Release of provisions	Other operating expenses	-	4
Impairment right-of-use assets	Depreciation right-of-use assets	-16	-
Total EBITDA AL incidentals		31	870

Operational free cash flow

Operational free cash flow is defined as adjusted EBITDA AL minus capital expenditure (Capex).

€ million	2022	2021
Adjusted EBITDA AL	2,404	2,347
Capex	-1,206	-1,216
Operational free cash flow	1,199	1,131

Leverage ratio

KPN defines its leverage ratio as net debt (excl. lease liabilities) divided by the 12-month rolling adjusted EBITDA AL. The ratio is adjusted for major changes in the composition of the KPN Group (Acquisitions and disposals) when applicable.

Net debt is defined as gross debt less net cash and short-term investments. Gross debt is defined as the nominal value of interest-bearing financial liabilities representing the net repayment obligations in euro, excluding derivatives, related collateral and leases, and taking into account 50% of the nominal value of the hybrid capital instruments.

For the calculation of KPN's leverage ratio, see Note 13.4 to the Consolidated Financial Statements.

Net Opex reduction program

KPN's net Opex reduction program is directed at reducing KPN's net indirect operating expenses after leases. The program is directed at the operating expense categories personnel, IT/TI, other operating expenses and lease-related expenses, excluding restructuring costs and incidentals. Through its nature, the program will also mean a reduction in FTEs. The baseline for measurement is the operating expense level at the end of 2018.

The baseline is adjusted for major changes in the composition of the group in the years 2019-2021 (acquisitions and disposals).

● Appendices

Appendix 3: Materiality assessment

Materiality

The annual materiality assessment ensures KPN is aware of what is happening around us, where we can have an impact, and how we can add focus to our efforts. In 2022, KPN conducted a double materiality assessment. We conducted extensive desk research, using internal and external documentation to define KPN's new material topics. In addition, we interviewed nine stakeholder representatives, and the Board of Management filled in a survey to rank the material topics. The steps of the assessment process are described in detail below.

Step 1: Selecting relevant topics and impacts 2022

As opposed to previous years, we applied double materiality instead of single materiality. The materiality assessment was conducted according to the newest GRI 2021 requirements and already inspired by the upcoming CSRD guidelines. These updated guidelines focus more on impact, including financial impact (outside-in) and the impact of KPN on its surroundings (inside-out). For this report, the definition applied for a material topic is any topic that significantly influences our organization or, with its activities, our organization has a significant impact on. Impact includes positive and negative impact, intended and unintended impact, short- and long-term impact, reversible and irreversible, and direct and indirect (risk/opportunity) impact. These impacts can have an effect on economy, environment, people and human rights across our value chain.

As a starting point, we researched the most material topics for KPN. We conducted desk research using international standards, SDGs, peers, partners, sector trends, internal documents, and, lastly, a media analysis. This resulted in a longlist of relevant topics and issues. The longlist was consolidated into an initial shortlist of topics with the most impact on KPN. The Board of Management and an internal CSR working group validated this shortlist, and the list of topics was then used as a basis for stakeholder consultation. The definitions of the material topics were adapted in an internal review to more closely reflect KPN's current operational context.

Some topics were removed or mapped differently as compared to previous years. The reason for this is that the double materiality assessment was approached from a fundamental point of view. These consolidated topics were compared with those of previous years and merged, where possible and relevant, for the sake of recognizability. In this way, the result was a list of topics similar to the previous list, often with minor new, adjusted or expanded definitions), as well as a number of newly identified topics.

- 'Network quality, reliability & availability' is adjusted to 'Network quality' due to the fact that this covers the whole material topic while being more compact
- 'Data & information protection' is adjusted to 'Cybersecurity, data & information protection' because our increased focus on cybersecurity
- 'Environmental Performance' is split into two material topics, 'GHG emissions' and 'Circular resource management', those are better measurable
- 'Customer interaction' is adjusted to 'Customer value' be more in line with our value creation model
- 'Supplier selection & good governance' is adjusted to 'Supplier management and selection' due to the fact that this topic covers more than only the selection of our suppliers. This topic is also ranked medium material instead of higher material in previous year
- 'Sustainable ICT solutions' is adjusted to 'Sustainable ICT solutions & product innovation' because our sustainable ICT solutions go hand in hand with product innovations
- 'Responsible operations' is adjusted to "Health & Safety EMF radiation" because this is what covers the definition of the topic more accurate
- 'Attractive working conditions' is changed to 'Working conditions' to be more compact and therefore is the word attractive removed from the definition of this topic
- 'Fair access to KPN fixed network' has expired due to developments in this area
- 'KPN's corporate governance & human rights compliance' is adjusted to 'Compliance & business ethics' to be more compact and broaden the scope
- 'Social community investment' is adjusted to "Social investment & partnerships" because developments in our foundation more focussing on partnerships
- 'Shared digital knowledge' is adjusted to 'Facilitating innovation' because this is the essence of sharing digital knowledge
- 'Tax Strategy' is adjusted to 'Fair Taxes' as this is more in line with the objective of tax (see chapter Tax and regulations (p. 62))

● Appendices

Materiality topic (adjustments in bold)	Content (adjustments in bold)
Network quality	The impact that the quality and reliability of KPN's networks have on the accessibility of high speed internet - and therewith the availability of critical communications (short term) and the contribution to growing economic and social activity (long-term).
Cybersecurity, data & information protection	The impact of KPN's data & information protection and cybersecurity efforts on safeguarding the rights , safety & privacy of customers and employees and, where applicable, suppliers.
Supplier management and selection	The impact of KPN's responsible supplier management and due diligence on supplier selection regarding data security, natural resources , human rights, and local communities.
GHG emissions	The impact KPN has with its own business operations on reducing energy consumption and CO₂e emissions to mitigate climate change.
Circular resource management	The impact KPN has with its circular approach (reduced use of virgin materials, extended product use, recycling and handling of e-waste) on materials and resources.
Customer value	The impact of offering future-proof services at a fair price , and transparent marketing and communication on customer appreciation and digital readiness .
Sustainable ICT solutions & product innovation	The impact that KPN has with its digital product innovation and future-proof technologies on the acceleration of digitalization.
Working conditions	The impact of fair and attractive working conditions (equal opportunities, diversity & inclusion), ensuring health & safety, and attractive career development opportunities on KPN's workforce employability, and physical and mental well-being .
Compliance & business ethics	The impact that responsible governance and compliance with applicable laws and regulations have on business continuity and integrity .
Facilitating innovation	The impact of KPN's facilitating role on stimulating innovation in society through, among others, seminars, field labs, and partnerships with governmental institutions.
Fair taxes	KPN's contributes to society through its total tax contribution as a means for social economic cohesion, sustainable growth and long-term prosperity.
Health & safety EMF radiation	The impact on health and safety of people in the surrounding communities of KPN's network infrastructure.
Social investments & partnerships	The impact of KPN's social investments and partnerships on digital access and social inclusion .

Step 2: Review impact relevance and maturity

For the second step, nine internal and external stakeholder representatives were consulted for their input on the material topics. In these interviews, qualitative input was collected on the role and responsibility the stakeholder representatives expect from KPN in relation to the topics. Stakeholder representatives were asked to rank their top five topics on which KPN has the most impact on its surroundings (inside-out perspective). Stakeholder representatives were also asked to rank their top five topics that could have the most positive and negative impact on KPN's financial performance (outside-in perspective). This validated list of material topics was used as a basis for a survey for the Board of Management.

From an outside-in perspective, the stakeholder representatives defined the following topics as most material:

1. Network quality
2. Cybersecurity, data & information protection
3. Customer value
4. Sustainable ICT solutions & product innovation
5. GHG emissions

Step 3: Survey for Board of Management

For the third step, KPN's Board of Management was asked to prioritize the material topics by responding to an online survey. In this survey, the Board of Management was asked for its opinion on the most material topics from an inside-out and outside-in perspective. This included impact materiality and financial materiality. The Board was asked to rank the top five topics on which KPN has the most impact on its surroundings (inside-out perspective) and which topics, from an outside-in perspective, have the most positive and negative impact on KPN's financial performance.

From an inside-out perspective, both the stakeholders as well as the Board of Management ranked the same topics as most material:

1. Network quality
2. Cybersecurity, data & information protection
3. Customer value
4. Sustainable ICT solutions & product innovation
5. GHG emissions

● Appendices

The Board of Management ranked five material topics with the highest risk and the highest opportunity for KPN from an outside-in perspective. These results are consolidated and normalized to the list and rating below.

Material topics - risk	Score
1 Cybersecurity, Data & Information protection	5.0
2 Customer value	4.5
3 Network quality	4.2
4 Supplier management and selection	3.2
5 Fair taxes	2.6

Material topic - opportunity	Score
1 Customer value	5.0
2 Network quality	3.3
3 Sustainable ICT solutions & Product innovation	2.6
4 Cybersecurity, Data & Information protection	2.6
5 Working conditions	1.0

Step 4: Conclusion

The results of the inside-out perspective are divided into the following categories:

High material topics: we aim to fulfill a leading role on these topics by developing policies, setting targets, and defining KPI's to monitor and report on our impact.

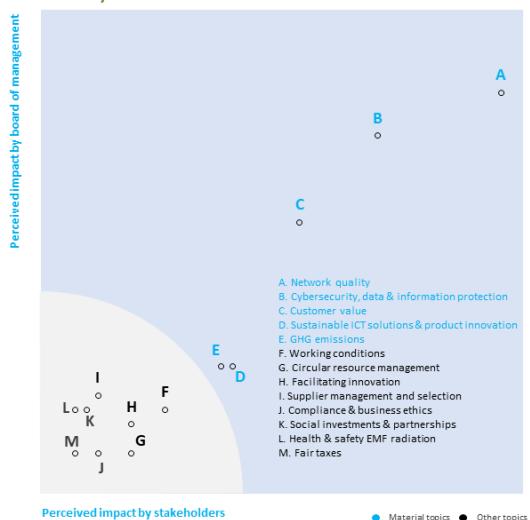
Other topics: we aspire to stay on top of those topics as they are relevant for creating medium and long-term value for KPN. We want to demonstrate our social responsibility in these areas.

To see where GRI topics are translated into KPN topics, please see the cross reference in Appendix 2 Alternative performance measures.

Based on the priority outcomes of the materiality analysis, approved by the Board of Management, we determined which material topics would be addressed in this report. This includes the scope and aspect boundaries of all topics. The definitions per topic can be found in the table disclosed in Step 1.

The inside-out perspective is consolidated for the Board of Management and stakeholder representatives in the following matrix. The final consolidated ranking has been validated in an internal review by the Board of Management.

KPN materiality matrix 2022



● Material topics ● Other topics

● Appendices

Stakeholder dialogue

KPN is in continuous dialogue with a diverse set of stakeholders, with equally diverse interests and motivations. This includes the positive and negative impacted affected stakeholders. These dialogues take place on different levels within our organization and are often part of our daily business. Members of the

Board of Management attend the most important stakeholder dialogues, at which a variety of stakeholders are present. The table below provides insight into all the interactions we had with different stakeholders including our response and actions. With our stakeholders we discuss the positive and negative impacts of our material topics and formulate next steps.

Stakeholder group	What they expect	How we engage (incl. frequency)	Main topics in 2022	Our response
Employees	Employees expect us to provide opportunities to develop in a dynamic workplace. For them, this translates to an attractive, effective and inspiring work environment (physical, technology, learning and development); simplicity in data, organization, technology and processes; transparency in the organization, and from leadership, a recognizable culture and values, and excellent development opportunities. New generations expect generational awareness, dynamic career perspectives, continuous feedback, mentoring and coaching, empowerment, purpose and agility.	To some, the changing conditions in the world and the labor market may feel like a threat. That is a natural reaction and we see it as our responsibility as an employer to both create awareness of the consequences of the fast-changing environment and encourage and enable people to seize the opportunities this offers. In the long run, KPN's HR function will increasingly be using data, digital tools, robotization and AI to create an employee experience that responds to increasing consumerism and will result in alternative employment relations. We engage with our employees at least twice a year through an extensive survey.	<ul style="list-style-type: none"> Safe and COVID-19 proof work environment for all employees Leadership based on our leadership profile – giving purpose, engaging people, delivering performance Maximize internal mobility with continuous support on personal development Focus on future skills and capabilities, rationalization and standardization A future-proof organizational design with room for authenticity, diversity and inclusiveness Implementing a HR information system in the cloud (Oracle, launch Jan 2022) aimed at simplifying and standardizing HR processes and enabling managers and Employees in their day-to-day HR related tasks 	<ul style="list-style-type: none"> Create a safe and digital work environment, with attention to the physical and mental well-being of our employees Continuous investment in and development of our employees with an enlarged digital L&D offer
Government and regulators	The government and regulators expect us to run infrastructure and services considered as very important to the Dutch economy and Dutch society at large and to create coverage of high-speed networks. One of their goals is to create a level playing field and protect the interests of end-users. They therefore expect us to comply with applicable rules and regulations on various topics, including fair competition, safety, consumer protection, privacy etc. They also expect us to be climate responsible and transparent in our communication.	We proactively engage with the government and regulators. We engage in a continuous dialogue to explain our efforts and results. We also work together with (local) governments on the roll-out of our networks, innovation (e.g. IoT) projects, cybersecurity, sustainability, energy generation, and cost savings.	<ul style="list-style-type: none"> Avoiding non-compliance Integrity and transparency Confined concerns around national cybersecurity Network roll-out (both fiber and mobile) in agreement with local governments, and compliance with various regulations 	<ul style="list-style-type: none"> We continued our compliance efforts through clear and practical legal advice, clear operating procedures and related control frameworks, compliance training, culture programs, and clear and safe ways to report potential misconduct We interact closely with ACM with regard to compliance, incidents and potentially different views on interpretation of the law We engage with local governments on the best way to roll out our networks in their territories Access regulation to KPN's fixed network ACM regulations for Wholesale services
Investor community	The investor community – financial markets in general, our shareholders, debt investors and research analysts – expects us to be extensive and transparent. We should be clear and consistent in communicating our financial and operational performance, strategy, objectives, and outlook, and transparent about environmental, social and corporate governance topics, including executive remuneration. Their main interest is our	We organize key corporate events such as the Annual General Meeting of Shareholders and Capital Markets Days, and we meet with (potential) investors, analysts and credit rating agencies during (virtual) roadshows and conferences. We also provide relevant company information through timely press releases and regular publications such as our quarterly results and Integrated Annual Report.	<ul style="list-style-type: none"> Execution of our strategy Accelerate to Grow to create long-term value in the interests of all KPN stakeholders Progress on fiber roll-out The impact of rising inflation and energy prices Wholesale regulation Shareholder returns including share buyback Leverage profile including bond redemptions, bond tender offer and new hybrid issuance 	<ul style="list-style-type: none"> Solid progress has been made in achieving the strategic objectives first formulated in November 2020, in spite of the increased challenges brought about by the economic environment. We met with several (potential) investors, analysts and credit rating agencies during (virtual) roadshows and conferences. We also provided relevant

● Appendices

Stakeholder group	What they expect	How we engage (incl. frequency)	Main topics in 2022	Our response
	commitment to creating value. They want timely and accurate updates and ample opportunity to seek clarification and ask questions.			<p>company information through our quarterly results and Integrated Annual Report. Investors and analysts found comfort in management's guidance</p> <ul style="list-style-type: none"> • The fiber roll-out run rate has maintained a good pace, and has a proven and attractive return profile. Our Retail fiber customer base has surpassed our Copper Base • Group service revenue growth continued to develop favorably, with positive signs in Wholesale, Business and Consumer Mobile. We realized a growing adjusted EBITDA and free cash flow • We paid a final dividend over 2021 and intend to pay a regular dividend per share of € 14.3 cents over 2022. We completed a € 300m share buy back in 2022 as part of our structural return of additional capital to our shareholders • We fully redeemed € 616m senior bond, tendered \$ 454m of \$ 600m hybrid and issued a € 500m perpetual Green Hybrid Bond in 2022 • We improved our offer for access to KPN's open (virtual) unbundled fiber networks for all wholesale providers
Suppliers	<p>Our suppliers expect to maintain a long-term commitment and cooperation with us. Furthermore, they expect simple contracts, fair prices, compliance with the core principles of data protection, and acceptable payment terms.</p> <p>In addition to the last topic: in 2022, KPN has adopted a 30-days payment term for her SME suppliers. This puts KPN ahead of mandatory legislation to adopt a 30-days payment term for all SME suppliers per 1 July 2023.</p>	<p>KPN has a central corporate procurement organization that is responsible for contracting deals with suppliers. We make sure the principles of our suppliers' CSR policies are in line with our own. We are constantly in touch with our suppliers. We increasingly partner with them on sustainable solutions. We are also a member of the JAC, an association of 26 telecom operators that aims to verify, assess and develop CSR implementation across the manufacturing centers of important multinational suppliers.</p>	<ul style="list-style-type: none"> • We adjusted our procurement policy in 2020, introducing a new process for suppliers from non-EU countries, mainly to assess potential geopolitical risks involved. One of the reasons we set up this non-EU suppliers procedure was the increased impact of geopolitical issues on international business in the past few years 	<ul style="list-style-type: none"> • Together with our suppliers we implemented sustainable solutions that resulted in cost reductions, as well as reductions in material use • We aim for all suppliers we do business with to comply with the KPN Supplier Code of Conduct or have their own equivalent code. Our Code of Conduct helps to ensure that all our suppliers are committed to conducting their business in a manner that is ethical, legal, environmentally friendly, respectful of human rights and socially responsible, as well as adhering to JAC standards • KPN has integrated the EcoVadis Scorecard. This is an evaluation of how well a company has integrated

● Appendices

Stakeholder group	What they expect	How we engage (incl. frequency)	Main topics in 2022	Our response
Business customers	<p>Customers expect KPN to help them with the digital transformation within their companies. They want sincere and proactive advice that meets their specific needs.</p> <p>Business customers also expect effortless IT solutions and there is a growing customer demand for continuous accessibility, as well as fast and reliable fixed and mobile connections. When problems do occur, they expect KPN to solve them adequately and demonstrate customer-centric behavior.</p>	<p>We talk to our business customers every day via account managers, service managers, in our XL stores, our contact centers and our Business Partners.</p> <p>We give customer the opportunity for 'Advies op Afstand', an online video solution for contact.</p> <p>We also engage with them through customer panels, quarterly market research and workshops connecting customers' strategies with KPN, as well as social media through our B2B platform, The Digital Dutch.</p> <p>We engage through our Customer Experience Lab in which we test the needs and experience of the customers.</p> <p>We closely monitor our business customers' satisfaction and loyalty through NPS.</p>	<ul style="list-style-type: none"> Digital Dutch Experience Improve customer experience and loyalty Migrations of customers to our target portfolio 	<p>the principles of CSR into their business and management system. The assessment is part of our tender process. The scope criteria are across four themes: environment, labor & human rights (Employee Health & Safety, Working Cond, Soc. Dialogue, Child Labor, Forced Labor & Human Trafficking, Diversity, Discrimination and External Stakeholder Human Rights, ethics & sustainable procurement). If the outcome of the assessment is <35 points, the supplier must draw up an improvement plan in order to mitigate identified risks for the purpose of achieving a score of the least 35 points in a later assessment</p> <ul style="list-style-type: none"> We started a large-scale roll-out of fiber including high-speed internet business parks We continue to inspire our customers with our online Digital Dutch platform. We co-create content with our customers to inspire others with our customers in the podcast Digital Heroes and proactively engage with our customers in other Dutch forums Growth in professional services supported by integrated solutions at KPN's larger customers
Retail customers	<p>Our retail customers expect the certainty of failure-free and secure networks, easy to use products and processes, and good online and offline customer service. They also want their loyalty to be acknowledged and appreciated through sincere and proactive advice about the best possible subscriptions that meet their needs.</p>	<p>We communicate 24/7 with our customers on our front ends (through customer service, our engineers, in our stores and on social media). Both reactive as well as pro-active. We collect and monitor requested and unrequested customer feedback on a daily basis and share these customer voices throughout the company. We also use external panels for our Brand NPS and RepTrak to objectively monitor our reputation.</p>	<ul style="list-style-type: none"> Best network: Always being connected by giving our customers the best WiFi experience, best iTV experience, and best fixed internet and mobile connection A seamless and easy digital experience Improved Customer Journeys Best proposition for households 	<ul style="list-style-type: none"> We continued the roll-out of fiber, for both existing, new and future customers We introduced 5G in our mobile propositions We introduced a new WiFi manager where customers can easily check and improve their WiFi. We improved our Super WiFi offering for existing customers We raised iTV customer satisfaction by new software releases, finalized the new menu migration, improved recording platform and improved content

● Appendices

Stakeholder group	What they expect	How we engage (incl. frequency)	Main topics in 2022	Our response
Society	<p>Society expects us to have a positive influence on Dutch society. They expect us to be socially and environmentally responsible and to be a good corporate citizen. They want products and services that help to solve social and environmental issues. They also expect us to be a frontrunner in sustainability and other societal issues by creating sustainable partnerships. KPN has the potential to lead debates, e.g. on privacy and security.</p>	<p>We are active in working groups initiated by NGOs and participate in or liaise with organizations such as the European Telecommunications Network Operators' Association (ETNO), Joint Alliance for CSR (JAC), Platform for the European Telecom Industry (ETIS), the International Telecom Union (ITU), the Global Compact Foundation and the Dutch Association of Investors for Sustainable Development (VBDO). We organize an annual meeting with stakeholders to discuss our contribution to society and the desired next steps</p>	<p>Topics discussed with our societal partners were:</p> <ul style="list-style-type: none"> • Development of a biodiversity policy • Improving human rights in the value chain • Accelerate diversity and digital inclusion • Professionalization of circularity 	<ul style="list-style-type: none"> • We had a yardstick for nature-inclusive construction developed • We set up a board and performed a deep dive on our processes • We have included special conditions in the collective labor agreement to promote inclusion and diversity • We collaborate on international standards for circularity • We deploy our thought leadership on security to help make the Netherlands safer

How we engage with policymakers

KPN actively engages with policymakers in politics and government, and sponsors activities that help to generate public debate around the consequences of digitalization, as well as develop actions to address them. For KPN, as a predominantly Dutch operation, policy is primarily shaped in Brussels and The Hague. The focus of our engagement is therefore aimed at policy makers in these cities. To increase relevance with policymakers, we our aim to cooperate as much as possible with other like-minded companies. As such, KPN participates in trade organizations active in the Netherlands as well as at a European level, and contributes to these organizations.

These contributions account for the majority of the disclosed amounts. The sums apportioned to Brussels are part of the sums disclosed in the Transparency Register to which KPN has subscribed from the start. The Transparency Register also encompasses an estimation of cost of staff. KPN also participates in global organizations like GSMA, which aims to develop the mobile industry worldwide, and which engages with policymakers in Europe and elsewhere, too.

Finally, KPN contributes to ITU. This is a standardization body and United Nations agency, not a trade organization, and is therefore not included in the sums presented.

KPN does not financially, or in any other way, support political parties or candidates for political positions. KPN does engage with national and regional authorities through knowledge-sharing to facilitate informed regulatory policy measures. KPN contributes to sector organizations representing the interests of KPN in specific fields. Management upholds strict standards on ethical and transparent behavior.

Employees who are politically active must ask for permission if they have paid political functions, e.g. as a member of municipal or regional councils. In the past, KPN's policy has always been to approach policymakers directly. KPN does not use external public affairs agencies to speak on its behalf.

KPN presents the amount of money spent on public affairs in three categories. KPN does not disaggregate these figures further, as we are not at liberty to divulge the contributions to individual organizations.

● Appendices

Type of Trade organization	Geographic scope	Spend in 2022 in EUR	Focus of membership (non-exhaustive)
Trade bodies representing the interests of mobile operators worldwide	Global	38,437	Develop the mobile industry worldwide with a focus on a level playing field and predictability of the law. Create common standards and encourage sustainable innovation
Trade body representing Europe's telecommunications network operators	The European Union	132,508	Create a level playing field within the EU based on an unambiguous and predictable legal situation Focus on the European Electronic Communications Code, the General Data Protection Regulation, ePrivacy, and the Privacy Shield
Trade body representing industry and employers in the Netherlands	The Netherlands and the European Union	340,399	Monitor and influence nationwide issues that are of importance across sectors, e.g. include creating a prosperous investment and fiscal climate, and a digital agenda
Trade association for IT, telecom and internet companies	The Netherlands	32,000	Monitor, influence and increase awareness of (issues in) the digital economy, e.g. on continuity and security and privacy
Trade association in the technology industry	The Netherlands	75,000	Monitor and influence national policies in particular for the manufacturing industries, such as health care, metallurgy, microconductor and digital industry
Trade association for the positioning of the Netherlands defense- and safety-related industry	The Netherlands	59,736	Monitor and influence national policies specifically in the field of national security
Trade body and knowledge center representing commercial users of electricity and water in the Netherlands	The Netherlands and the European Union	23,127	Representing the interests of small, medium and larger organizations that use water and electricity on a professional basis
Trade body representing the interests of the cybersecurity sector	The Netherlands and the European Union	27,500	Aims to increase the digital resilience of the Netherlands and to increase the quality and transparency within the growing cybersecurity sector
Coalition formed to stimulate AI	The Netherlands	15,000	Coalition bringing together organizations to facilitate an organized approach with regard to AI
Platform for information society	The Netherlands	20,000	Neutral platform where government, knowledge institutions, business and civil society organizations collaborate on public-private partnerships and share knowledge about the responsible design of our digitalizing society
Cluster in the security domain	The Netherlands	20,000	Network of businesses, governments and knowledge institutions, that work together on knowledge development and innovation in security
Association for data-driven marketing	The Netherlands	9,150	Association advocating responsible data-driven marketing, unlocking the potential within the regulatory framework
Association for healthcare technology	The Netherlands	2,865	Healthcare association advocating actual care issues to increase the knowledge and quality of the healthcare industry
Trade body representing Europe's largest industrial and financial groups	The European Union	25,000	Senior business advisory board, officially consulted by EU institutions and national governments on sector-specific European economic matters
Trade body representing tax advisers in the Netherlands	The Netherlands	1,000	Association of the university-educated tax advisers in the Netherlands. Submits extensive commentaries on proposed Dutch tax laws

● Appendices

Appendix 4: Non-financial information

The tables below provide an overview of KPN's non-financial information KPI's, with references to the specific chapter in this Integrated Annual Report for qualitative explanations. Also references are made to the strategic pillar, GRI and impact on SDG.

To limit the number of goals and achieve more focus, we mark a number of KPIs as 'discontinued'. However, we will continue to be active in these areas.

Reference	Strategic pillar					GRI reference	Impact/ SDG
Customer value	Grow & strengthen customer footprint					Customer interaction: Own indicator	9. Industry, Infrastructure and Innovation
	Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025
NPS consumer total	21	15	16	11	20	N/a	
NPS business total	5	2	4	-2	4	N/a	

Reference	Strategic pillar					GRI reference	Impact/ SDG
Impact on society	Connected Society					Economic performance Customer interaction: Own indicator	4. Quality Education
	Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025
% eligible chronically ill children provided with a KPN Klasgenoot	100%	100%	100%	100%	100%	100%	100%
# chronically ill children provided with a KPN Klasgenoot	N/a	691	690	847	Discontinued		

Reference	Strategic pillar					GRI reference	Impact/ SDG
Network infrastructure	Leverage & expand superior network					Network quality, reliability & availability: Own indicator	9. Industry, Infrastructure and Innovation 11. Sustainable Cities and Communities
	Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025
FttH households ¹	N/a	47%	41%	34%	>50%	~80% (2026)	
# mobile sites modernized and 5G ready	4,900	5,072	4,000	2,936	Completed		
5G population coverage	N/a	96%	81%	N/a	98%	N/a.	
Service availability internet	99.99%	99.99%	99.99%	99.78%	99.99%	99.99%	
Service availability mobile	99.9%	99.98%	99.99%	99.89%	99.9%	99.9%	
Download speed experience	150 Mbps	146 Mbps	139 Mbps ²	97 Mbps ³	146 Mbps	N/a	

¹ Together with Glaspoort

² Restated number due to improved calculation methodology

³ In 2020 we reported on Average 4G download speed per year-end

● Appendices

Reference	Strategic pillar					GRI reference	Impact/ SDG
Focused innovation and digitalization	Grow & strengthen customer footprint					Customer privacy,data and information protection: own indicator	3. Good health & Well-being 9. Industry, infrastructure and innovation
Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025	
End-to-end standalone 5G mobile core network	N/a	N/a	N/a	N/a	Live	N/a	
Innovation theme: Digital services aggregation	N/a	N/a	N/a	N/a	New consumer cloud infotainment service	N/a	
Innovation theme: Cybersecurity-4ALL	N/a	N/a	N/a	N/a	New internet security and privacy solution for every customer	N/a	
Innovation theme: Mission and business critical	N/a	N/a	N/a	N/a	Multiple connected ambulances	N/a	
# of professionals with secure digital access to healthcare information	113,000	100,019	88,374	69,770	Discontinued		
# of clients and patients using healthcare facilities to live with more autonomy	12,300	10,830	11,767	11,815	Discontinued		

Reference	Strategic pillar					GRI reference	Impact/ SDG
Safeguarded privacy and security	Leverage & expand superior network					Customer privacy,data and information protection: Own indicator	9. Industry, Infrastructure and Innovation 11. Sustainable Cities and Communities
Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025	
% of Dutch people that believe their data is safe with KPN	71%	69%	66%	66%	70%		
% of technical employees who are SecurX certified ¹	N/a	N/a	N/a	N/a	95%	N/a	
% of SME KPN EEN customers that activates safe internet	47.5%	52.1%	41.5%	N/a	62.5%	75%	

1 In TDO (Networks, B2B Solutions & CISO)

Reference	Strategic pillar					GRI reference	Impact/ SDG
Responsible supply chain	Leverage & expand superior network					Supplier selection and security governance: Own indicator	12. Responsible Consumption and Production 17. Partnership for the Goals
Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025	
% realized improvements on corrective action plans	75%	94%	98%	91%	85%	N/a	
% high-risk Tier I, Tier II and Tier III suppliers audited	40%	45%	46%	32%	40%	N/a	

● Appendices

Reference	Strategic pillar					GRI reference	Impact/ SDG
Sustainable employability	Leverage & expand superior network Grow & strengthen customer footprint Simplify & streamline operating model					Supplier selection and security; Own indicator	5. Gender Equality 8. Decent Work and Economic Growth
Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target 2025	
Overall % of women at KPN in the Netherlands	23%	22%	22%	21%	24%	25%	
% Women sub top ¹	N/a	30%	N/a	N/a	33.5%	35%	
% of participants apprenticeship company found a paid job within 3 months in- or outside KPN	N/a	57%	N/a	N/a	60%	N/a	
PSO certification	N/a	N/a	N/a	N/a	Aspirant status	Tier 1	
Sustainable employability: % of employees with a new job < 1 year after leaving KPN	>80%	88%	79%	75%	Discontinued		
Employee survey score for engagement	83%	81%	82%	86%	82%	82%	

1 Direct reports to the Board of Management in management positions

Reference	Strategic pillar					GRI reference	Impact/ SDG
Environmental performance	Leverage & expand superior network					Materials, effluents and waste	12. Responsible Consumption and Production
Critical performance indicator	Target 2022	Result 2022	Result 2021	Result 2020	Target 2023	Target > 2023	
% fossil fuel free cars added to company fleet in reporting year (lease pool + engineers)	80%	95%	90%	46%	95%	98% in 2025	
Energy savings by customers as % of KPN Group	~200%	~170%	306% ¹	401% ¹	Discontinued		
CO ₂ e reduction in the value chain (Scope 3) compared to 2014	N/a ²	37%	30% ³	27% ³	38% in 2023	45% in 2030 net-zero in 2040 (-90% vs 2014 + max 10% compensation)	
Reduction of electricity consumption of KPN Group compared to 2010 (in GWh)	N/a	478	502	573	462 (-40% vs baseline 2010)	< 400 GWh in 2030 (-48% vs baseline 2010)	
Reduction of energy consumption of KPN Group compared to 2010	46%	48%	45%	37%	Discontinued		
Absolute car-fuel savings compared to 2010	80%	81%	80%	74%	Discontinued		
% collected customer premises equipment	90%	90%	86%	86%	92%	95% in 2025	
Climate-neutral operations	100%	100%	100%	100%	Discontinued		
Waste reduction: % reuse and recycling ⁴	84%	86%	85%	81%	85%	85% in 2025	
Circular B2B Services ⁴	N/a	N/a	N/a	N/a	6	9 in 2024 12 in 2025	

1 Results 2021 and 2020 have been restated for CNG fuel

2 Old target was 23% and based on old calculation, prior to restatement; for details see Appendix 11

3 Results 2021 and 2020 have been restated, for details see Appendix 11

4 As part of our ambition to become close to 100% circular in 2025

● Appendices

Appendix 5: TCFD

Taskforce on Climate-related Financial Disclosures

KPN recognizes the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) as an important step in providing transparency on climate strategy. We have

mapped TCFD elements to this report (see sections on environmental performance, responsible supply chain and related appendices). KPN's risk framework is described in the chapter Compliance and risk (p. 67) and Appendix 8: List of top risks (p. 208) contains the list of top risks.

TCFD element	TCFD recommendation	KPN reporting on TCFD guidelines
Governance	<p>Describe the governance of Board of Management related to climate-related risks and opportunities.</p> <p>Describe the role of management on the judgement and governance of climate-related risks and opportunities.</p>	<p>Corporate Governance (p. 60) Compliance and risk (p.67)</p> <p>Corporate Governance (p. 60) Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p>
Strategy	<p>Describe the climate-related risks and opportunities as described on short, midterm and long-term timeframe.</p> <p>Describe the impact of climate-related risks and opportunities on business activity, strategy and financial planning of the organization.</p> <p>Describe the agility of the strategy, taking climate-related scenarios into account, amongst others a scenario to stay within the 2-degrees Celsius limit for global warming.</p>	<p>SWOT (p.7) Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p> <p>Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p> <p>Our performance: Environmental performance and responsible supply chain (p.50) Compliance and risk (p.67) Appendix 4: List of top risks (p.208) We performed scenario analysis on long-term energy pricing taking the impact of CO₂-price regulation into account.</p>
Risk Management	<p>Describe the climate-related risks and opportunities as described on a short, midterm and long-term timeframe.</p> <p>Describe the processes the organization uses to manage climate-related risks and opportunities.</p> <p>Describe how processes for the identification, assessment and management of climate-related risks are integrated into the risk approach of the organization.</p>	<p>Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p> <p>Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p> <p>Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p>
Indicators and objectives	<p>Describe the organizational processes for identification and assessment of climate-related risks.</p> <p>Report on scope 1, 2 and 3 emissions.</p> <p>Report on performance to climate-related objectives.</p>	<p>Compliance and risk (p.67) Appendix 4: List of top risks (p.208)</p> <p>Our performance: Environmental performance and responsible supply chain (p.50)</p> <p>Our performance: Environmental performance and responsible supply chain (p.50)</p>

● Appendices

Appendix 6: NFRD

EU Directive: Disclosure of non-financial information and diversity information

Requirements EU Directive	Subtopic	Chapter / Page reference (starting page)
A brief description of the business model	The business environment	Our purpose and the world around us (p. 6) Strategy and key performances (p. 9)
	Organization and structure	Our valuable assets (p. 15) Strategy and key performances (p. 9)
	Markets where the undertaking operates	Our valuable assets (p. 15) Our purpose and the world around us (p. 6) Strategy and key performances (p. 9)
	Objectives and strategies	Our valuable assets (p. 15) Strategy and key performances (p. 9) Our valuable assets (p. 15) Our purpose and the world around us (p. 6)
	Main trends and factors that may affect the undertaking's future development	Strategy and key performances (p. 9) Our valuable assets (p. 15)
Relevant social and personnel matters (e.g. HR, safety, etc.)	A description of the policies pursued, including due diligence	Our value for stakeholders: Employee value (p. 27)
	The outcome of those policies	Our value for stakeholders: Employee value (p. 27)
	Principle risks in own operations and within value chain	Our value for stakeholders: Employee value (p. 27)
	How risks are managed	Appendix 8: List of top risks (p. 208)
	Non-financial key performance indicators	Appendix 8: List of top risks (p. 208)
Relevant environmental matters (e.g. climate-related impacts)	A description of the policies pursued, including due diligence	Our value for stakeholders: Employee value (p. 27) Our performance: Environmental performance and responsible supply chain (p. 50)
	The outcome of those policies	Our performance: Environmental performance and responsible supply chain (p. 50)
	Principle risks in own operations and within value chain	Our performance: Environmental performance and responsible supply chain (p. 50)
	How risks are managed	Appendix 8: List of top risks (p. 208) Compliance and risk (p. 67)
	Non-financial key performance indicators	Appendix 8: List of top risks (p. 208)
Relevant matters with respect for human rights (e.g. labor protection)	A description of the policies pursued, including due diligence	Our performance: Environmental performance and responsible supply chain (p. 50) Our value for stakeholders: Employee value (p. 27) Procurement and suppliers (p. 55)
	Principle risks in own operations and within value chain	Our value for stakeholders: Employee value (p. 27) Procurement and suppliers (p. 55)
Relevant matters with respect to anti-corruption and bribery	A description of the policies pursued, including due diligence	Appendix 8: List of top risks (p. 208) Maintaining effective risk management (p. 67) Our performance: Environmental performance and responsible supply chain (p. 50)
	The outcome of those policies	Our value for stakeholders: Employee value (p. 27)
	Principle risks in own operations and within value chain	Compliance and risk (p. 67)
	How risks are managed	Our value for stakeholders: Employee value (p. 27)
	Non-financial key performance indicators	Compliance and risk (p. 67)
Insight into diversity (Board of Management and Supervisory Board)	A description of the policies pursued	Our value for stakeholders: Employee value (p. 27)
	Diversity targets	Our value for stakeholders: Employee value (p. 27)
	Description of how the policy is implemented	Supervisory Board report (p. 83)
	Results of the diversity policy	Our value for stakeholders: Employee value (p. 27) Supervisory Board report (p. 83)

● Appendices

Appendix 7: EU Taxonomy

General

In 2019, the European Commission presented the Green Deal of the European Union, setting the course for more sustainable investments to reach a climate-neutral economy by 2050 – an economy with net-zero greenhouse gas (GHG) emissions, with a reduction of 55% already implemented in 2030. An important purpose of the EU Action Plan on Sustainable Finance is to steer cash flows towards sustainable investments. In this context, the EU Taxonomy Regulation became effective mid-2020 (Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020). This EU Taxonomy-Regulation is intended to serve as a standardized and mandatory classification system to determine which economic activities are considered as 'environmentally sustainable'.

The EU published a catalog of sustainable activities in the manner of the EU Taxonomy ('EU Catalog') for two of the six environmental objectives:

- climate change mitigation
- climate change adaptation

At this moment, further Delegated Regulations including the technical criteria for the other four environmental objectives (sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and protection and restoration of biodiversity and ecosystems) are pending publication. By the current Delegated Regulations, it is determined which economic activities can be considered in general. By implementing the first stage of the EU's taxonomy, reporting on eligibility for potentially sustainable activities in 2021 we concluded that the impact of this current framework in relation to the two environmental objectives is very limited given KPN's business model.

As of 2022, it is required to report whether eligible activities can be considered 'environmentally sustainable', i.e. Taxonomy-aligned. This depends whether certain criteria are fulfilled. These technical screening criteria determine the conditions under which an economic activity qualifies as contributing substantially to one of the two environmental objectives and determine whether that economic activity causes no significant harm to any of the other environmental objectives and compliance with minimum safeguards.

Judgments and assumptions made by management regarding the EU Taxonomy

Based on our assessment of compliance to the current EU Taxonomy Regulation, we conclude that various aspects are open to multiple interpretations. In order to comply to the EU Taxonomy disclosure obligations, management has made judgments and assumptions. Regarding the objective climate change mitigation, we conclude that the following economic activities described in the EU Taxonomy and relating to climate change mitigation apply to KPN:

- 6.5 – Transport by motorbikes, passenger cars and light commercial vehicles
- 7.2 – Renovation of existing buildings
- 8.2 – Data driven solutions for GHG emissions reductions

Climate change mitigation

Climate change mitigation means the process of holding the increase in the global average temperature to well below 2°C and pursuing efforts to limit it to 1.5°C above pre-industrial levels, as laid down in the Paris Agreement. Below we describe the nature of our Taxonomy eligible and aligned economic activities.

To determine whether the eligible activities are Taxonomy-aligned, the activities were assessed to the 3 alignment criteria:

1. Substantial contribution (SC) to Climate change mitigation.
2. Does not do significant harm (DNSH) to Climate change adaptation, nor to Transition to a circular economy and/or Pollution prevention and control.
3. Compliance with minimum safeguards.

Transport and buildings

With regard to 'Renovation of existing buildings', we concluded that our Capex amount on renovation of existing buildings including adding new charging stations and solar panels are too limited to report on. Based on our assessment for 'Transport by motorbikes, passenger cars and light commercial vehicles', we concluded that our Capex amount on full electric lease-cars increased to EUR 23m. Compared to previous year this is a material increase. KPN decided to cancel its temporarily stop of investments in lease cars, and continued to further transform its leased car fleet to fossil fuel free cars.

The first criteria of substantial contribution to climate change mitigation was met as electric vehicles have lower emissions than the limit allowed in the technical screening criteria. KPN's car lease contracts include maintenance and repair. After ending the lease contract cars are returned and sold by the lease company on the second hand market, which proves the activity does no significant harm to the objective transition to a circular economy. With regard

● Appendices

to pollution prevention, electric vehicles have lower exhaust of emissions. According to our assessment the tyres do not comply to the EU Regulation 2020/740 and cannot qualify as an aligned economic activity.

Data driven solutions for GHG emissions reductions

EU Taxonomy Capex KPI

Prior year we reported Capex on specific customer premises equipment as eligible. This economic activity is considered an enabling activity and it complies with all the technical screening criteria of economic activity 8.2. It ensures lower lifecycle GHG emissions through lower energy consumption compared to best performing alternative solution or technology. This new customer premises equipment aims for our customers to reduce energy by 35% when using it, compared to using the previous customer premises equipment.

In case of the investments in customer premises equipment, the first criteria of substantial contribution to climate change mitigation was met by referring to the content of their product passports, verified by an independent third party. The customer premises do not significant harm to the other environmental objectives which is evidenced by performing a climate risk and vulnerability assessment. Compliance to minimum safeguards is enforced by suppliers accepting the KPN Supplier Code of Conduct, verifying suppliers operations by performing audits by a third party (JAC) and in case of short comings by corrective actions (see also chapter Procurement and suppliers). Furthermore, KPN complies with the UN Guiding Principles, by integrating these principles in our Code of Conduct and what we require from our suppliers (see also chapter Compliance and risk).

We did not report Capex on fiber roll-out, as this is not covered by economic activity 8.2. However, we do believe that fiber is an important enabler for climate change mitigation, mainly in terms of energy savings compared to copper. In our view, the roll-out of fiber should be added to the taxonomy eligible activities in the future.

Please refer to the accounting policy EU Taxonomy on the next page for a calculation of the EU Taxonomy Turnover, Capex and Opex. The accounting policy includes references to the related line items in the Consolidated Financial Statements, making sure to avoid double counting between the various reporting categories and between the objectives climate change mitigation and adaptation. Risk of double counting between the two objectives does not exist as only climate change mitigation is relevant for KPN's business model. All eligible and aligned investments in customer premises equipment are included in the Consolidated Financial Statements in Note 10 as investments in plant & equipment. Additions related to acquisitions through business combinations and expenses incurred as part of a Capex plan are not applicable.

We did not include our Joint Venture Glaspoort in our disclosure, as KPN does not have control over this entity. We did not report impact separately as Glaspoort's main activities relate to fiber roll-out which is currently not eligible.

With the proceeds of the issuance of the EUR 500m Green Hybrid Bond, KPN will finance or refinance projects with positive environmental impact (see also chapter Our performance: Environmental performance and responsible supply chain). However, the purpose of financing is not specific for identified Taxonomy-aligned activities and therefore does not have an impact on the EU Taxonomy Capex KPI.

EU Taxonomy Turnover KPI

We concluded that the EU Taxonomy Turnover is not material for our business model, as KPN's economic activities are not described in the Delegated Acts on climate change mitigation and climate change adaptation. We investigated our turnover on ICT Solutions helping our customers to reduce GHG emission, for example our network which enables customers to work from home, or any of our IoT solutions. Turnover relevant for the EU Taxonomy from IoT are relatively small, do not influence the reported percentage and are not reported as eligible.

In addition, as electronic communications networks (telecommunication) as such are not included as an activity under the current coverage of the Taxonomy delegated act it is not able to qualify our fiber roll-out activities as environmentally sustainable under the EU Taxonomy Regulation. Industry alignment on treatment of this topic is ongoing.

The total value of the KPN's turnover amounts to EUR 5,324m of which 100% non-eligible activities (2021: EUR 5,270m: 100% non-eligible activities).

EU Taxonomy Opex KPI

We concluded that the EU Taxonomy Opex is not material for our business model given the nature of our activities and therefore we make use of the practical exemption and consider the numerator as being not material. The total value of the EU Taxonomy Opex amounts to EUR 298m.

Conclusion

For the reporting year 2022, ~5% of KPN's EU Taxonomy Capex activities qualifies as eligible relating to certain customer premises equipment and electric lease cars. Only ~3% of our EU Taxonomy Capex activities qualify as aligned, which consists of certain customer premises equipment. We concluded that KPN's EU Taxonomy Turnover is not eligible and Opex is not material under the economic activities currently in scope of the EU Taxonomy regarding climate change mitigation and adaptation. We did not

● Appendices

include a Turnover and Opex table as in our view this would not provide additional insights.

We have concluded that the roll-out of fiber is currently not eligible, however we believe this is an important enabler for climate change mitigation, also providing significant energy savings compared to copper.

Our future EU Taxonomy disclosures are subject to any potential new guidance and the release of criteria for the four remaining environmental objectives.

EU Taxonomy Capex

	Substantial contribution criteria		Does not significant harm						Taxonomy aligned proportion		Taxonomy aligned proportion											
	Absolute Capex (in Proportion Codes EURmillion)	Climate Change Mitigation	Climate change adaptation	Climate change adaptation	Transition to a prevention circular economy		Pollution controls	Minimum safeguards	of Capex 2022	of Capex 2021	Category enabl. activity	Category trans. activity										
					of	Category																
A. Taxonomy eligible activities																						
<i>A1. Environmentally sustainable acitivities (Taxonomy aligned)</i>																						
8.2 Data driven solutions for GHG emissions reductions: -Investments in customer premises	8.2	40	3%	100%	0%	Y	Y	N/a	Y	3%		Y										
<i>A2. Taxonomy eligible but not environmentally sustainable acitivities (not Taxonomy aligned)</i>																						
6.5 Transport by motorbikes, passenger cars and light commercial vehicles -Electric lease cars	6.5	23	2%	100%	0%	Y	Y	No ¹	Y			Y										
Total A1 + A2	63	5%								3%												
B. Taxonomy non-eligible activities																						
Capex of taxonomy non-eligible activity (B)		1,187		95%																		
Total A + B	1,250	100%																				

¹ Not all DNSH criteria could be met, because the tyres of the electric lease cars do not comply with the Regulation (EU) 2020/740

● Appendices

Accounting policy EU Taxonomy

Accounting policy on EU taxonomy Turnover definition

EU Taxonomy Turnover is defined as Revenue as disclosed in Note 4 of the Consolidated Financial Statements.

Accounting policy on EU taxonomy Capex definition

EU Taxonomy Capex definition differs from KPN's Capex definition in Appendix 2. EU Taxonomy Capex consists of the following components: Property, plant and equipment investments and PPE changes in consolidation, in case of acquisitions of business combinations (Note 10 of the Consolidated Financial Statements), Intangible assets

investments and Intangible assets changes in consolidation, in case of acquisitions of business combinations (Note 11 of the Consolidated Financial Statements) and Leasing, Right-of-use assets additions (Note 19 of the Consolidated Financial Statements).

Accounting policy on EU taxonomy Opex definition

EU Taxonomy Opex definition differs from KPN's Opex definition in Appendix 2. EU Taxonomy Opex consists of the following components: research & development costs, building renovation costs, short-term leases, maintenance and repair costs and all other direct costs necessary to service the asset.

● Appendices

Appendix 8: List of top risks

Category	Risk	Countermeasures	Evaluation
Fast-changing market conditions: strong competition	<p>KPN faces strong competition on services and network access from current competitors as well as new market entrants and over-the-top (OTT) players. Competition in Consumer, Business and Wholesale markets can occur based on price, content, increase of investment in customer acquisition or retention costs, subscription options, coverage and service quality. Most of our services are increasingly based on technology standards, limiting the possibilities for differentiation from competitors. Our competitive position could be threatened by actions of competitors, e.g. in the roll-out of fiber networks or in the adoption of pricing strategies. These factors could lead to lower profitability as well as lower market shares.</p> <p>Impacted strategic objective Grow & strengthen customer footprint</p>	<ul style="list-style-type: none"> Implement a superior network in the Netherlands by: <ul style="list-style-type: none"> Accelerating fiber roll-out for Consumer and Business Market (by KPN or its joint venture), increasing availability of high access speeds and improving in-home WiFi coverage Enabling the latest innovative mobile technologies by modernizing the mobile network Moving to an All-IP infrastructure Offer fixed-mobile converged services and competitive price/portfolio combinations, such as KPN Hussel for Consumer Market (CM) and KPN EEN MKB, Smart Integration and Smart Combinations for Business Market (BM) Offer high quality of service to customers to improve NPS Maintain focus on high-value customers in both Consumer and Business Market Launch targeted household approach and optimize KPN Hussel propositions Introduce new innovative products and services to meet changing customer needs, such as SuperWiFi, Cloud storage, Smart Home and Security services Simplify, digitalize and streamline the operating model. This will lead to improved time-to-market, better quality of service and a simplified and agile organization. Additionally, it will lead to a structural lower level of operational costs and will enable swift response to new market developments Strengthen distribution power with business partners, online channels, and shops Partnerships and cooperation with OTT players including third-party services such as gaming, content (CM) and Office, Azure (BM) Rationalize our brand portfolio: focusing on the strong KPN brand by expanding KPN's services with the best elements of the individual brands, to offer customers in all segments a better user experience Improve customer loyalty and customer experience by optimizing and digitalizing customer journeys, use of AI and implementing advanced data analytics programs 	Likelihood: High Impact: High Trend: Increasing Risk Monitoring KPI: <ul style="list-style-type: none"> Market shares, net adds Group service revenues ARPU, ARPA Number of (#) fiber homes passed/activated NPS
Fast-changing market conditions: disruptive technologies or business models	<p>KPN's business model and financial performance could be affected by disruptive technologies or business models, changing customer preferences and entrance of new players (including big tech companies and companies that provide telecom services via satellite). KPN's response to new technologies (such as AI, quantum computing, software-defined networks, alternative network providers, integrated optics, eSIM, terahertz technologies, cloud propositions and metaverse), changing customer behavior, and market developments and its ability to successfully and/or timely introduce new competitive products or services, are essential to KPN's performance and profitability in the long run.</p> <p>The introduction of new products and services such as new propositions may not be successful and/or timely. This could lead to lower profitability as well as lower market shares.</p> <p>Impacted strategic objective Leverage & expand superior networks Grow & strengthen customer footprint Simplify & streamline operating model</p>	<ul style="list-style-type: none"> Implement a superior network in the Netherlands by: <ul style="list-style-type: none"> Accelerating fiber roll-out for Consumer and Business Market (by KPN or its joint venture), increasing availability of high access speeds and improving in-home WiFi coverage Enabling the latest innovative mobile technologies by modernizing the mobile network Moving to an All-IP infrastructure Develop new services, business models and pricing models Continue the exploration of how KPN can adequately and timely respond to changes in the (telecommunications) market and value chain by implementing new business initiatives, in line with KPN's strategy Develop partnerships with OTT players, hyperscalers and network suppliers and monitor these partnerships on profitability Implement an agile organization, new technologies (such as applying open innovation models and standardized technology) and processes to enable swift response to new market developments 5G field labs, Innovation & Partnerships team and proof of concepts (e.g. in software-defined networks and network function virtualization) to test new technologies with customers KPN Ventures: scout, invest in and create cooperations with innovative technology companies to enhance innovation in key areas such as IOT, smart home, cybersecurity, cloud computing, data services, digital healthcare, mobile/video (OTT) services and networking technology (e.g. integrated optics) 	Likelihood: Medium-high Impact: High Trend: Increasing Risk Monitoring KPI: <ul style="list-style-type: none"> Revenues existing business (Mobile, Fixed, TV, etc) and new business

Appendices

Category	Risk	Countermeasures	Evaluation
Operational and quality related incidents	<p>KPN's services, technical infrastructure and IT may be vulnerable to damage, service interruptions, operational issues and loss/theft or manipulation of customer data. These incidents could be caused by failures in the network systems, power supplies, failures and bugs in supporting computer systems, disasters (e.g. fire, flooding), human errors, lack of staff with specific knowledge and skills, supplier failures, pandemics and absenteeism, sabotage, terrorism or legacy systems. During pandemics or other crises, our customers and society rely heavily on our networks and services, making them more sensitive and vulnerable to network disruptions.</p> <p>Continued climate changes in the future could lead to rising river and sea levels, extreme rainfall, flooding or extreme heat; these weather conditions could also disrupt our systems, networks and services.</p> <p>Such incidents could have a negative impact on society, the quality of our services, reputation, profitability and customer satisfaction.</p> <p>Impacted strategic objective Leverage & expand superior networks</p>	<ul style="list-style-type: none"> Implement a superior network, including a resilient design of our networks in the Netherlands by: <ul style="list-style-type: none"> Accelerating fiber roll-out for Consumer and Business Market (by KPN or its joint venture), increasing availability of high access speeds and improving in-home WiFi coverage Enabling the latest innovative mobile technologies by modernization of mobile network Moving to All-IP infrastructure Simplify and streamline operating model: acceleration of simplification, automation and digitalization program for improved quality of service In order to increase our operational performance as a company KPN has established the Operations Stability Program. This KPN-wide program is focused at increasing the availability of our (critical) services to our customers. It consists of several streams, not only addressing business continuity management, architecture and recovery times, but also cultural and behavioral aspects Monitor performance of technical infrastructure (e.g. traffic growth and utilization rate), IT (predictive analysis of required maintenance), and network components, connections and platforms, and also improve (insight in) network redundancy Continuous improvement of operational processes and systems (including problem management) and improvement of technical workforce in capacity, knowledge and skills Business continuity management of all assets and technical buildings needed for continuous delivery and evaluation of their dependencies, continuity of internal processes and data-lakes in internal or public cloud, online and offline back-up and recovery plans in case of emergencies or ransomware attacks and adequate external communication (e.g. escalation procedures, corporate crisis management teams and public affairs) Insurance agreements to cover liability claims of customers or third parties in case of service interruptions Continued implementation of the regularly updated KPN Security Policy which is aligned with acknowledged standards (NIST, ISO, OWASP, CIS benchmarks, etc) Perform scenario analyses for climate change: assess the effects of climate change (such as flooding or heating risks) on our critical infrastructure and implement additional protective measures where necessary KPN's activities to acquire annual recertification for ISO, including e.g. ISO14001 BeAlert team for Ukraine-Russia situation to closely monitor possible security threats 	<p>Likelihood: Medium Impact: High Trend: Stable</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> NPS NL Network availability # Major incidents Damage per incident per service Number of (#) fiber homes passed
Strategic transformation	<p>KPN may not make sufficient progress in realizing the necessary simplification and transformation actions, for example by phasing out legacy networks and systems, by simplifying our processes and services, by digitalizing our business, by organizational transformation (more lean and flat), by post-merger integration of our acquisitions or by strengthening our capabilities and culture. These actions must lead to necessary cost reductions, increased agility (e.g. less complexity and improved time-to-market of new innovative services), increased digitalized operations and higher quality of services (e.g. higher NPS and first-time right).</p> <p>Global pandemics or other crises could delay the implementation of restructurings and consequently could lead to lower cost savings in the medium term. If KPN cannot realize simplification and transformation in time, we may not be able to adequately respond to actions of our competitors</p>	<ul style="list-style-type: none"> Define a long-term vision for KPN's future (e.g. Strategy27) Lean operating model: acceleration of simplification and digitalization program (digital customer interaction, digital employee mindset, simple IT architecture and technology and phaseout of copper network). This will lead to improved time-to-market, better quality of service and a simplified and agile organization. Additionally, it will lead to a structural lower level of operational costs Rationalization of networks, IT, products and services, data centers and technical infrastructure Increased use of standard (cloud) building blocks in networks Focused innovation and govern innovations and simplification at executive level; strong planning of new innovation, simplification and organizational improvement projects 	<p>Likelihood: Medium Impact: Medium Trend: Increasing Risk</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> Opex reduction Progress on strategic transformation programs # Fiber homes passed

Appendices

Category	Risk	Countermeasures	Evaluation
Sustainability	<p>and could lead to lower cost savings, less room for new Capex and lower profitability in future.</p> <p>Impacted strategic objective Simplify & streamline operating model</p> <p>KPN may fail to meet stakeholder expectations relating to energy, emissions, sustainability and biodiversity. This could lead to loss of customers, loss of profitability in the future and reputational damage.</p> <p>KPN respects and protects human rights in all our business dealings. KPN may not have full insight in all business practices of our contracted partners and their relationships and may not be able to effectuate sufficient control. As a consequence, KPN may not be able to comply with human rights regulations and standards in all parts of its supply chain.</p> <p>KPN promotes social and digital inclusion. However, KPN may not be able to fulfill our purpose to connect everyone in The Netherlands; some customer groups may not be able to understand, use or afford our services or may not be able to contact KPN in a way they prefer.</p> <p>Impacted strategic objective Generic, recognized as ESG frontrunner</p>	<ul style="list-style-type: none"> Embed sustainability in execution of our corporate strategy Maintain KPN's climate-neutral performance Continued efforts on reducing energy usage and emissions for our own operations and in the supply chain (net zero in 2040) Implement circular operations and services to reduce our footprint, e.g. by collecting customer equipment for reuse and recycling, increasing the longevity of our products and use less virgin materials, avoid single use plastics and lower risk on critical raw materials Continue KPN's CO₂ reduction objectives as approved by the Science Based Targets Initiative (SBTI), which means they are in line with the climate goals of the Paris Agreement Measure energy savings by ICT solutions for our customers Strong focus on ESG in the value chain and a proactive approach towards topics with increased societal interest, such as human rights External communication program about KPN's activities on corporate social responsibility, sustainability and on energy management and the benefits for KPN's stakeholders such as customers and Dutch society Together with Groene Netten and Naturalis Biodiversity Center KPN is working on the mapping of opportunities to enhance biodiversity Promote human rights in the supply chain, e.g. via: <ul style="list-style-type: none"> KPN's human rights board chaired by a member of BoM, that monitors adherence of human rights regulations by KPN and its suppliers Supplier Code of Conduct, containing requirements relating to a.o. human rights and labor conditions; the Code is based on the UN Guiding Principles on businesses and human rights Perform due diligence of suppliers via EcoVadis (only Tier 1 suppliers) Onsite audits by JAC Human Rights Workstream at (high risk) suppliers Promote social and digital inclusion, e.g. via KPN Klagenoot, KPN Mooiste Contact Fonds and adherence to Web Content Accessibility Guidelines (WCAG) standards in developing our websites and services Management remuneration linked to sustainability 	<p>Likelihood: Low Impact: Low Trend: Increasing Risk</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> Energy consumption Carbon emissions Circularity (long-term goal: close to 100% as of 2025) Percentage of waste Ranking in MSCI, Sustainalytics and CDP or similar ratings
Information and cybersecurity threats	<p>Unauthorized access, modification and disclosure within KPN's technical infrastructure, IT and (customer and company) data. This risk could be caused by:</p> <ul style="list-style-type: none"> Malicious actions and attacks by actors such as nation-states, organized criminals, hacktivists, terrorists and insiders Vulnerabilities in KPN's systems, applications or platforms Technological developments such as quantum computing <p>The risk could lead to:</p> <ul style="list-style-type: none"> Loss or leakage of confidential information (KPN and customer data) Disruption of our telecom services to customers Reputation damage, high remedial costs, fines, loss of customers, declining results of operations Increased regulation and supervision thereof <p>Impacted strategic objective Generic; Leverage & expand superior networks</p>	<ul style="list-style-type: none"> Implementation of baseline security measures according to the KPN Security Policy (KSP), which are aligned with acknowledged standards (NIST, ISO, OWASP, CIS benchmarks, etc) Continuous improvement of security according to the KPN security lifecycle Role-based security awareness of KPN employees, partners and suppliers Enhanced risk intelligence and increased network visibility Continuous development of security capabilities (people, processes and technology) Execution of strategic security actions, e.g. permanent vulnerability management, identity and access management, security monitoring, operational security testing (pentesting) and security incident & event management Increase cybersecurity exercises to improve response readiness Knowledge and threat intelligence sharing with the NCSC, leading Dutch and EU telecom operators, vendors and the global CERT community Proactive stakeholder and reputation management including dialogue with regulators, national security agencies and decision makers Insurance agreements to cover liability claims of customers or third parties in case of cyber attacks 	<p>Likelihood: High Impact: High Trend: Increasing Risk</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> Number and severity of security alerts and incidents Number and severity of expired KSP exceptions Number and severity of network & asset vulnerabilities

● Appendices

Category	Risk	Countermeasures	Evaluation
Regulatory compliance	<p>KPN may face issues in relation to non-compliance with regulation, including –but not limited to– telecommunications, privacy and consumer protection regulations. These incidents can lead to fines or have a negative impact on KPN's reputation and relationship with regulators and/or supervisors.</p> <p>Impacted strategic objective Generic</p>	<ul style="list-style-type: none"> Dedicated program to implement Ministerial Decree regulations in a structured and effective manner Establishment of security compliance monitoring and reporting function in CISO department Centralized organization for compliance and risk management Compliance training sessions for staff and management, for example e-learning about the company codes for all KPN staff in the Netherlands Proactive internal compliance investigations Surveys and culture improvement programs Improving and maintaining a robust internal control framework dedicated to complying with specific regulations Ringfencing wholesale within KPN's organization Quarterly compliance report to Board of Management 	Likelihood: Medium Impact: Medium Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> Fines # compliance incidents reported to regulator Results of annual compliance survey
Tax	<p>Tax risks:</p> <ul style="list-style-type: none"> Adverse decisions or interpretations of tax authorities on pending disputes or changes in tax treaties, tax laws, OECD guidelines, EU Directives and other rules could have a material adverse effect on KPN's net result and cash flow. Notwithstanding the fact that KPN is committed to being fully compliant with the relevant laws and regulations and adheres to its tax strategy and policy (see ir.kpn.com), some of KPN's tax positions could be perceived negatively by the political environment and society, which could lead to reputational damage. With regard to WBSO and Innovation Box benefits: KPN has a volatile number of eligible hours for WBSO, mainly due to Divestments, Mergers and Acquisitions (D&A) and lower qualifying Capex budgets for innovation. If business results do not meet expectations, KPN's net DTA may have to be impaired. The introduction of new mobile consumer propositions in August 2016 caused a change in the VAT calculation methodology which resulted in a lower remittance of VAT from August 2016 until December 2018. KPN's view is not shared by the Dutch tax authorities. KPN concluded, based on the applicable regulations, that a positive outcome of this dispute is not highly probable and therefore recorded a contract liability for the VAT amount. Additionally, an amount for the corresponding interest amount has been accounted for. A potential final negative outcome of the current court procedure will lead to a negative cash flow in future years. The German Tax Authorities finalized their tax audit of the remaining/former E-Plus companies. The overall net impact is zero. As all relevant tax years have been audited, KPN will now proceed to dissolve the respective legal entities. <p>Impacted strategic objective Generic</p>	<ul style="list-style-type: none"> Act in line with our company-wide tax strategy and tax principles Continuous monitoring of internal control framework for key tax risk areas Maintain good working relationships with tax authorities and provide them with required information if and when relevant Tax planning, while remaining compliant with all relevant laws, regulations and international standards All KPN's tax positions need to pass the 'mirror test' If (taxable) profits do not develop according to plan, timely action/tax planning is needed to avoid impairment (loss) of DTA Defending KPN's position through court procedures 	Likelihood: Medium-high Impact: High Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> Effectiveness of tax control framework

● Appendices

Category	Risk	Countermeasures	Evaluation
Electro-magnetic fields	<p>Although there is no evidence that electromagnetic fields of (mobile) equipment or base stations pose health risks, a change in this view could expose us to significant claims and litigations, a severe drop in our mobile business or high compliance costs of new laws and regulations (e.g. major changes in our mobile networks).</p> <p>Public perception of electromagnetic fields or actions of anti-5G movements (including litigations) could delay the roll-out of mobile networks or disrupt our (critical) communications equipment, which could lead to service interruptions and higher costs of operations.</p>	<ul style="list-style-type: none"> Monitor national and international scientific research on the effects of electromagnetic fields on health, provide data to longitudinal and other research Strict adherence to all national and international standards for electromagnetic fields Increase pressure on government (EU -via GSMA- and national) to steer the EMF debate Provide adequate and scientific information to the public regarding the effects of electromagnetic fields Start of escalation procedures and continuous consultation with police, local authorities, industry representatives (Monet) and owners of mobile sites for preventive and protective measures (e.g. surveillance) to protect mobile sites 	Likelihood: Very low Impact: High Trend: Stable Monitoring KPI: Research developments
	<p>Impacted strategic objective Leverage & expand superior networks</p>		
Impact of new regulations	<p>New regulatory decisions in the EU and the Netherlands could affect KPN's future operations and profitability, such as decisions regarding continuity, end-user protection, level playing field in access regulation and between telco and internet players, (national) security, and spectrum auctions.</p> <p>In 2022, the ACM took a decision to declare binding commitments from KPN to improve the conditions to access KPN's fiber networks. The commitments are binding until 2030. This reduces uncertainty for KPN and other market players for the years to come. ACM will monitor whether this and other markets are competitive. Most markets were already liberalized in the past. The binding decision may be challenged in court. However, based on ACM's communications, KPN sees only a small chance that traditional ex ante regulation will be implemented in the near future. There is still a discussion about 'symmetric access' obligations (without the need for significant market power findings) which have been introduced in the European Electronic Communications Code (that was implemented by 21 December 2020 in Dutch law). This is about wholesale access to non-replicable cable infrastructure to (local) customer premises. It has not yet been defined at national level and the ACM may – upon request of operators – define a broader application of the provision than the rather local scope of the obligation that is currently foreseen by KPN.</p>	<ul style="list-style-type: none"> Proactive stakeholder and reputation management including dialogue with regulators (e.g. with ACM based on KPN's open access wholesale policy), national security agencies and decision makers Proactive open access wholesale offer to ACM and market Periodic report to Board of Management on status of new laws and regulations, and where necessary scenario analyses on the possible impact for KPN Legal proceedings where deemed necessary Dedicated program to implement new regulations in a structured and effective manner 	Likelihood: Medium Impact: Medium-high Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> Regulatory developments (NL, EU)
	<p>Impacted strategic objective Generic</p>		
Uncertainty about KPN's future business model to recover high investments	The telecom and ICT market is characterized by strong competition, accelerating changes in customer behavior, accelerating technological developments, increasing price pressure and shrinking markets. Due to these developments, high investments in our assets such as technical infrastructure (access and core networks), IT infrastructure, licenses and goodwill may not be recovered as KPN's business models to generate revenue and cash flow streams could change in future. Also, changes in assumptions such as profitability, network penetration, long-term growth and discount rate could negatively affect the value	<ul style="list-style-type: none"> Strong Capex planning, supported by data-driven decision-making process and based on ROCE and NPV analyses Cross- and upselling of new services such as IoT, cloud, security and content to add value to our connectivity and access portfolio (BM) and deep-selling of telecom services in households (CM) Customer lifetime value (CLV) steering by monitoring end-to-end profitability of services and business lines Long-term vision on our networks, to optimize and align future investments (both timing, size and technology) with our commercial portfolio, market developments and financial performance KPN's Accelerate to Grow strategy; continuous monitoring of realization strategic business plans and performance, e.g. utilization and return on investments 	Likelihood: Medium Impact: Medium-high Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> ROCE Capex as % of revenues Network utilization CLV Group service revenues

● Appendices

Category	Risk	Countermeasures	Evaluation
	<p>Impacted strategic objective Leverage & expand superior networks Grow & strengthen customer footprint</p> <p>of cash-generating units. These factors could lead to impairments of tangible assets, such as mobile and fixed networks, and of intangible assets, such as licenses and goodwill.</p>	<ul style="list-style-type: none"> • Develop strategic partnerships and investigate options for network sharing • Implement a solid investment policy • Monitor profitability of the cash-generating units and network penetration 	
Delay of roll-out new networks	<p>To meet future customer needs and to stay ahead of our competitors, KPN must continuously invest in its infrastructure to upgrade, modernize and simplify its networks and supporting systems.</p> <p>The modernization of our networks (e.g. fiber roll-out) could be delayed, for example due to higher costs, lack of construction capacity (e.g. caused by lack of skilled personnel), complexities in the roll-out of fiber in higher buildings in cities, negotiations with municipalities, pandemics or other crises, or initiatives of (new) competitors. A delay in the roll-out could subsequently impede our network rationalization initiatives, for example the phase out of our copper network.</p> <p>In areas where KPN has not yet rolled-out a fiber network, other providers could roll out first, which could complicate the realization of our objective to connect 80% of The Netherlands in 2026. Additionally, it could increase the risk of 'fiber overbuild', which could impact our penetration rates and profitability in the longer run. Also, if KPN cannot generate sufficient cash flows in the future (e.g. due to lower number of activation of new customers on our networks or strong competition) or if KPN's capital position declines (e.g. deteriorating net debt/EBITDA ratio), we are not able to realize and finance the required investments. This could subsequently lead to a higher churn of customers, declining market shares and to lower revenues and profitability in future.</p> <p>Impacted strategic objective Leverage & expand superior networks Grow & strengthen customer footprint</p>	<ul style="list-style-type: none"> • Close long-term contracts with suppliers and contractors to safeguard construction capacity for the near term, including a flexpool of tactical partners • Apply new innovative techniques and procedures for fast roll-out of fiber networks • Develop strategic partnerships (e.g. Glaspoort) and investigate options for network sharing • Continuous monitoring of realization of strategic business plans and performance, e.g. growth of EBITDA and FCF, network utilization, and return on investments • Strong Capex planning, supported by data-driven decision making process and based on NPV analyses • Perform RoCE (return on capital employed) analyses on current and future investments 	Likelihood: Medium-high Impact: High Trend: Increasing Risk Monitoring KPI: <ul style="list-style-type: none"> • Net cash flow from operating activities, FCF margin • Progress in fiber roll-out and mobile network modernization • Capex as % of revenues • RoCE
Spectrum auctions	<p>Participation in spectrum auction in the Netherlands in Q3 2023 or later (3.5 GHz): in acquiring the required frequency blocks KPN may have to pay a high price for – or may not be able to acquire – the required spectrum.</p> <p>The 3.5 GHz auction has been further delayed due to court rulings with regard to the protection of Immarsat satellite services and due to a lobby from local license holders. We believe that the last official auction date in Q2 2023 (June) is no longer feasible; Q3 2023 (September) is a more likely earliest auction date. A long delay could lead to lower service revenues and increasing network costs in the short and medium term.</p> <p>Impacted strategic objective Leverage & expand superior networks</p>	<ul style="list-style-type: none"> • Thorough preparation by experienced KPN team and external experts; extensive simulation of auctions • Investigate alternative combinations of spectrum and advanced techniques to meet customer demands • Prudent financial policies to secure adequate funding • Proactive stakeholder management and dialogue with regulators and decision-makers, to minimize delays and ensure that the 3.5 GHz spectrum can be used for 5G in the whole of the Netherlands as quickly as possible 	Likelihood: Medium Impact: High Trend: Stable Monitoring KPI: KPN spectrum position relative to competitors, €/megahertz (MHz)/pop, also benchmarked against foreign auctions

Appendices

Category	Risk	Countermeasures	Evaluation
New business initiatives	<p>KPN may not be able to sufficiently grow and monetize new business initiatives and opportunities in the near future, which may jeopardize KPN's profitability.</p> <p>Impacted strategic objective Grow & strengthen customer footprint</p>	<ul style="list-style-type: none"> Focused innovation initiatives such as IoT and 5G, new business as well as strategic partnerships and cooperation with OTT players to ensure KPN meets the changing customer needs and adapts to a dynamic market 5G field labs, KPN innovation playground and proof of concepts (e.g. in software-defined networks and network function virtualization) to test new technologies with customers Innovation & Partnerships team to incorporate innovation/growth themes in KPN's strategy Focus innovation on six innovation and growth themes (digital services aggregation, cybersecurityforall, converged hybrid working, secure data exchanges, mission & business critical and network as a platform). The Innovation & Partnerships team will work on the execution of these themes together with the business and technology departments. The KPN startup community, Ventures and M&A scope will also be predominantly focusing on these six themes going forward KPN startup community to co-operate with startups and scout new innovative technologies & solutions and selective acquisitions thereof KPN Ventures to form partnerships with innovative companies Allocate Capex budgets for innovative new business Well guided migration of customers from legacy to new innovative portfolio Accelerate digitalization of processes and customer services to foster swift development and roll-out of new innovations 	Likelihood: Medium-high Impact: Medium Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> Revenues new business Take up 5G services Market sizes (IoT, etc) Incubator budget
Financing KPN	<p>KPN requires solid access to (debt) capital markets to finance its operations and refinance its outstanding debt. The pressure on KPN's financial framework may increase in the event of higher net debt levels and/or lower profitability. In that case, KPN might not be able to maintain its current credit ratings, which could negatively affect pricing and availability of financing resources.</p> <p>Impacted strategic objective Provide attractive shareholder returns</p>	<p>KPN ensures solid access to debt capital markets by:</p> <ul style="list-style-type: none"> Commitment to an investment-grade credit profile Maintaining a strong liquidity position and prefunding debt redemptions Monitoring and forecasting of metrics used by rating agencies Maintaining discipline in allocating capital to investment opportunities and shareholder remuneration 	Likelihood: Low Impact: Medium Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> Credit ratings Net debt/EBITDA ratio Liquidity forecast Rating metrics (used in credit rating) Dividend pay out ratio, total shareholder remuneration Interest cover ratio
Volatile financial markets	<p>Uncertainty or changes in financial markets could negatively affect pricing and availability of KPN's funding sources.</p> <p>Impacted strategic objective Provide attractive shareholder returns</p>	<ul style="list-style-type: none"> Cash flow forecasting to ensure sufficient liquidity headroom in both normal and stressed market circumstances Maintaining a varied maturity profile, limiting the amount of debt maturing in any one calendar year Financing upcoming debt maturities well ahead of their maturity Maintaining sufficient liquidity reserves in the form of cash and/or committed credit facilities Managing the mix of floating and fixed interest rates Diversification in funding sources 	Likelihood: Medium Impact: Medium Trend: Increasing Risk Monitoring KPI: <ul style="list-style-type: none"> Liquidity forecast Redemption profile Fixed/floating interest rate mix Interest cover ratio
Reliance on suppliers and their products and services, third-party risks, international supply chain issues	<p>KPN relies heavily on products and services of external suppliers. This reliance relates to adequate telecommunications equipment, software and IT services, and contractors' ability to build and roll out telecommunications networks, as well as suppliers' ability to deliver technical support. This reliance could potentially lead to unbalanced supply-demand relationships and could lead to an inability to obtain the products and services at a competitive price and quality.</p> <p>Suppliers could be unable to deliver the required products and services to KPN due to:</p>	<ul style="list-style-type: none"> Establishing a strong and centralized demand and contract management organization that defines, enforces and monitors compliance of suppliers with terms of contracts and preparation of re-transition plans as fall-back scenario Continuously monitor the availability and timely delivery of critical products and services with key suppliers and update business continuity plans accordingly. Proactively discuss with suppliers any risk mitigating measures to timely safeguard KPN's supply chain Simplification of the supplier landscape in line with KPN's strategy and cost focus Evaluation of outsourced activities on effectiveness and efficiency and (where applicable) preparation of a re-transition plan for insourcing 	Likelihood: High Impact: Medium-high Trend: Increasing Risk Monitoring KPI: <ul style="list-style-type: none"> Spend development: % spend at top 20 suppliers JAC audit results

● Appendices

Category	Risk	Countermeasures	Evaluation
	<p>• Scarcity in chips, parts, equipment or lack of skilled personnel (high attrition) and raw materials</p> <p>• Disruptions in international logistics and transportation chains</p> <p>• Sanctions that are imposed by governments on specific countries (e.g. Russia) or specific suppliers (e.g. as a result of breaches of legislations)</p> <p>• Containment measures for pandemics and other crises</p> <p>This could lead to disruption of our processes and lower quality of our services to customers.</p> <p>The scarcity, in combination with increasing energy prices, already led to higher prices and could also lead to further increasing prices in future.</p> <p>Furthermore, we identify the risk of an inappropriate level of back-to-back contracting with regards to customer requirements on e.g. price and services in supplier agreements.</p> <p>Suppliers could breach relevant legislation such as data protection, security, privacy, IPR, human rights and/or environmental laws, which could negatively impact KPN's reputation.</p> <p>Impacted strategic objective Leverage & expand superior networks Note: Suppliers have a significant role in the realization of KPN's strategic objectives, including recognition as ESG frontrunner</p>	<ul style="list-style-type: none"> Include the possibility to terminate contracts based on non-performance and, in that case, migration of the activities to other suppliers Include a right-to-audit clause in supplier contracts and the possibility to conduct regular audits Monitor compliance of suppliers with the KPN Security Policy Align customer contract requirements with supplier contract requirements (this alignment is part of the governance rules for outsourcing), in line with requirements and policies of General Counsel Office Share the KPN Supplier Code of Conduct with all suppliers and ask that all medium and high-risk suppliers confirm compliance with this code For high-risk suppliers, perform audit procedures to evaluate suppliers' compliance with international standards for human rights and environmental laws. Monitoring of timely follow-up on main audit findings Promote transparent pricing and way of doing business Secure long-term commitments with contractors and key suppliers, e.g. for fiber roll-out Prepare fall-back scenarios (e.g. dual sourcing contracts from different geographical regions) when suppliers are not able to deliver their products and services due to effects of pandemics, natural disasters or geopolitical circumstances 	
Employment diversity and talent	<p>KPN may not be able to attract and retain qualified and diverse staff members, as the war for talent increases rapidly. This could lead to insufficient competency and capacity in KPN's workforce, but also to higher workload, rising sick leave and increasing labor costs. Also, employees or new candidates may have negative perceptions about KPN's employer identity.</p> <p>If KPN does not meet the diversity goals and 'social return' requirements, this could impact KPN's future profitability (e.g. lower margins in business market for public sector), customer satisfaction and reputation.</p> <p>Attrition could lead to higher work pressure and/or key personnel leaving the company and thus loss of knowledge and continuity and influencing KPN's demographics.</p> <p>Impacted strategic objective Generic Recognized as ESG frontrunner</p>	<ul style="list-style-type: none"> Improve skilled and talented workforce by: <ul style="list-style-type: none"> Innovative and inspiring talent management programs to attract and maintain qualified staff (both from the Netherlands and abroad) Discover new talent and make KPN more attractive for talented employees across the organization Launch of a new employer identity and accompanying labor market strategy to attract external staff with the right capabilities Promote technical education initiatives at high schools and universities to attract new and diverse workforce Targeted development programs to attract hires on specific areas such as security and cloud Clear communication to (key) staff about KPN's strategy and value their opinions Sustainable employability and mobility: support employees in acquiring different skills, enabling them to find a new role inside or outside KPN Maintain or improve employee engagement and attractiveness as employer Continued implementation of KPN's policy to improve diversity in KPN's workforce Implementation of a strategic plan on inclusion and social return Implement strategic workforce management for KPN wide operations Develop a total reward strategy and aiming for a competitive salary and benefits package Increase recruitment efforts (expansion of recruitment team) and campaigns externally Increase focus on internal development and skill building Investigate sourcing strategies to attract and develop new talents 	Likelihood: Medium-high Impact: Medium Trend: Stable Monitoring KPI: <ul style="list-style-type: none"> Employee engagement % women within KPN from several perspectives Ranking KPN in 'attractive employer' benchmarks

● Appendices

Category	Risk	Countermeasures	Evaluation
Adverse macro-economic conditions	<p>The economic climate could deteriorate in the near term, for example due to the impact of inflation and rising prices in assets, raw materials and energy, increasing interest rates, geopolitical tensions (e.g. war in Ukraine and US-China tensions), pandemics, continued political uncertainties in Europe, increasing protectionism, climate change (e.g. resulting in extreme weather conditions and rising sea levels) and other crises. This could lead to declining spending of customers in both the Consumer and Business market and higher bad debt, and will consequently lead to lower future revenue growth, profitability and cash flows.</p> <p>Impacted strategic objective Grow & strengthen customer footprint</p>	<ul style="list-style-type: none"> Close monitoring of and swift response to new market developments and trends, for example by drafting contingency plans such as plans for cost-cutting initiatives and restructurings Simplify & streamline operating model: acceleration of simplification and digitalization program. This will lead to improved time-to-market, better quality of service and a simplified and agile organization. Additionally, this will also lead to a structurally lower level of operational costs Seizing new opportunities by innovation and introduction of new services, to compensate for declining telecom and IT businesses Closely monitor payment terms, increase of bad debt and bankruptcies within customer base Closely monitor customer trading down 	Likelihood: Medium-high Impact: Medium Trend: Increasing Risk Monitoring KPI <ul style="list-style-type: none"> Order intake, sales Organic revenue growth Bad debt, deferred customer payments OpeX levels
Pandemics	<p>Global epidemics or pandemics such as COVID-19 and the accompanying containment measures could have several adverse effects on our business in the coming years:</p> <ul style="list-style-type: none"> Lower business revenues, for example caused by lower roaming revenues and cancellations or postponement of sales contracts in business market (e.g. IT projects). Increasing interruptions in the continuity and quality of our services, for example caused by sick leave of key personnel or disruptions in the international supply chain leading to shortage of network equipment or devices. Lower operational cash flows due to increasing bad debt in Consumer, Wholesale or Business market (especially when the Dutch government reduces its COVID-19 support packages). <p>Overall, the risk could lead to lower profitability of our operations and declining customer satisfaction.</p> <p>Impacted strategic objective Grow & strengthen customer footprint Leverage & expand superior networks</p>	<ul style="list-style-type: none"> Implement a superior network including a resilient design of our networks in the Netherlands, to offer our customers reliable and robust telecom services Hire trained staff that are committed to delivering a high quality of customer services amid the challenging conditions of a pandemic Offer excellent remote customer services e.g. via video chats or helpdesks Accelerate the digitalization program for improved digital customer journeys and quality of service Continuously assess our revenue risk profile and focus on services that are relevant for customers during a pandemic, such as broadband, security and videoconferencing services Implement protective and preventive measures for engineers and shop personnel; implement strong network facilities for office staff to work from home Corporate Pandemic team that co-ordinates, in close cooperation with Board of Management, the necessary actions in response to national virus developments and new regulations Continue the execution of cost-saving programs, to offset declining revenues. Revisit roaming contracts and improve working capital management Prepare fall-back scenarios and dual sourcing contracts (from different geographical regions) when suppliers are not able to deliver their products and services due to effects of pandemics or containment measures 	Likelihood: Medium Impact: Low-medium Trend: Stable Monitoring KPI <ul style="list-style-type: none"> Order intake, sales Group service revenue growth Bad debt, deferred customer payments
High-risk vendors: Geopolitical developments for suppliers, which could trigger security, business continuity and reputational risks	<p>Geopolitical volatility, driven by rising international tensions, protectionism and security concerns, may impact our ability to do (sourcing) business in any part of the world. These concerns could lead to bans and other sanctions on suppliers of hardware and software from countries with offensive cybersecurity activities. Such sanctions could significantly impact the supply chain and products of those suppliers and consequently could also harm KPN's availability, innovation roadmap, and use of network equipment. Additionally, public opinion of these vendors and the use of their services could lead to reputational damage and loss of consumer or business customers.</p> <p>The Dutch government or other regulating bodies may impose additional security requirements or ultimately ban a vendor in order to mitigate or prevent possible security issues that some vendors (or the originating countries) could bring for Dutch society. If we can no longer use equipment from those vendors in (parts of) our networks, it could lead to higher and unexpected investment</p>	<ul style="list-style-type: none"> Conduct frequent threat analyses and closely monitor latest global and political developments in general and specifically US and EU actions regarding suppliers from countries with offensive cybersecurity activities Perform scenario analyses during network and solution design to assess potential implications of geopolitical developments for suppliers and impact thereof on associated risks Prepare fall-back scenarios and policies if KPN can no longer acquire or use hardware and software from specific suppliers and avoid reliance on single vendors or countries for critical or vital services Implement new governmental regulations by defining KPN's critical assets and implementing technical and process security measures in order to sustain trusted service delivery Ensure good relations and exchange with relevant national security agencies and political decision-makers Maintain strong PR and communication with customers and other stakeholders regarding the use of equipment from specific suppliers and KPN's high security standards Maintain structural risk management and governance processes for high-risk vendors in the sourcing and tender processes to be able to respond to global and political developments for vendors and their country of origin 	Likelihood: High Impact: High Trend: Stable Monitoring KPI: N/a

● Appendices

Category	Risk	Countermeasures	Evaluation
	<p>and maintenance costs in future. Next to that, compliance with security regulations could lead -also for existing suppliers- to higher costs for KPN.</p> <p>Impacted strategic objective Leverage & expand superior networks</p>	<ul style="list-style-type: none"> Include the possibility to terminate contracts due to geopolitical developments and governmental decisions In the longer term, consider using open source and standardized network equipment and interfaces to limit reliance on specific suppliers or proprietary hardware and software Maintain the KPN Security Policy and monitor continuous compliance with security requirements 	<p>Likelihood: High Impact: Medium-high Trend: Stable Risk</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> Consumer Price Indices Opex and Capex levels EBITDA and FCF Interest rates
Inflation	<p>KPN could be faced with increasing inflation and cost levels in the near future. The rising inflation is caused by high energy prices, scarcity of equipment/raw materials (refer to the risk 'Reliance on suppliers and their products and services') and scarcity in labor capacity, but also by other factors such as monetary policies of central banks (monetary easing, and current and future interest rate hikes), changing foreign exchange rates, higher lease expenses, global economic recovery, climate change, geopolitical tensions and international conflicts. Additionally, KPN and our suppliers could be faced with increasing wages and salaries in the near future. Also, if we raise our prices as a result of inflation, customers may no longer be able to afford KPN's services.</p> <p>With regards to supplier contracts, it is likely that the inflation will exceed the indexation thresholds. KPN may not be able to (1) fully offset resulting cost increases, and (2) to pass on (a part of) the higher costs to our customers. Consequently, the higher costs could have a material adverse effect on KPN's Opex and Capex levels, results of operations, cash flows and financial condition.</p> <p>Impacted strategic objective Generic</p>	<ul style="list-style-type: none"> Close long-term contracts with suppliers with fixed price agreements Close hedge and other forward contracts for energy and other materials where possible Increase breadth of supplier base, renegotiate terms and conditions with existing suppliers Increase -where possible- our tariffs and subscription rates, e.g. in line with Consumer Price Indices Limit the increase of interest costs by managing the mix of floating and fixed interest rates (the majority of our debt has fixed rates) and by maintaining a well spread debt redemption profile Implement cost saving and efficiency programs to limit cost increases where possible 	<p>Likelihood: High Impact: Medium-high Trend: Stable Risk</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> Consumer Price Indices Opex and Capex levels EBITDA and FCF Interest rates
Energy availability	<p>Energy supply in the Netherlands could not be sufficiently available in the future to meet KPN's energy needs; additionally, energy prices could further rise to levels that energy sources are no longer affordable. The shortages or high prices could be caused by international conflicts that could hamper the supply of oil, gas or other energy sources, shortages in national or European backup systems and severe weather conditions. Furthermore, the transition to sustainable energy sources could lead to shortages due to increasing demand for electricity or network congestions. Energy shortages could lead to service interruptions or lower service quality in future, and subsequently to lower customer satisfaction and results of operations.</p> <p>Impacted strategic objective Generic</p>	<ul style="list-style-type: none"> Close hedge and other forward contracts for energy where possible Use alternative energy sources, e.g. via solar panels on technical buildings and wind farms on sea Reduce energy to the max: <ul style="list-style-type: none"> Migrate customers from copper network to energy efficient fiber network Optimize mobile network as much as possible, e.g. by adopting traffic-based power consumption Rationalize data centers and optimize virtualization Optimize energy use in metro core locations (e.g. reduce cooling systems) Reduce number of office and technical buildings where possible Diminish dependence on gas in technical buildings 	<p>Likelihood: Low Impact: High Trend: Increasing Risk</p> <p>Monitoring KPI:</p> <ul style="list-style-type: none"> Energy prices Geopolitical developments and conflicts Energy reduction

● Appendices

Appendix 9: Social figures

KPN is a company based in the Netherlands and this is our only country of operation. Therefore the numbers in this Appendix refer to this region. An employee is an individual who is in an employment relationship with KPN according to national law or practice. According to the Dutch and European law (AVG and GDPR), we are not allowed to register ethic nor racial background, nor are we allowed to register nationality. For the determination of the Social Figures we measure the headcount and FTEs for the end of our reporting period. Only the internships are measured throughout the whole year due to the fact that an internship last shorter than a year in most cases.

Table 1: Total number of employees (in FTE and number)

	2022		2021		2020	
	FTE	Number	FTE	Number	FTE	Number
Overall	9,452	9,975	9,699	10,285	10,102	10,691

Table 2: Gender proportion among employees (in FTE and number, both as % of total)

	2022		2021		2020	
	FTE	Number	FTE	Number	FTE	Number
Male	79.5	77.9	80.0	78.2	80.3	78.6
Female	20.5	22.1	20.0	21.8	19.7	21.4

Table 3: Employee contract type (in % of total number of employees)

	2022		2021		2020	
	FTE	Number	FTE	Number	FTE	Number
Permanent				97.1	97.5	96.6
Temporary				2.9	2.5	3.4
Part-time				27.5	28.4	27.2
Full-time				72.5	71.6	72.8

Table 4: Composition of employees per age category (in % of total number of employees)

	2022		2021		2020	
	FTE	Number	FTE	Number	FTE	Number
< 30 years				7.4	7.1	7.7
30 - 50 years				49.6	51.2	51.7
> 50 years				43.0	41.7	40.6

Table 5: Absentee rate (per 100 FTE)

	2022		2021		2020	
	FTE	Number	FTE	Number	FTE	Number
Absentee rate				5.7	4.6	4.2

● Appendices

Table 6: Remuneration difference and gender proportion in % between men and women per management level¹

	2022			2021		
	Difference	Male	Female	Difference	Male	Female
Overall workforce	2.2	78	22	1.7	78	22
PLA	2.2	73	27	-1.3	75	25
Sub Top	0.5	71	29	-8.5	77	23
Scale 12 and higher	3.0	82	18	5.9	82	18

1 Direct reports to the Board of Management in management positions

Table 7: Employees covered by a collective labor agreement (in % of total number of employees)

	2022	2021	2020
Workforce represented in a formal joint management-worker health and safety committee	99.0	98.9	98.9
Collective labor agreement ¹	93.1	93.2	92.3

1 Employees who are not covered by CLA are employees under a personal labour agreement

Table 8: Employee training (in average hours and euro per FTE)

	2022	2021	2020
Hours/FTE	37.2	54.8	67.7
Euro/FTE	1,552	1,499	1,507

Table 9: Employee turnover (in % of total number of employees)

	2022	2021	2020
Intake	7.5	11	2.0
Exit	10.7	11.4	11.6

Table 10: Accident and fatality rate

	2022	2021	2020
Accidents (% of total employee number)	0.45	0.38	0.43
Fatality rate (accidents per 100 FTE)	0	0	0

Table 11: Other type employees (number of employees)

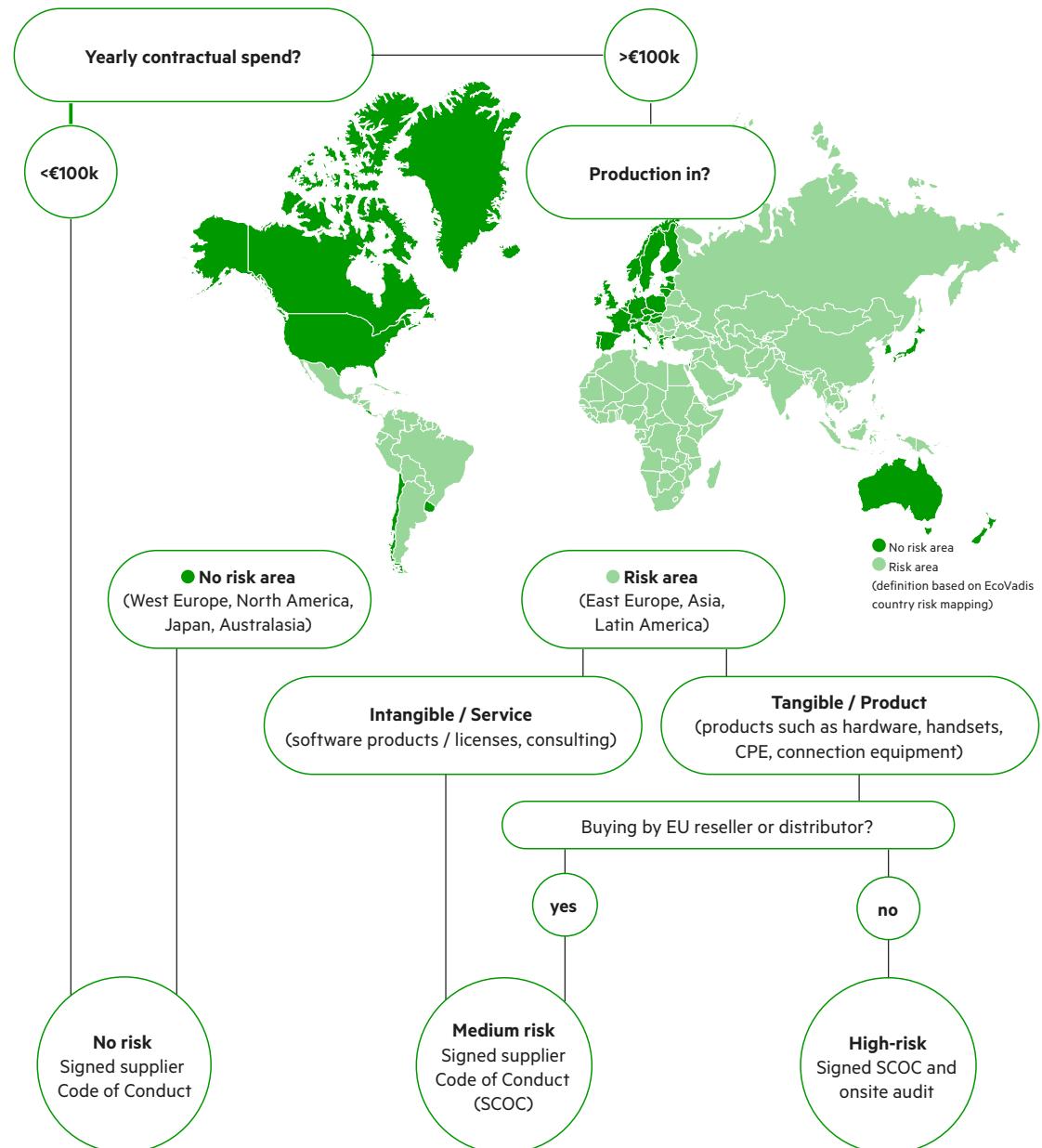
	2022
Workers who are not employees and whose work is controlled by KPN ¹	3,735
Internships	111
Workers with non guaranteed hours	0

1 External personnel from employment agencies

● Appendices

Appendix 10: Supply chain

Risk level decision maker



● Appendices

Assessing our suppliers

KPN works together with suppliers in order to purchase their products and services. We critically review these suppliers in terms of their environmental impact and the working conditions of their staff.

Our sourcing process (new, extension or renewal of products or services) therefore includes a qualification process. This entails classifying the supplier based on the potential social and environmental risks that its operations, products and services represent.

We assess these risks based on three parameters (see decision tree on the previous page):

- Geographical areas
- Spend
- Potential environmental impact of a supplier's operations, products or services

For the definition of the risk of countries of production we use the EcoVadis country risk mapping.

In total we have 4,837 Tier I suppliers, and 1,327 contracted Tier I suppliers. In 2022, we identified 29 high-risk suppliers based on the definition above.

JAC audits

High risk Tier I, Tier II, Tier III and Tier IV suppliers to KPN are audited by the JAC.

Between 2010 and 2022, together with other JAC members, 652 audits were carried out in production plants (Tier I, II, III and IV) in Asia, North America, Latin America, Eastern and Western Europe and Oceania, covering a total of about 1.5 million workers. During 2022, audits were conducted in Brazil, Cambodia, China, India, Italy, Mexico, Nigeria, Poland, Russia, South Africa, Sweden, Taiwan, United States and Vietnam.

The table below shows the total numbers of CSR issues recorded during on-site audits conducted on behalf of JAC in 2022.

CSR issues	Raised	Closed	Pending
Child Labour & Juvenile workers	9	3	6
Forced Labour	14	5	9
Health and Safety	226	112	114
Freedom of Association	7	2	5
Discrimination	6	1	5
Disciplinary Practices	3	3	-
Working Hours	66	33	33
Wages And Compensation	50	26	24
Environment	98	38	60
Business Ethics	53	15	38
Total	532	238	294

● Appendices

Appendix 11: Environmental figures

Note

As outlined in the Combined Independent Auditor's Report and assurance report (page 176), this Appendix is part of the assurance scope of EY's assurance procedures over KPN's 2022 sustainability information.

Scope and calculation methodologies

Scope and calculation of reported emissions

The report includes reporting on CO₂e emissions in the chapter Our performance: Environmental performance and responsible supply chain (p. 50) and this Appendix. Reporting is done in accordance with the guidance and standards of the GHG Protocol and the ISO 14064-1 standard. KPN uses the operational control approach when reporting CO₂ emissions. Carbon dioxide (CO₂) is the most relevant GHG for KPN. Where available, CH₄ and N₂O are taken into consideration in the GHG emissions information. KPN applies the CO₂e emission factors from co2emissiefactoren.nl as published in the year of reporting. The term 'CO₂e emissions' is used to refer to the GHG emissions reported on. These are stated in CO₂ equivalents.

Scope 1 – Direct emissions

- Fuel consumption of the lease vehicle fleet (employees' passenger vehicles and commercial vehicles)
- Heating of buildings (gas)
- Consumption of coolants for air conditioning and/or cooling
- Fuel consumption of emergency power generators

Scope 2 – Indirect emissions

- Electricity consumption of the fixed and mobile networks, data centers, offices and shops
- District heating
- District cooling

The accuracy of the electricity consumption data is a key factor in the reliability of the CO₂e emissions calculations. In the data-collection process, a number of factors affect the accuracy of the collected data. In general, data originating from direct measurements and recordings or invoices, including measurements from third parties, are the most accurate.

The net Scope 2 emissions are market-based and calculated based on the well-to-wheel (WTW) CO₂e emissions factors for renewable electricity. For renewables (wind, biomass, solar), the WTW values are all zero. The CO₂e emissions of the well-to-tank (WTT) phase are accounted for in our Scope 3 emissions (category 3 – fuel and energy-related activities). Both the location-based and market-based Scope 2 emissions can

be found in Our performance: Environmental performance and responsible supply chain (p. 50).

Electricity providers estimate the consumption for part of our network operations - as monthly meter readings are not always conducted - so there is some uncertainty around the accuracy and completeness of our energy consumption. To improve the accuracy, transparency and reliability of our energy data, we are migrating to remote readable meters, reviewing administrative processes and updating profiles with our electricity providers.

Scope 2 emissions restated

In 2021, the Scope 2 emissions have been calculated using the 2022 emission factors. This has been recalculated using the 2021 emission factors. The impact of the restatement for 2021 amounts to 25kTon.

Scope 3 – Other indirect emissions:

- Emissions in the upstream value chain (during the production phase of products, services and equipment at suppliers)
- Emissions in the downstream value chain (during the use phase, including recycling and disposal of the products, services and equipment)

The results are presented in Our performance: Environmental performance and responsible supply chain (p. 50). We have used two main methodologies to calculate Scope 3 emissions: the spend-based method, which takes procurement data and calculates the emissions within an environmentally extended input output (EEIO) model to assess the emissions, and the process-based method, which uses quantity-based data to evaluate the emissions associated with specific activities, e.g. kWh of energy usage or quantity of materials purchased to manufacture goods. In both cases, we used actual data covering January to December.

CO₂e emissions of CAT5 waste could not be calculated with the spend-based approach. Spend on waste services is integrated with spend of service partners. Hence, the CO₂e emissions are not disclosed separately, but included in CAT1 and CAT2.

Scope 3 emissions restated

Each year, all parameters used in the Scope 3 calculations are checked whether new values are available or not. In 2022, we learned that the previously reported Scope 3 emissions needed to be restated, both due to an error as well as refinements of data used in the calculation method. The error relates to an incorrect calculation of inflation adjustments in the spend-based approach, which had to be corrected. The refinement consisted a.o. of using active TV set-top boxes instead of sold set-top boxes,

● Appendices

taking into account Wifi amplifier sales, Solcon modems, fiber customer equipment (ONT) and full year financial figures instead of extrapolating the last month. Accordingly, we recalculated 2019-2021 and baseyear 2014 to make the figures comparable. We determined that the differences with previously reported Scope 3 emissions are considered significant enough to make restatements. For example, the Scope 3 emissions over 2021

are 17% lower than the emissions previously reported. We have restated all three previous years, including the baseline. Please refer to table 7 for the Scope 3 emissions and the effect of the restatement.

The following table describes the calculation of emission methods, coverage and assurance.

Scope CO ₂ e	Standard	Scope	Coverage	Approach	Reported	Assurance	Sources and additional information
Scope 1	GHG Protocol Scope 1 Guidance	Netherlands	98% of all KPN business units and subsidiaries (Opex/FTE)	Operational control approach	Gross and Net Scope 1 emissions	Reasonable	co2emissiefactoren.nl January 2022 Gold standard and REDD+ forest compensation projects
Scope 2	GHG Protocol Scope 2 Guidance	Netherlands	98% of all KPN business units and subsidiaries (Opex/FTE)	Operational control approach	Market- and Location-based Scope 2 emissions	Reasonable	co2emissiefactoren.nl January 2022 100% renewable electricity (windfarms)
Scope 3 Cat: 1, 2, 5, 9	GHG Protocol Scope 3 Guidance	Netherlands	98% of all KPN business units and subsidiaries (Opex/FTE)	Spend-based (Environmentally Extended Input Output data (EEIO) approach)	Scope 3 emissions	Limited	UK DEFRA 2011 (Indirect emissions from the supply chain) and CBS Statline The EEIO-factors are corrected for inflation.
Scope 3 Cat: 3, 6, 7, 11, 13	GHG Protocol Scope 3 Guidance	Netherlands	98% of all KPN business units and subsidiaries (Opex/FTE)	Process- and activity-based	Scope 3 emissions	Limited	co2emissiefactoren.nl January 2022 Emissions Cat 11 and 13 of used electricity by customers with location based scope 2 factor (grid mix)
Scope 3 Cat: 4, 8, 10, 12, 14, 15	GHG Protocol Scope 3 Guidance	Netherlands	98% of all KPN business units and subsidiaries (Opex/FTE)	Not applicable for KPN	Not applicable	Not applicable	Not applicable

Energy consumption and carbon emissions avoided through customers using our IT solutions

The calculation of avoided energy consumption, CO₂e emissions and cost reduction for customers is based on models per service.

The results are presented in Our performance: Environmental performance and responsible supply chain (p. 50) and in Table 9 in this Appendix.

Avoided energy consumption	Kind of avoidance (most impact)	KPN measurement	Source external information
Teleworking (enabled by KPN connectivity)	Avoided travel	Market share of broadband subscribers	Publicly available statistics and reports from Statistics Netherlands (CBS), Kennisinstituut voor Mobiliteitsbeleid (KIM), ECN, Netbeheer Nederland, Milieu Centraal, RVO, Telecompaper and other sources
KPN hosting	Electricity savings	Volume-hosting services	Statistics Netherlands (CBS)
iTV cloud solution	Energy and raw materials savings	Number of customers, energy consumption KPN Cloud for iTV	Stichting KijkOnderzoek

We used most data covering full year, and data covering January to November in the calculation extrapolated for the full year. The extrapolation was required due to unavailability of full year public and internal data. Examples are average gas prices for consumers, and electricity usage of external datacenters. All parameters are annually checked by KPN for updates. In case of changes or new services are introduced in calculation methods, we involve external consultants. In the teleworking calculation for 2022, we made a more accurate calculation of the car fleet in the Netherlands by including plug-in hybrid, hybrid and electric cars. This is based on share of electric vehicles by RVO. In addition,

we removed dematerialization, audioconferencing and video conferencing in the calculation. These factors were outdated and the services were terminated.

For the parameters saved on office space and the extra electricity and gas consumption at home when working at home (rebound effect), the values used in the teleworking savings calculation are based on averages. We use the average between the lowest and highest reported value in reports and research. Cost savings are based on the average fuel, electricity and gas prices published by Statistics Netherlands (CBS) and Milieu Centraal.

● Appendices

Scope and calculations for KPI % reuse and recycling

The KPI % reuse and recycling covers the outflow of KPN materials and waste destined to be reused, recycled, incinerated or landfilled. This means the scope includes, but is not limited to:

- Regular waste streams from KPN offices and operations
- Obsolete (end-of-use) equipment and inventory coming from KPN operations, offices and shops
- Obsolete (end-of-use) customer-premises equipment and mobile phones that are collected via KPN return programs and processed by KPN or on KPN's behalf

The scope therefore does not include obsolete (end-of-use) customer-premises equipment, mobile phones and related packaging that are not collected via KPN return programs. In this case, the customer is responsible for disposing of this in accordance with the law, regulations and local waste-collection procedures.

The outflow of materials and waste is reported in table 10. The following disposal methods are reported with reference to GRI-306-2: reuse (i), recycling (ii, iii), incineration (iv, v) and landfill (vii). The other disposal methods, i.e. deep well injection (vi), on-site storage (viii) and other (ix), do not apply. The waste disposal method is mostly determined by selected service partners and their waste-disposal contractor, which are challenged on methods and performance. As part of our circular ambitions, we promote reuse over recycling and incineration with energy recovery over landfill to minimize ecological impacts. Service partners report the waste volumes (tons) on a monthly or quarterly basis. These volumes are allocated to the four types of disposal method based on processing rates (%) from direct information or public information. The KPI % reuse and recycling is then calculated by dividing the tons reuse and recycling by the total volume.

Scope and calculations for Circular Transition Indicator

The scope of the KPN Circularity Indicator for 2022 for consumer market is as follows:

- Residential: KPN owned customer premise equipment for TV (set-top boxes, remote controls, Digitenne) and Internet (modems, routers, media converters)
- Mobile: SIM-cards
- Packaging: KPN specific packaging added to the consumer market products by KPN (logistics partners).

KPN's Circular Transition Indicator is based on the methodology of the Circular Transition Indicator (CTI) framework of the World Business Council for Sustainable Development (WBCSD). The calculations include the inflow, and outflow indicators under the "close the loop" indicator set, and the recovery type indicator under the "optimize the loop" indicator set of the CTI framework. The outflow indicator of the CTI framework is adapted by only using the actual recovery rate to determine the outflow circularity and the aggregated circularity performance. The potential recovery is used for internal reference and used in calculating the aggregate circularity performance.

This metric currently covers approximately 42% of the spend on new products of the consumer market segment in 2022, excluding mobile handsets and one-off promotional products.

Collected equipment

The return rate for modems, Digitenne tuners and TV set-top boxes is based on the total number of returns (numerator) and the total number send and delivered to customers minus the delta installed base of internet and tv (denominator) in the reporting year.

● Appendices

Environmental figures

Coverage of all figures according to materiality assessment (98% of operational cost).

Table 1: Energy consumption (in PJ)

	Target 2030 compared to base year	Target 2023 compared to base year	2022	2021 ¹	2020 ¹	2019 ¹	2010 (base year)
The Netherlands	-	-	2036	2,156	2,444	2,741	3,662
KPN non-NL Entities	-	-	-	-	-	-	0,217
KPN Group	1,746	1,978	2,036	2,156	2,444	2,741	3,879
Energy directly consumed	-	-	0,207	0,199	0,246	0,386	-
Energy indirectly consumed	-	-	1,829	1,958	2,199	2,355	-
KPN Group			2,036	2,156	2,444	2,741	3,879
% Reduction compared to base year	-55%	-49%	-48%	-44%	-37%	-29%	

1 1 2019-2021 figures have been restated as a result of expanding our fuel fleet with compressed natural gas (CNG) and electric charging

Table 2: Electricity consumption (in GWh)

	Target 2030 Compared to base year	Target 2023 Compared to base year	2022	2021	2020	2019	2010
Network			456	480	548	580	697
Offices & Shops			22	22	24	37	72
KPN Group	400	462	478	502	573	617	769
% Reduction compared to base year	-48%	-40%	-38%	-35%	-26%	-20%	

Table 3: Fuel consumption, lease vehicle fleet

	Unit	Target as from 2025	Target 2023 compared to base year	2022	2021	2020	2019	2010 base year
Petrol, diesel and LPG	1,000 liter			3,110	3,389	4,311	8,457	16,597
% Reduction compared to base year		-98%	-96%	-81%	-80%	-74%	-49%	
CNG	kg			392	312	198	136	0
Electric	MWh			3,847	2,399	1,891	1,756	0

Table 4: Other Energy consumption

	Unit	2022	2021	2020	2019
Natural gas	1,000 m ³	2,089	2,361	2,746	2,580
Heating purchased	GJ	24,466	28,068	23,531	27,618
Cooling purchased	GJ	84,041	97,711	97,191	92,891
Diesel for emergency power generators	1,000 liter	91	107	140	116

● Appendices

Table 5: CO₂e emissions own operations Scope 1 and 2 (in kTon)¹

	Target 2023-2050	2022	2021	2020	2019	2010 base year
Scope 1 KPN NL	0	0	0	0	0	58.8
Scope 2 KPN NL	0	0	0	0	0	35.9
KPN non-NL entities	0	0	0	0	0	25.0
KPN Group	0	0	0	0	0	119.7

1 The reported emissions in the table are net scope 1 and scope 2 market based. In the table in section CO₂e emission and energy management (p. 52) both net and gross scope 1 emissions are reported as well as the location and market based scope 2 emissions

Table 6: Energy efficiency and Carbon intensity indicators target

	target 2023	2022	2021	2020	2019	2010
Ton CO ₂ per Gb/s KPN Netherlands (2010=100)	0	0	0	0	0	100
GWh per Gb/s Network Netherlands (2010 =100)	30	32	34	39	54	100

Table 7: CO₂e emissions Scope 3 (in kTon) KPN the Netherlands

	Target 2040 compared to base year	Target 2030 compared to base year	Target 2023 compared to base year	2022	2021 ¹	2020 ¹	2019 ¹	2014 base year ¹
CAT1 Purchased goods and services				295.2	316.1	318.7	340.8	432.8
CAT2 Capital goods				97.7	120.1	137.5	142.5	210.7
CAT3 Fuel and energy related activities				3.2	3.0	3.6	6.7	95.3
CAT4 Upstream transportation and distribution				-	-	-	-	-
CAT5 Waste generated in operations				-	-	-0.0	0.1	0.2
CAT6 Business travel				0.9	0.6	0.9	3.2	3.2
CAT7 Employee commuting				0.8	1.0	2.9	16.5	17.7
CAT8 Leased assets				-	-	-	-	-
CAT9 Downstream transportation and distribution				12.2	14.8	16.6	18.6	21.3
CAT10 Processing of sold products				-	-	-	-	-
CAT11 Use of sold products				23.7	23.0	21.8	13.7	4.1
CAT12 End-of-life				-	-	-	-	-
CAT13 Downstream leased assets				160.2	179.7	180.7	158.7	156.1
CAT14 Franchises				-	-	-	-	-
CAT15 Investments				-	-	-	-	-
Total CO₂e emissions	0.0	517.7	583.6	593.9	658.2	682.6	700.8	941.3
Total upstream CO₂e emissions				397.8	440.7	463.6	509.8	759.9
Total downstream CO₂e emissions				196.1	217.5	219.1	191.0	181.4
% Reduction compared to base year	net-zero	-45%	-38%	-37%	-30%	-27%	-26%	
Impact of restatement compared to previously reported					-17%	-17%	-18%	-8%

1 Figures 2014 base year and 2019-2021 have been restated, see Appendix 11, page 222

● Appendices

Table 8: Other environmental impacts KPN Group

	Unit	Target 2023	2022	2021	2020	2019
Materials usage						
Cable length	1,000 km		~679	~660	~618	~587
Paper consumption	Tons		186	233	201	268
% FSC or PEFC	%		100%	100%	100%	100%
Coolants (e.g. R407C and R417A)	kg		518	538	661	657
Water consumption						
Offices and shops	1,000 m ³		39.6	38.7	49.2	52.4
Operations	1,000 m ³		57.3	33.6	34.7	31.7
KPN Group	1,000 m³	90	96.9	72.3	83.9	84.1

Table 9: Estimated avoided energy consumption and CO₂e emissions by usage of KPN

	Target 2023	Target 2022	2022	2021	2020	2019
Estimated avoided energy consumption (in PJ)						
Teleworking (enabled by KPN connectivity) ¹			3.432	6.345	9.494	3.065
Dematerialisation ²			0.000	0.202	0.170	0.169
KPN Audioconferencing ³			0.000	0.009	0.077	0.109
KPN Videoconferencing ³			0.000	0.001	0.027	0.050
KPN Hosting services			0.009	0.014	0.020	0.032
KPN iTV Cloud solution			0.015	0.016	0.014	0.012
Total estimated avoided energy consumption			3.455	6.588	9.802	3.437
Total energy consumption KPN ⁴			2.036	2.156	2.444	2.741
% Avoided energy consumption compared to energy consumption KPN	Discontinued	-200%	170%	306%	401%	125%
Estimated avoided CO₂e-emissions (in kTon)						
Teleworking (enabled by KPN connectivity) ¹			307.3	499.9	728.0	259.7
Dematerialisation ²			0.0	13.5	11.9	12.4
KPN Audioconferencing ³			0.0	0.6	5.3	8.3
KPN Videoconferencing ³			0.0	0.1	1.8	3.7
KPN Hosting services			1.1	1.7	2.6	4.3
KPN iTV Cloud solution			2.3	2.4	2.4	2.1
Total estimated avoided carbon emissions			310.7	518.2	751.9	290.5
Avoided Particulate matter emissions (PM₁₀) in tons						
Total avoided PM10 emissions ¹			964	2,007	2,161	795

1 Impact of Teleworking declined mainly due to decrease in % of Teleworkers, and decrease in share of commuting with the car. Also, we improved the model by calculating the car fleet in the Netherlands more accurate. We included share and emission factors of plug-in hybrid, hybrid and electric cars. This resulted in a smaller impact of teleworking and will continue to be smaller in the future, on account of electrification of cars.

2 The impact of KPN on dematerialisation has been evaluated and deemed outdated. Examples were decrease in usage of newspapers, CD's, and DVDs. The remaining impact of KPN on dematerialisation is minimal, and therefore the amount for 2022 has been set at 0.

3 KPN's audioconferencing and video conferencing services are terminated, due to substitutions. Examples are Microsoft Teams, Zoom, and Skype.

4 2019-2021 figures have been restated as a result of expanding our fuel fleet with compressed natural gas (CNG) and electric charging

● Appendices

Table 10: Circular information on reuse, recycling and disposal

Total outflow		Target 2023	Target 2022	Result 2022	Result 2021 ¹	Result 2020	Result 2019
Total volume non-hazardous materials & waste	ton			10,134	9,276	7,803	6,863
Reuse	ton			1,000	1,011	1,018	561
Recycling	ton			7,728	6,855	5,263	4,780
Incineration	ton			1,240	1,260	1,397	1,366
Landfill	ton			166	150	125	156
Total volume hazardous materials & waste	ton			759	569	367	190
Reuse	ton			5	10	1	-
Recycling	ton			663	468	295	148
Incineration	ton			67	72	62	39
Landfill	ton			25	19	9	3
Total volume	ton			10,893	9,845	8,170	7,053
% Reuse	%			9%	10%	12%	8%
% Recycling	%			77%	75%	69%	70%
% Reuse and Recycling	%	85%	84%	86%	85%	81%	78%
% Incineration	%			12%	13%	17%	20%
% Landfill	%			2%	2%	2%	2%
Collected equipment							
Modems and TV settop boxes	%			90%	90%	86%	86%
Mobile phones	%			4%	4%	4%	5%

1 Restated values due to incomplete data received in 2021 from new partners.

● Appendices

Appendix 12: Tax overview for continuing operations per country

Tax overview for continuing operations per country

Tax overview for
continuing
operations per
country¹

In € million or FTE	Total unrelated income ²	Total related income	Profit before tax excl. Associates and joint ventures	Corporate income tax expense	ETR	Corporate income tax cash flow	Corporate income tax receivable/ payable CY	Other tax cash flow mainly VAT & payroll	Property plant and equipment ³	Employees end of year (FTE)	ECTR
NL	2022	5,360	475	993	-227	22.8%	-85	-0	-1,071	5,568	9,452 6.5%
(Regular operating activities)	2021	6,112	533	1,635	-344	21.0%	-273	-17	-1,011	5,463	9,699 179%
DE	2022	-	-	-0	-	0.0%	-	-	-	-	- 0.0%
(Regular operating activities)	2021	0	-	-0	-	0.0%	-	-	-	-	- 0.0%
IRL	2022	-0	8	1	-0	16.8%	1	1	-	-	- 13.1%
(Main activity: insurance)	2021	-0	7	-0	0	24.6%	-0	1	-	-	- 0.0%
UK ⁴	2022	-	-	-4	-	0.0%	-	-	-	-	- 0.0%
(Main activity: pension)	2021	-	-	-3	0	9.0%	-	-	-	-	- 0.0%
USA ⁴	2022	-	0	-3	-	0.0%	-	-	-	-	- 0.0%
(Main activity: pension)	2021	-0	0	-3	-	0.0%	-	-	-	-	- 0.0%
Total	2022	5,360	483	987	-227	23.0%	-84	1	-1,071	5,568	9,452 6.5%
	2021	6,112	540	1,628	-344	21.1%	-274	-16	-1,011	5,463	9,699 179% ⁵

1 An overview of all KPN's legal entities is published on the companies website

2 Unrelated income is the total of revenues and (other) financial income

3 Tangible assets other than cash and cash equivalents

4 See Note 17 Retirement benefits (page 152)

5 Due to the expected carry back of 2022 realized losses to the 2021 taxable profit, the 2021 ECTR of 179% would have been 13.3%

● Appendices

Appendix 13: GRI index

KPN has reported in accordance with the GRI standards for our reporting period. KPN only included the GRI Topic Standards which are relevant to the organization.

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
GRI 2: General Disclosures 2021				
1. The organization and its reporting practices				
2-1		Organizational details	Corporate governance (p. 58) General notes to the Consolidated Financial Statements (p. 110) Steering the company (p. 58) Legal structure of the company (p. 58)	
2-2		Entities included in the organization's sustainability reporting	Appendix 1: About this report (p. 186) Appendix 11: Environmental figures (p. 222)	
2-3		Reporting period, frequency and contact point	Consolidated Financial Statements (p. 104) General notes to the Consolidated Financial Statements (p. 110) Appendix 1: About this report (p. 186)	
2-4		Restatements of information	General notes to the Consolidated Financial Statements (p. 110) Appendix 4: Non-financial information (p. 199) Appendix 11: Environmental figures (p. 222)	
2-5		External assurance	Corporate governance (p. 58) Combined independent auditor's report and assurance report (p. 176) Appendix 1: About this report (p. 186)	
2. Activities and workers				
2-6		Activities, value chain and other business relationships	Introduction by the CEO (p. 4) Our purpose and the world around us (p. 6) Accelerate to Grow strategy pays off (p. 9) Our value for stakeholders: Customer value (p. 17) Our performance: Network infrastructure (p. 36) Our performance: Focused innovation and digitalization (p. 41) Collaborating towards a sustainable value chain (p. 50) Appendix 10: Supply chain (p. 220)	
2-7		Employees	Our value for stakeholders: Employee value (p. 27) Appendix 9: Social figures (p. 218)	
2-8		Workers who are not employees	Our value for stakeholders: Employee value (p. 27) Appendix 9: Social figures (p. 218)	We report this data for the first time. Therefore we have no comparative numbers to explain the fluctuations for 2-8 c.
3. Governance				
2-9		Governance structure and composition	Corporate governance (p. 58) Compliance and risk (p. 67) Composition of the Board of Management (p. 77) Composition of the Supervisory Board (p. 80) Supervisory Board Report (p. 83)	
2-10		Nomination and selection of the highest governance body	Corporate governance (p. 58) Supervisory Board Report (p. 83)	
2-11		Chair of the highest governance body	Corporate governance (p. 58) Statement by the Board of Management and Responsibility Statement (p. 76) Composition of the Board of Management (p. 77)	
2-12		Role of the highest governance body in overseeing the management of impacts	Corporate governance (p. 58) Compliance and risk (p. 67) Composition of the Board of Management (p. 77) Appendix 3: Materiality assessment (p. 191)	

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
2-13		Delegation of responsibility for managing impacts	Corporate governance (p. 58)	
2-14		Role of the highest governance body in sustainability reporting	Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191)	
2-15		Conflicts of interest	Corporate governance (p. 58) Supervisory Board Report (p. 83) Remuneration Report (p. 90) See for more information our IR website: https://ir.kpn.com/websites/kpn/English/7030/supervisory-board.html	
2-16		Communication of critical concerns	Compliance and risk (p. 67)	The nature and number of critical concerns raised during 2022 cannot be communicated, as this concerns sensitive information.
2-17		Collective knowledge of the highest governance body	Supervisory Board Report (p. 83)	
2-18		Evaluation of the performance of the highest governance body	Corporate governance (p. 58) Supervisory Board Report (p. 83)	
2-19		Remuneration policies	Composition of the Board of Management (p. 77) Composition of the Supervisory Board (p. 80) Remuneration Report (p. 90)	
2-20		Process to determine remuneration	Corporate governance (p. 58) Composition of the Board of Management (p. 77) Supervisory Board Report (p. 83) Remuneration Report (p. 90)	
2-21		Annual total compensation ratio	We monitor the ratio in annual total compensation for our employees in the main country of operation, the Netherlands. The basis for determining the ratio is the pension base salary, which includes all fixed components of the salary of our employees. For the calculation, we use the annualized salary as paid in the reporting year. This is not by definition a full time salary, part time salaries are also included. All bonuses paid during 2022 are included in the calculation, including the value of vested shares or phantom shares received by employees in the reporting year. For the reporting year 2022, the annual total compensation of the highest paid individual to the median annual total compensation is 4514/1. The total annual compensation of the highest paid individual is predominately defined by incentives. Consequently this results in highly fluctuating total annual compensation year-on-year even though base payments remains unchanged. The annual total compensation of the highest paid individual increased with 34.2% in 2022 (compared with 2021) and the annual total compensation of the median increased with 5.6% in 2022 (compared with 2021). The ratio of the percentage increase of the highest paid individual to the increase of the median annual total compensation of 2022 is 6.06/1	
2-22		Statement on sustainable development strategy	Introduction by the CEO (p. 4) Supervisory Board Report (p. 83)	
2-23		Policy commitments	Our value for stakeholders: Employee value (p. 27) Our performance: Environmental performance and responsible supply chain (p. 50) Compliance and risk (p. 67)	
			The most important charters, principles, or other initiatives to which KPN subscribes or which KPN endorses are: UN Global Compact, UN Declaration on Business and Human Rights, International Labor Organization, OECD Guidelines for Multinational Enterprises, Principles of the World Economic Forum, RE100. For our approach to EMF and more information and context, see: https://www.overons.kpn/en/kpn-in-the-netherlands/our-network/health	

4. Strategy, policies and practices

2-22	Statement on sustainable development strategy	Introduction by the CEO (p. 4) Supervisory Board Report (p. 83)
2-23	Policy commitments	Our value for stakeholders: Employee value (p. 27) Our performance: Environmental performance and responsible supply chain (p. 50) Compliance and risk (p. 67)

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
			For more information, see our Code of Conduct and the KPN SpeakUp Line: https://ir.kpn.com/websites/kpn/English/7050/code-of-conduct.html	
Own indicator		Reports on violation of KPN Code of Conduct subcodes	There were 1121 reports on violation of KPN CoC subcodes	
2-24		Embedding policy commitments	Corporate governance (p. 58) Tax and regulations (p. 62) Compliance and risk (p. 67) Supervisory Board Report (p. 83)	
2-25		Processes to remediate negative impacts	Our value for stakeholders: Customer value (p. 17) Employee value (p. 27) Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 8: List of top risks (p. 208)	
2-26		Mechanisms for seeking advice and raising concerns	Our value for stakeholders: Customer value (p. 17) Compliance and risk (p. 67) Employees can seek advice and report violations on ethical and lawful behavior by contacting the KPN Helpdesk Security, Compliance and Integrity. All reports made to this helpdesk are registered.	
2-27		Compliance with laws and regulations	Reports on possible violations of the KPN Code of Conduct or subcodes (which include all company policy on ethical and lawful behavior) are registered by the KPN Helpdesk Security, Compliance and Integrity. In 2022, 1121 reports on possible violations have been registered. In 138 occasions, these were followed by corrective measures. KPN does not register the number of complaints about breaches of the company Code or other ethical issues at the helpdesks, social media and mvo@kpn.com For the Code and more information on anonymous reporting, see: https://ir.kpn.com/websites/kpn/English/7050/code-of-conduct.html	
2-28		Membership associations	Bribery and corruption (p. 73) Appendix 14: SASB index (p. 239)	
2-29		Approach to stakeholder engagement	We had no significant monetary fines or non-monetary sanctions for non-compliance with environmental laws and regulations. Als we had no significant monetary fines for non-compliance with laws and regulations concerning the provision and use of products and services. We had a EUR 3,229,000 monetary fines for non-compliance with other laws and regulations, however no other non-monetary sanctions. There were 7 legal actions for anti-competitive behavior, anti-trust and monopoly practices, 2 incidents of non-compliance concerning marketing communications and 1 legal action for non-compliance with customer information regulation.	
2-30		Collective bargaining agreements	Our most important memberships are: ETNO, Green Grid, Mobility Management Task Force, UN Global Compact, ITU, NL Digital, ECP For more information and the most recent overview of memberships, see: https://www.overons.kpn/en/kpn-in-the-netherlands/sustainability/working-together	
			For information on trade organizations, see: Appendix 3: Materiality assessment (p. 191)	
			Our value for stakeholders: Customer value (p. 17) Appendix 3: Materiality assessment (p. 191)	
			KPN does not engage with stakeholders exclusively as part of the report preparations process, although all stakeholders input is considered to be of potential value to the report. KPN wants to know what topics stakeholders deem important and actively respond to their rising demands.	
			Our value for stakeholders: Employee value (p. 27) Appendix 9: Social figures (p. 218)	

Material topics

GRI 3: Material Topics 2021

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
	3-1	Process to determine material topics	Appendix 3: Materiality assessment (p. 191)	
	3-2	List of material topics	Corporate governance (p. 58) Composition of the Board of Management (p. 77) Appendix 3: Materiality assessment (p. 191)	
Own material topics				
Network quality	3-3	Management of material topics	Our value for stakeholders: Impact on society (p. 32) Our performance: Environmental performance and responsible supply chain (p. 50) Our performance: Network infrastructure (p. 36) Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208)	
	Own indicator	FttH Footprint of the Netherlands	Strategy and key performances (p. 9) Our valuable assets (p. 15) Our performance: Network infrastructure (p. 36) Appendix 4: Non-financial information (p. 199)	
	Own indicator	# mobile sites modernized and 5G ready	Strategy and key performances (p. 9) Our valuable assets (p. 15) Our performance: Network infrastructure (p. 36) Appendix 4: Non-financial information (p. 199)	
Cybersecurity, data & information protection	3-3	Management of material topics	Our value for stakeholders: Impact on society (p. 32) Our value for stakeholders: Customer value (p. 17) Our performance: Environmental performance and responsible supply chain (p. 50) Our performance: Safeguarded privacy and security (p. 45) Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208)	
	Own indicator	% of Dutch people who believe their data is safe with KPN	Our performance: Safeguarded privacy and security (p. 45) Appendix 4: Non-financial information (p. 199)	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints regarding breaches of customer privacy	In 2022, we received 266 reported incidents concerning privacy and reported 66 data leaks concerning personal data to the Dutch Data Protection Authority (AP)	
Customer value	3-3	Management of material topics	Our value for stakeholders: Customer value (p. 17) Our performance: Network infrastructure (p. 36) Our performance: Environmental performance and responsible supply chain (p. 50) Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208)	
	Own indicator	Net Promoter Score (NPS) - Business	Our value for stakeholders: Customer value (p. 17) Appendix 4: Non-financial information (p. 199)	
	Own indicator	Net Promoter Score (NPS) - Consumer	Our value for stakeholders: Customer value (p. 17) Appendix 4: Non-financial information (p. 199)	
	Own indicator	RepTrak	Our value for stakeholders: Customer value (p. 17) Appendix 4: Non-financial information (p. 199)	
Sustainable ICT solutions & Product innovation	3-3	Management of material topics	Our value for stakeholders: Impact on society (p. 32) Our value for stakeholders: Customer value (p. 17) Our performance: Focused innovation and digitalization (p. 41) Our performance: Environmental performance and responsible supply chain (p. 50) Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208)	

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
GRI 302: Energy 2016	Own indicator	Energy savings by customers as % of KPN Group energy usage	Our value for stakeholders: Impact on society (p. 32) Appendix 4: Non-financial information (p. 199)	
	3-3	Management of material topics	Our value for stakeholders: Impact on society (p. 32) Our performance: Environmental performance and responsible supply chain (p. 50) Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208) Appendix 11: Environmental figures (p. 222)	
	302-1	Energy consumption within the organization	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 11: Environmental figures (p. 222)	
	302-2	Energy consumption outside of the organization	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 11: Environmental figures (p. 222)	
	302-3	Energy intensity	Appendix 11: Environmental figures (p. 222)	
	302-4	Reduction of energy consumption	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 11: Environmental figures (p. 222)	
	305-1	Direct (Scope 1) GHG emissions	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)	
	305-2	Energy indirect (Scope 2) GHG emissions	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)	
	305-3	Other indirect (Scope 3) GHG emissions	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)	
	Own indicator	% reduction of energy consumption of KPN Group compared with 2010	Strategy and key performances (p. 9) Our valuable assets (p. 15) Appendix 4: Non-financial information (p. 199) Appendix 11: Environmental figures (p. 222)	
GRI 305: Emissions 2016	Own indicator	Climate-neutral own operations	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)	
	Own indicator	Energy consumed by KPN	Strategy and key performances (p. 9) Our valuable assets (p. 15) Appendix 4: Non-financial information (p. 199) Appendix 11: Environmental figures (p. 222)	
	Own indicator	Reduction of value chain CO ₂ e (scope 3) compared to base year 2014	Our valuable assets (p. 15) Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199) Appendix 11: Environmental figures (p. 222)	
	Own indicator	Reduction of value chain CO ₂ e (scope 3) compared to base year 2014	Our valuable assets (p. 15) Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199) Appendix 11: Environmental figures (p. 222)	
Other topics	Working conditions	Management of material topics	Our value for stakeholders: Employee value (p. 27) Our value for stakeholders: Impact on society (p. 32) Corporate governance (p. 58) Compliance and risk (p. 67) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208) Appendix 9: Social figures (p. 218)	
	Own indicator	Employee score for engagement	Strategy and key performances (p. 9) Our valuable assets (p. 15) Our value for stakeholders: Employee value (p. 27)	
	Own indicator	Full-time domestic personnel	Our valuable assets (p. 15)	

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
Circular resource management	3-3	Own indicator	Average training cost in EUR per FTE	Our valuable assets (p. 15)
		Own indicator	Overall % women at KPN	Our value for stakeholders: Employee value (p. 27)
		Own indicator	% women on KPN Boards	Our value for stakeholders: Employee value (p. 27)
		Own indicator	People graduated from the apprenticeship project with poor labor market prospects	Our value for stakeholders: Employee value (p. 27)
		Management of material topics		Our value for stakeholders: Impact on society (p. 32) Our performance: Environmental performance and responsible supply chain (p. 50) Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199) Appendix 8: List of top risks (p. 208) Appendix 11: Environmental figures (p. 222)
		Own indicator	% reuse and recycling	Our value for stakeholders: Impact on society (p. 32) Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)
		Own indicator	Materials usage	Appendix 11: Environmental figures (p. 222)
		Own indicator	Water consumption	Appendix 11: Environmental figures (p. 222)
		Own indicator	Total volume non-hazardous materials & waste	Appendix 11: Environmental figures (p. 222)
		Own indicator	Total volume hazardous materials & waste	Appendix 11: Environmental figures (p. 222)
Facilitating innovation	3-3	Own indicator	Collected equipment	Appendix 11: Environmental figures (p. 222)
		Own indicator	Products with improved design for circularity	Appendix 11: Environmental figures (p. 222)
		Management of material topics		Our value for stakeholders: Impact on society (p. 32) Our performance: Focused innovation and digitalization (p. 41) Corporate governance (p. 58) Compliance and risk (p. 67) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199)
		Own indicator	Machine-to-machine (M2M) subscribers (#SIMs)	Our performance: Focused innovation and digitalization (p. 41)
		Own indicator	Patent families in KPN portfolio	Our performance: Focused innovation and digitalization (p. 41)
Supplier management & selection	3-3	Management of material topics		Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 8: List of top risks (p. 208) Appendix 10: Supply chain (p. 191)
		Own indicator	% high-risk Tier I, Tier II and Tier III suppliers audited	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199) Appendix 10: Supply chain (p. 191)
		Own indicator	% realized improvements on corrective action plans	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)
		Own indicator	# Grievances human rights	There were reports concerning human rights violations involving an employee in our operations

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
		Own indicator % of high-risk suppliers	Our performance: Environmental performance and responsible supply chain (p. 50) Appendix 4: Non-financial information (p. 199)	
Compliance & business ethics	3-3	Management of material topics	Corporate governance (p. 58) Compliance and risk (p. 67)	
			Additional information on compliance and business ethics can be found on our website in subcode 2 - How we interact with third parties: https://ir.kpn.com/websites/kpn/English/7050/code-of-conduct.html	
		Own indicator Internal fraud cases	Compliance and risk (p. 67) We identified 197 internal fraud cases	
		Own indicator Employees trained to detect and prevent corruption	Compliance and risk (p. 67) We had 10,135 employees trained to detect and prevent corruption	
Social investments & partnerships	3-3	Management of material topics	Our value for stakeholders: Impact on society (p. 32) Corporate governance (p. 58) Compliance and risk (p. 67) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199)	
		Own indicator Partnering research centers and universities	Our valuable assets (p. 15)	
		Own indicator Partnering innovative startups and entrepreneurs	Our valuable assets (p. 15)	
		Own indicator KPN Ventures fund size	Our valuable assets (p. 15)	
		Own indicator Contracted suppliers	Our valuable assets (p. 15)	
Health & safety EMF radiation	3-3	Management of material topics	Corporate governance (p. 58) Appendix 3: Materiality assessment (p. 191) Appendix 8: List of top risks (p. 208)	
Fair taxes	3-3	Management of material topics	Corporate governance (p. 58) Tax and regulations (p. 62) Compliance and risk (p. 67) Appendix 3: Materiality assessment (p. 191) Appendix 4: Non-financial information (p. 199)	
	207-1	Approach to tax	a: Tax definition (fair taxes) – see appendix 3 Materiality assessment definition TTC - appendix 15 Glossary and details in Tax contribution report b&c: impact & boundary and limitation: <ul style="list-style-type: none">• See Tax profile and current tax position• Stakeholder engagement – appendix 3 Materiality assessment, website tax strategy and principles and Stakeholder engagement and forward looking• Appendix 1: About this report (p. 186) – Dutch and Legacy investments (Germany, UK, US & Ireland)	
GRI 207: Tax 2019	201-4	Financial assistance received from government	a-i: For our Tax strategy & principles, see: https://ir.kpn.com/websites/kpn/English/7070/tax-strategy_-policy.html a-ii: BoM statement & frequency - see Tax profile and current tax position and Statement by the Board of Management and Responsibility Statement a-iii&iv: Regulatory compliance respectively business & ESG- see Tax profile and current tax position and website tax strategy and principles (https://ir.kpn.com/websites/kpn/English/7070/tax-strategy_-policy.html)	
	207-2	Tax governance, control, and risk management	a-i&ii: see Tax profile and current tax position and website tax strategy and principles (https://ir.kpn.com/websites/kpn/English/7070/tax-strategy_-policy.html) a-iii: tax risk appetite - see Tax profile and current tax position, 3. Define risk appetite and 8 List of top risks	

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
			a-iv: evaluation tax governance by representative of the Board - see Tax profile and current tax position	
	207-3	Stakeholder engagement and management of concerns related to tax	ii-iii: tax authorities, advocacy on tax & other engagements - see Stakeholder engagement and forward looking and website tax strategy and principles (https://ir.kpn.com/websites/kpn/English/7070/tax-strategy-_policy.html)	
	207-4	Country-by-country reporting	See Appendix 12 Tax overview for continuing operations per country	
Own indicator		Normalized ETR	Tax and regulations (p. 62)	
Own indicator		Total tax contribution	Tax and regulations (p. 62)	
Own indicator		Government allowances	Tax and regulations (p. 62)	
GRI topics				
Economic performance	3-3	Management of material topics	Introduction by the CEO (p. 4) Strategy and key performances (p. 9) Our value for stakeholders: Shareholder value (p. 23) Corporate governance (p. 58)	
	201-1	Direct economic value generated and distributed	Strategy and key performances (p. 9) Our value for stakeholders: Shareholder value (p. 23)	
Own Indicator		Money spent on donations, sponsoring and community projects	Our value for stakeholders: Impact on society (p. 32)	
	201-2	Financial implications and other risks and opportunities due to climate change	Our performance: Environmental performance and responsible supply chain (p. 50) Compliance and risk (p. 67) Appendix 11: Environmental figures (p. 222)	
GRI 201: Economic Performance 2016			KPN discloses all material carbon emissions, climate governance and management approach, including the financial implications of risks regarding climate change and the costs of mitigating actions for the CDP (Carbon Disclosure Project). Find our 2022 disclosure at https://cdp.net/en	
	201-3	Defined benefit plan obligations and other retirement plans	Financial Statements (p. 101)	
	201-4	Financial assistance received from government	KPN does not receive significant financial assistance from the government.	
Own indicator		Money spent on donations, sponsoring and community projects	Our value for stakeholders: Impact on society (p. 32)	
Anti-corruption	3-3	Management of material topics	Compliance and risk (p. 67)	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Compliance and risk (p. 67)	
	205-2	Communication and training about anti-corruption policies and procedures	Compliance and risk (p. 67)	
	205-3	Confirmed incidents of corruption and actions taken	Compliance and risk (p. 67) We identified 197 internal fraud cases	
Own Indicator		Employees trained to detect and prevent corruption	Compliance and risk (p. 67) We had 10,135 employees trained to detect and prevent corruption	
Materials	3-3	Management of material topics	Corporate governance (p. 58)	
	301-1	Materials used by weight or volume	KPN is a service provider and not a production company. The materials consumed are therefore limited.	
GRI 301: Materials 2016	301-2	Recycled input materials used	Our performance: Environmental performance and responsible supply chain (p. 50)	
	301-3	Reclaimed products and their packaging materials	Our performance: Environmental performance and responsible supply chain (p. 50)	

● Appendices

GRI Standard	#	GRI Disclosure	Relevant section	Omission ¹
Water and effluents	3-3	Management of material topics	Appendix 11: Environmental figures (p. 222)	This indicator supports Principles 8 and 9 of the UN Global Compact.
			Appendix 3: Materiality assessment (p. 191)	
			Appendix 11: Environmental figures (p. 222)	
			Our performance: Environmental performance and responsible supply chain (p. 50)	
			Corporate governance (p. 58)	
	303-1	Interactions with water as a shared resource	Appendix 11: Environmental figures (p. 222)	
		Management of water discharge-related impacts	Not applicable	
		Water withdrawal	Not applicable	
		Water discharge	Appendix 11: Environmental figures (p. 222). Only applies to third party freshwater.	
		Water consumption	Only applies to third-party water released to municipal water treatment facilities (same volume assumed as reported under 303-3).	
GRI 303: Water and effluents 2018	3-3	Management of material topics	Appendix 11: Environmental figures (p. 222)	
			Corporate governance (p. 58)	
	306-1	Water discharge by quality and destination	Not applicable	
		Waste by type and disposal method	Appendix 11: Environmental figures (p. 222)	
		Significant spills	Not applicable	
	306-2	Transport of hazardous waste	Appendix 11: Environmental figures (p. 222)	
		Water bodies affected by water discharges and/or runoff	Not applicable	
GRI 306: Effluents and waste 2016	306-3	Significant spills	Not applicable	
		Transport of hazardous waste	Appendix 11: Environmental figures (p. 222)	
		Water bodies affected by water discharges and/or runoff	Not applicable	
	306-4	Significant spills	Not applicable	
		Transport of hazardous waste	Appendix 11: Environmental figures (p. 222)	
		Water bodies affected by water discharges and/or runoff	Not applicable	

¹ All topics described in the GRI are applicable or not material for our operations

● Appendices

Appendix 14: SASB index

Topic	SASB Code	Metric	Response
Activity metrics	TC-TL-000.A	Total number of mobile accesses (millions)	101
	TC-TL-000.B	Total number of fixed line accesses (millions)	0.2
	TC-TL-000.C	Number of fixed broadband subscribers (millions)	4.3
Environmental footprint of operations	TC-TL-000.D	Network traffic in petabytes	N/a ¹
	TC-TL-130a.1	Total energy consumed (GJ)	2,035,963
		Percentage of grid electricity out of total energy consumption	0.853
Data privacy		Percentage renewable energy out of total energy consumption	0.894
TC-TL-220a.1	Description of policies and practices relating to behavioral advertising and customer privacy	KPN is aware of the fact that we must carefully manage two separate and often conflicting priorities: data as a valuable revenue source versus privacy. We have a reputation to uphold where it concerns the safety of customer data. We believe that customer privacy must be a core value when doing business. As such, we have made promises to our customers on how we use their data. One of our core promises is that we do not sell data of our customers to third parties. Our second promise is that if we want to use traffic data for commercial purposes (which is not secondary use, but primary use after consent), we only do so after we have received unambiguous consent of the customers. Customers can, at all times, revoke their consent. KPN has procedures in place for consent and revocation and customers are informed through the KPN Privacy Statement. As such we provide transparency on our processing of customer data.	
TC-TL-220a.2	Number of customers whose information is used for secondary purposes	For our use of customer data, we refer to our Privacy Statement, see https://www.kpn.com/algemeen/misie-en-privacy-statement/privacy-statement.htm	
TC-TL-220a.3	Total amount of monetary losses as a result of legal proceedings associated with customer privacy	Monetary losses in the form of fines by regulators resulting from privacy breaches: EUR 0 Monetary losses in the form of fines ruled by the court resulting from privacy breaches: EUR 0	
TC-TL-220a.4	Number of law enforcement requests for customer information	It is prohibited by law to publish the number of government requests either publicly or sharing this figure on a confidential basis for benchmarks.	
		This question concerns obligations under the law of Telecommunications and the handling of warrants received by KPN, based on the Criminal Procedure Code, i.e. Intelligence and Security services, described in the "Telecommunications Security Data Decree": https://wetten.overheid.nl/BWBR0015808/2018-05-01	
		Reporting on the scope is reserved for and responsibility of the Ministry of Justice and Security and the Ministry of Internal Affairs and Kingdom Relations. In general, Dutch judicial law has a commitment to notify persons if information concerning these persons has been collected. See https://wetten.overheid.nl/BWBR0015808/2018-05-01 on the Decree on data security by public telecommunication providers.	
Data security	TC-TL-230a.1	Number of customers whose information was requested	See "Number of law enforcement requests for customer information"
		Percentage resulting in disclosure	98.86%
		Number of data breaches	74 For this indicator, we use the definition as relevant for the jurisdiction(s) in which KPN is active. This definition is broader than the standard definition used by SASB.
		Percentage involving personally identifiable information	For 2022, it is not possible to report on this KPI yet. For this indicator, we use the definition as relevant for the jurisdiction(s) in which KPN is active. This definition is broader than the standard definition used by SASB.
		Number of customers affected	KPN is not able to report on this number due to the practical implications.

● Appendices

		Cybersecurity remains a high priority, as cybersecurity attacks by nation states, phishing, ransomware and supply chain attacks are becoming increasingly sophisticated. To protect our systems and data, and those of our customers, we are constantly vigilant.
	TC-TL-230a.2	Description of approach to identifying and addressing data security risks, including use of third-party cybersecurity standards Our Chief Information Security Office (CISO) is organized into four teams. Together with the operational security officers throughout the company, they work according to the KPN Security Lifecycle, which is based on the NIST cybersecurity framework: identify, protect, detect, respond and recover. CISO sets a KPN Security Policy to prevent vulnerabilities and incidents. The CISO Red Team of ethical hackers conducts security testing of new products and proactively identifies vulnerabilities across the organization. The CISO Blue Team is responsible for continuously monitoring our networks and infrastructures, and detecting security threats and vulnerabilities in a timely manner from within our Security Operations Center (SOC). As part of the Blue Team, the KPN Computer Emergency Response Team (KPN-CERT) provides rapid incident response, while the CISO Monitoring & Reporting team is responsible for security compliance monitoring and security analytics and reporting.
Product end-of-life management	TC-TL-440a.1	Weight, in <i>metric tons</i> , of materials recovered through product take-back programs and recycling services 10,893 tons Percentage (%) of recovered materials that are reused 9% Percentage (%) of recovered materials that are recycled 77% Percentage (%) of recovered materials that are deposited in landfills 2%
	TC-TL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations EUR 0
Competitive behavior & open internet	TC-TL-520a.2	Actual average sustained download speed in Mbps of own and commercially partnered content 484 ² Actual average sustained download speed in Mbps of nonassociated content 484 ²
	TC-TL-520a.3	Description of risks and opportunities associated with net neutrality, paid peering, zero rating and related practices KPN acts in accordance with the EU Regulation 2015/2120 of the European Parliament regarding measures concerning open internet access (net neutrality). Both paid peering and zero rating are of less importance to KPN, as also stated by the ACM, since we do not have placed 'zero rated offers' in the market and the ACM has not established significant problems regarding these topics in the Dutch market.
	TC-TL-550a.1	Average system outage frequency (fixed line network) Broadband: 0.25 Mobile: 0.16 Average duration of customer interruption (fixed line network) Broadband: 0.94 Mobile: 1.87
Managing systemic risks from technology disruptions	TC-TL-550a.2	At KPN, we are doing the best we can to avoid outages or other service disruptions. The bigger the impact, the more measures are taken to minimize the chances of something going wrong, with procedures being ready for every service disruption one could think of. For common service disruptions we have automated reboots programmed to minimize the impact of the disruption. In the event that any loss of service distribution does occur, KPN makes use of the Be Alert classification matrix to determine the urgency of the disruption of Major Incidents. This classification, by means of colour coding, happens on the basis of the amount of impact and the importance of the service that is malfunctioning. In order to minimize the negative experience for customers, we proactively inform clients about the disruption to inform them that we are aware of the problem and that we are working towards a solution.

1 SASB definition is not in line with KPN's value for network traffic

2 The average maximum download speed that we report is the predicted technical speed, based on the best available technologies, per address. Figures are based on year-end data

● Appendices

Appendix 15: Glossary

3G

Third-generation mobile system, which is based on the UMTS universal standard.

4G

Fourth-generation mobile system, a standard for wireless communication delivering high-speed data for mobile phones and data terminals.

5G

Fifth-generation mobile system, a standard for wireless communication delivering high-speed data for mobile phones and data terminals, exceeding 4G speeds. 5G targets high data rates, reduced latency, network slicing, higher system capacity and massive device connectivity.

A

ACM (Authority for Consumers and Markets)

The ACM acts as a regulator in the Netherlands and is responsible for monitoring compliance with antitrust rules.

ADR (American depository receipt)

Negotiable security that represents securities of a foreign company and allows that company's shares to trade in the U.S. financial markets.

Adjusted revenues

Adjusted revenues are derived from revenues (including other income) and are adjusted for the impact of restructuring costs and incidentals. Incidentals are non-recurring transactions of EUR 5m or over unless significant for the specific reportable segment, which are not directly related to day-to-day operational activities.

Adjusted EBITDA AL

Adjusted EBITDA AL (adjusted EBITDA after leases) are derived from EBITDA and are adjusted for the impact of restructuring costs and incidentals and for lease costs, including depreciation of right-of-use assets and interest on lease liabilities. Incidentals are non-recurring transactions of EUR 5m or more unless significant for the specific reportable segment, which are not directly related to day-to-day operational activities.

AI (artificial intelligence)

AI is the intelligence demonstrated by machines.

ARPA (average revenue per address)

ARPA is the sum of connection fees, monthly fixed subscription revenues, traffic revenues and gross service-provider revenues less related discounts during a one-month period, divided by the average number of addresses during that month. Gross service-provider revenues represent revenues generated by third-party providers. KPN accounts for the net part as gross service-provider revenues.

ARPU (average revenue per user)

ARPU is the sum of connection fees, monthly fixed subscription revenues, traffic revenues and gross service-provider revenues less related discounts during a one-month period, divided by the average number of customers during that month. Gross service-provider revenues represent revenues generated by third-party providers. KPN accounts for the net part as gross service-provider revenues.

Average 4G and 5G download speed

The average download speed is based on the results of a speedtest that customers initiate on 4G and 5G with their smartphone. Robot measurements and customers using networks other than KPN's are excluded from the results.

Average maximum download speed broadband fixed

The average maximum download speed that we report is the predicted technical speed, based on the best available technologies, per address. Figures are based on year-end data.

B

BCF (business control framework)

The BCF contains all corporate policies and guidelines that are mandatory for KPN segments and entities. It forms the cornerstone of the governance of the KPN Group.

B2B (Business-to-business)

Business-to-business, commercial transactions between businesses. Referring to our business market related activities.

Broadband

Broadband refers to telecommunication that provides multiple channels of data over a single communications medium, typically using some form of frequency or wave division multiplexing.

● Appendices

C

Capex (capital expenditure)

Investments in property, plants, equipment (PPE) and software. Please note that EU taxonomy's Capex definition differs from KPN's Capex definition. EU taxonomy Capex consists of the following components: PPE investments and PPE changes in consolidation in case of acquisitions of business combinations, Intangibles investments and Intangibles assets changes in consolidation in case of acquisitions of business combinations and Right-of-use assets additions.

CDP (Carbon Disclosure Project)

The CDP is a joint initiative of investors worldwide that questions and benchmarks listed companies on their approach to climate change.

Churn (calculated on an annual basis)

The number of customers no longer connected to an operator's network divided by the operator's customer base.

Circular economy

The circular economy is a generic term for an industrial economy that is producing no waste and pollution and in which material flows are of two types: biological nutrients, designed to re-enter the biosphere safely, and technical nutrients, which are designed to circulate at high quality in the production system without entering the biosphere.

Circular inflow

Renewable inflow from sustainably managed resources and which is used at a rate in line with natural cycles of renewability or inflow which is non-virgin.

Circular Outflow

Outflow that is designed and treated in a manner that ensures products and materials have a full recovery potential and extend their economic lifetime after their technical lifetime and that is demonstrably recovered.

Climate-neutral

For KPN, climate-neutral means operating with zero net CO₂e emissions.

Cloud services

Cloud services are standardized IT capability (services, software or infrastructure) delivered via internet technologies in a pay-per-use, self-service way.

Cloud Gaming

Cloud gaming is a form of cloud computing and offers services in the field of computer games.

CO₂e

Carbon dioxide equivalent, is a standard unit for measuring carbon footprints. The idea is to express the impact of each different greenhouse gas in terms of the amount of CO₂ that would create the same amount of warming. That way, a carbon footprint consisting of different greenhouse gases can be expressed as a single number.

Conflict minerals

Conflict minerals are minerals mined under conditions of armed conflicts and human rights issues. These minerals are used in a variety of products, including consumer electronic devices such as mobile phones.

CSR (corporate social responsibility)

CSR, to KPN, is the integrated vision of entrepreneurship, in which the company takes responsibility and creates value in economic (profit), ecological (planet) and social (people) terms. We incorporate CSR into our business and by doing so, take our social responsibility and contribute to societal challenges.

CSRD (Corporate Sustainability Reporting Directive)

The CSRD covers all relevant Environmental, Social and Governance elements and aims to increase investments in truly sustainable activities across the European Union. The CSRD will replace the existing reporting requirements of the EU's Non-Financial Reporting Directive (NFRD). The Directive shall apply from 1 January 2024 for financial years starting on or after 1 January 2024.

Customer base

Customer base is the total number of subscribers.

D

DEFRA (UK Department for Environment, Food & Rural Affairs)

DEFRA has published conversion factors to calculate greenhouse gas emissions.

DESI-rapport (Digital Economy and Society Index-rapport)

The EU's Digital Economy and Society Index annually maps the digital economy in European countries.

DJSI (Dow Jones Sustainability Index)

The DJSI series is a collection of indices that track the performance of companies that are frontrunners in terms of CSR. The DJSI is based on an analysis of corporate economic, environmental and social performance. There are several sub-indices based on geographical parameters.

● Appendices

DSL (digital subscriber line)

DSL is a technology for bringing high bandwidth information to homes and small businesses over copper PSTN lines. The widely used term xDSL refers to different variations of DSL, such as ADSL, HDSL, VDSL and SDSL.

E

EBITDA

Operating result before depreciation and impairments of property, plant and equipment and amortization and impairments of intangible assets.

EBITDA AL (EBITDA after leases)

EBITDA AL are derived from EBITDA and adjusted for lease costs, including depreciation of right-of-use assets and interest on lease liabilities.

EcoVadis

EcoVadis is an international platform that assesses the material CSR impacts of companies. Purchasing organizations can integrate EcoVadis Scorecards into their day-to-day business practices driving their organization to make more sustainable procurement decisions, while positively incentivizing trading partners that align with their sustainability practices.

Edge Computing

Distributed paradigm that brings computation and data storage closer to the sources of data.

EEIO (environmentally extended input output data)

EEIO models estimate energy use and/or GHG emissions resulting from the production and upstream supply chain activities of different sectors and products. The resulting EEIO emissions factors can be used to estimate cradle-to-gate GHG emissions for a given industry or product category. EEIO models are derived by allocating national GHG emissions to groups of finished products based on economic flows between industry sectors.

ESG (Environmental, Social and Governance)

ESG refers to the three central factors in measuring the sustainability and societal impact of an investment in a company or business.

Externally

An externality is an economic term referring to a cost or benefit incurred or received by a third party. However, the third party has no control over the creation of that cost or benefit.

F

FTE (full-time equivalent)

The equivalent of the number of employees with a full-time contract. FTEs are calculated compared to the standard number of contract hours per employment group within KPN.

FttH (Fiber to the Home)

FttH is defined as an access network architecture in which the final part of the connection to the home also consists of optical fiber.

FttH households

FttH households are defined as premises to which an operator can connect in a service area. Fiber is available, at least, at the premises property boundary.

FCF (Free Cash Flow)

FCF is defined as cash flow from continuing operating activities plus proceeds from real estate, minus capital expenditure (Capex), being expenditure on PP&E and software and adjusted for repayments of lease liabilities.

G

Gbps (Gigabit per second)

A gigabit is a unit denoting the speed of data transfer. It is the speed in billions of bits per second.

GHG (Greenhouse Gas) Protocol

The GHG Protocol is a multi-stakeholder partnership of business, non-governmental organizations (NGOs), governments and others that develop internationally accepted GHG accounting and reporting standards for organizations.

GHz

Gigahertz is a frequency unit that measures the number of cycles per second and is used to indicate the different spectrums of our mobile network.

Green electricity

Green electricity is electricity from renewable sources. KPN only uses wind energy and electricity from biomass that does not compete with food production.

GRI (Global Reporting Initiative)

The Global Reporting Initiative is an organization that publishes international standards for CSR reporting.

● Appendices

H

High-risk supplier

Our procurement process includes an assessment of all new contracted suppliers, classifying them based on the potential social and environmental risk their operations, products and services represent. We assess this risk based on three parameters: geographical areas, spend and potential environmental impact of a supplier's operations, products or services. High-risk suppliers are audited by independent external auditors once every two to four years.

I

IIRC (International Integrated Reporting Council)

Worldwide non-profit organization that has developed a technical standard for companies that want to account for the value they add to this world as a company.

IT

IT refers to information technology.

IoT (Internet of Things)

The Internet of Things connects objects such as garbage bins or cars via a chip with the internet. This offers many opportunities, such as Smart City solutions.

ISDN (Integrated services digital network)

A form of digital telephony. It is an alternative to the analogue POTS. With ISDN, more data can be transported over a copper two-wire connection at the district level than is usually possible with POTS.

ISO (International Organization for Standardization)

This organization is responsible for international management standards such as ISO 14001, ISO 140064-1, ISO 27001 and ISO 22301 (mentioned in this report).

iTV (Interactive TV)

With iTV, the customer can easily choose when, where and which programs to watch.

J

JAC (Joint Alliance for CSR)

The JAC is a cooperation of European telecommunication operators (including KPN) focusing on the social, ethical, and environmental conditions across their supply chains. In March 2022, more than ten years after its inception, the JAC (Joint Audit Cooperation) has transitioned into a legal entity with the new name of 'Joint Alliance for CSR'.

K

KPI (Key Performance Indicator)

Key performance indicators measure the performance of the organization, teams and individual employees.

KPN Mooiste Contact Fonds

This KPN foundation supports societal initiatives aimed at stimulating social contact, by combining people and technological resources to best advantage.

KPN Unlimited

Unlimited mobile data subscription with unlimited internet access on 5G in NL + 50 GB in the EU, calling and texting in the Netherlands within the EU and from NL to the EU, sharing MBs with other KPN Mobile subscriptions at the same address, an monthly adjustable, also downwards.

L

LCE

LCE refers to large corporate enterprises.

LGBTQIA+

Lesbians, gays, bisexuals, transgender, queers, intersexuals, asexuals and people with other sexual and/or gender identity. KPN Pride is an inclusive community for LGBTQIA+, and all colleagues (including heterosexuals) who are interested in LGBTQIA+ subjects related to the KPN workflow.

M

MSCI (Morgan Stanley Capital International)

Sustainable ranking intended to measure a company's resilience to long-term, financially relevant ESG risks.

M2M (machine-to-machine)

Direct communication between devices using any communications channel, including wired and wireless.

Market share

Market share is the percentage or proportion of the total available market that is being serviced by KPN. These figures are based on externally available market data, which may not be completely accurate, and may partially be based on estimates.

Mass-market

The collective term for Consumer, SME and Wholesale market.

Mbps (Megabits per second)

A megabit is a unit denoting the speed of data transfer. It is the speed in millions of bits per second. The bandwidths of broadband networks are often indicated in Mbps.

● Appendices

MHz (megahertz)

MHz is one million hertz (a unit of frequency).

Modernized site

A site is considered to be modernized when the equipment is being replaced by future-proof equipment that is also able to handle 5G traffic. The number of modernized sites is calculated by the number of sites equipped with our new mobile network technology.

MTA

MTA refers to mobile terminating access.

N

Nature inclusive

Nature inclusive refers to a way of working that also benefits nature and is working within the boundaries of nature.

NPS (Net Promoter Score)

NPS is a metric for measuring customer loyalty, based on whether customers would recommend KPN to someone else. The NPS results included in this report are measured, calculated and provided by Kantar (a leading market-research company). NPS is based on direct customer input, with the key question being whether a customer would recommend KPN to someone else. Depending on the score they give, the customer is classified as a 'promoter' or a 'detractor'. The NPS is calculated by subtracting the percentage of 'detractors' from the percentage of 'promoters'. The result is displayed as an absolute number instead of a percentage, within a range of -100 to +100. In this report, all NPS results refer to Q4 of the respective year, based on a three-month rolling average (December 2022 is based on October 2022, November 2022 and December 2022). The NPS Consumer and NPS Business reflect a weighted average based on 2020 revenues. NPS Business combines this with EBITDA margins for segments.

Non-conformities

Non-conformities are identified when a supplier is found to be in breach of any of the JAC Supply Chain Sustainability Guidelines that form the set of common requirements expected from the ICT industry.

NOPLAT

NOPLAT refers to net operating profit less adjustments for taxes.

Normalized ETR

Normalized effective tax rate (ETR) is defined as the total ETR excluding incidentals (such as return to provisions), major changes in the composition of the group, changes in (de-)recognition of deferred taxes and changes in tax law.

Notice and Take Down code

A code that specifies how organizations have to deal with reports of unlawful content on the internet. Content is removed by the host following notice. Notice and take down is widely operated in relation to copyright infringement, as well as for libel and other illegal content. We are committed to removing content related to Child Sexual Abuse Material within 24 hours after notification by our national hotline, Expertisebureau Online Kindermisbruik (Expertise Center for Online Child Abuse).

O

OECD (Organization for Economic Cooperation and Development)

An international organization that works to establish evidence-based international standards and find solutions to a range of social, economic and environmental challenges.

ONT

ONT (optical network terminal) converts light signals into electrical signals and back.

OTT (over-the-top)

In broadcasting, over-the-top content (OTT) refers to the delivery of audio, video, and other media over the internet for which no subscription to a traditional cable or satellite operator is required. A famous example is WhatsApp, which is replacing text messaging.

● Appendices

P

Product with improved circular design

Our “number of products with an improved circular design” KPI measures our progress on our circular ambitions. This cumulative number shows how many products we have improved the design of to make them more circular. We regard a product as having improved design for circularity if the design changes lead to (1) reduced use of virgin raw materials and/or (2) extended lifetime or improved resource efficiency and/or (3) improved opportunities for re-using components or recycling materials and/or (4) improved energy efficiency. We count a product from the year in which it enters KPN’s value chain of operations – that is, when we can actually use or sell it.

PSTN (Public Switched Telephone Network)

Globally used telephone network.

R

RepTrak

RepTrak has been developed by the RepTrak Company and is used as a method to calculate the reputation score of companies worldwide. The RepTrak methodology also measures the drivers of reputation and the consequences for supportive behavior. The RepTrak Company’s policy is to adjust all RepTrak scores by standardizing them against the aggregate distribution of all scores obtained from the RepTrak Company’s Annual Global RepTrak Reputation Score Standardization has the effect of lowering scores in countries that tend to over-rate companies, and has the effect of raising scores for companies in countries that tend to rate companies more negatively. All RepTrak scores are culturally standardized. This means that all RepTrak results are comparable across countries, industries and over time. Every month, the progress on the key attributes that stimulate reputation and supportive behavior is measured. The results are based on a minimum of 500 respondents per company each quarter. The data collection method is an online interview of 20 minutes. The qualified respondents have to be familiar or very familiar with the company. The RepTrak Company started using an updated cultural bias adjustment procedure on 1 January 2011, whereby the cultural adjustment analysis was rebased based on the latest reputation scores. Because KPN was already in the middle of setting KPIs, we asked the RepTrak Company to report KPN’s reputation scores using the ‘old’ cultural bias adjustment analysis. Hence, this report shows ‘unrebased’ reputation scores for KPN. KPN reports the fourth quarterly average in the report.

Return on capital employed (ROCE)

Return on capital employed is calculated by the net operating profit less adjustments for taxes (NOPLAT) divided by capital employed, on a 4-quarter rolling basis. Net operating profit is the adjusted EBITA (excluding incidentals and amortization of other Intangibles, and including restructuring costs). KPN defines capital employed as the carrying amount of operating assets and liabilities, which excludes goodwill and the other intangibles.

Radiocommunications Agency Netherlands

As from 1 January 2023 The Radiocommunications Agency Netherlands (Agentschap Telecom) called Rijksinspectie Digitale Infrastructuur (Dutch Authority for Digital Infrastructure).

Roaming

Transfer of mobile traffic from one network to another, referring to the exchange of international mobile traffic.

S

Safe data

The KPI regarding the percentage of Dutch people that believe their data is safe with KPN is based on research performed by an external marketing research company. To measure this, we conduct an annual survey in which we ask the Dutch population to choose 3 companies of which they think their data is safe with.

Scope 1

Direct greenhouse gas emissions occurring from sources that are owned or controlled by an organization.

Scope 2

Indirect greenhouse gas emissions from the generation of purchased electricity, heating or cooling consumed by an organization.

Scope 3

Other indirect greenhouse gas emissions as a consequence of the activities of the company, but occurring from sources not owned or controlled by an organization.

Service revenues

Service revenues are defined as the aggregate of connection fees, monthly subscription fees and traffic fees.

SME

SME refers to small and medium enterprises.

Stakeholder

Stakeholders are the people or organizations with an interest in the company, such as customers, employees, shareholders, suppliers, governments and media.

● Appendices

Subscriber

A subscriber is defined as an end-user with a connection to the mobile or fixed networks and/or service platforms of KPN.

SDGs (Sustainable Development Goals)

On 25 September 2015, countries within the United Nations adopted 17 goals to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved in 2030. Also known as Global Goals.

T

Tailored Solutions

Offering customization to the business customer at any point in its digital journey.

Tier standards (I to IV)

Telecommunications Infrastructure Standard for data centers. Tier levels describe the availability of data at a location. The higher the tier, the greater the availability. Tier IV is the highest level and entails independent dual-powered cooling and expected data availability of 99.995% or higher.

TTC (total tax contribution)

Total tax contribution is the total tax amount born or collected by KPN generated through its operations.

TSR (total shareholder return)

A measure of the performance of different companies' stocks and shares over time. TSR is calculated from the growth in capital from purchasing a share in the company, assuming that the dividends are reinvested each time they are paid. This growth is expressed as a percentage as the compound annual growth rate.

V

VBDO (Vereniging van Beleggers voor Duurzame Ontwikkeling)

The Dutch Association of Investors for Sustainable Development (VBDO) works to create a sustainable capital market, a market that considers not only financial criteria but also non-financial, social and environmental criteria. VBDO's vision is to increase sustainability awareness among companies and investors.

VDSL (Very High Bitrate Digital Subscriber Line)

VDSL is a successor to ADSL, which allows a much higher download and upload speed.

Virgin materials

Materials sourced directly from nature in their raw form, such as wood or metal ores. Manufacturing products using virgin materials uses much more energy and depletes more natural resources, as opposed to producing goods using recycled materials.

Virtualization

The separation of the physical hardware and the functions to run the network in software.

W

Weighted downtime

The weighted downtime concerns the average monthly time period in which a combination of KPN platforms and systems is inaccessible to clients due to major incidents, weighted by the impact of this downtime.

WBSO (Wet Bevordering Speur- en Ontwikkelingswerk)

The WBSO is a subsidy that is intended for every entrepreneur in the Netherlands who conducts research into technological innovations.

Colophon

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Forward-looking statements and management estimates

Certain of the statements we have made in this Integrated Annual Report are 'forward-looking statements'. These statements are based on our beliefs and assumptions and on information currently available to us. They include information concerning our possible or assumed future results of operations, business strategies, financing plans, competitive position, potential growth opportunities, potential operating performance or expense improvements and the effects of future legislation or regulation.

Forward-looking statements include all statements that are not historical facts and can be identified by the use of forward-looking terminology such as the words 'believe', 'expect', 'plan', 'intend', 'anticipate', 'estimate', 'predict', 'potential', 'continue', 'may', 'will', 'should', 'could', 'shall', or the negative of these terms or similar expressions.

Forward-looking statements involve risks, uncertainties and assumptions. Actual results may differ materially from those expressed in these forward-looking statements. No undue reliance should be put on any forward-looking statements. Unless required by applicable law or applicable rules of the stock exchange on which our securities are listed, we have neither the intention nor an obligation to update forward-looking statements after distribution of this Integrated Annual Report. All market share information in this financial report is based on management estimates based on externally available information, unless indicated otherwise.

The terms 'we', 'our' and 'us' are used to describe the company.

We always aim to further improve our CSR activities and reporting. Therefore, we highly appreciate your feedback, questions and comments on our Integrated Annual Report and CSR activities. Please contact mvo@kpn.com.



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