Management Discussion and Analysis Report

ECONOMIC OVERVIEW

In 2023, the global economy continued to navigate persistent challenges and evolving dynamics. Recovery from the Covid-19 pandemic, Russia's invasion of Ukraine, and the cost-of-living crisis is proving surprisingly resilient. With substantial stabilisation witnessed in 2023, global GDP growth stood at 2.9%[1], supported by a mix of monetary and fiscal policies. Early forecasts for growth in 2024 are around 3.1%[2]. Factors contributing to this moderated growth include the tightening of central bank rates to combat inflationary pressures, ongoing geopolitical tensions, and lingering uncertainties from various global events. Recent turbulence in the banking sectors of the US and Europe has highlighted vulnerabilities in the financial system, complicating the decision-making processes of central banks as they balance inflation management with financial stability. Additionally, elevated levels of debt persist, constraining the flexibility of fiscal policymakers in addressing emerging challenges.

Inflation is falling faster than expected from its 2022 peak, with a smaller-than-expected toll on employment and activity. This reflects favourable supply side developments and central banks tightening, which has kept inflation expectations anchored. However, high interest rates aimed at fighting inflation and the withdrawal of fiscal support amid high debt levels are expected to weigh on growth in 2024.

The global recovery is slowing amid widening divergences among economic sectors and regions. Global inflation[3] is expected to fall from 8.7%[3] in 2022 to 6.8%[3] in 2023 and 5.2%[3] in 2024. Major economies are projected to experience lower inflation, with advanced economies benefitting from stronger monetary policies and lower exposure to commodity prices and exchange rates. In contrast, inflation in low-income developing countries, is expected to be in double digits but is projected to decrease in 2024.

As disinflation trends continue, monetary policy tightening is tapering. However, there is a moderate risk of inflation re-accelerating in 2024. Firm global demand, driven by tight labour markets and strong worker bargaining power, alongside an upswing in key commodity prices due to supply shortages, may push central banks to tighten monetary policies further. This could lead to a significant slump in consumer and investment demand.

Risks to the current economic scenario remain prevalent, with key geopolitical flashpoints shaping global economic dynamics:

- **2024 'the election year':** 2024 is a historic election year, with elections in 50 countries. Over 2 billion voters will head to polls in countries like the US, India, Mexico, and South Africa. These markets account for about 54%[4] of the global population and nearly 60%[4] of global GDP. The US and EU elections are particularly consequential, presenting competing visions for international relations and economic policy that will fundamentally impact the global business environment.
- **Russia-Ukraine conflict:** The ongoing conflict between both nations continues to exert significant implications for the global economy. Disruptions to energy supplies, trade routes, and financial markets have heightened uncertainty and weighed on economic prospects. Sanctions imposed by Western nations further complicate the situation, contributing to regional economic contraction.
- **China-Taiwan tensions:** Tensions between the two pose risks to regional stability and global supply chains. Diplomatic efforts are underway to mitigate the potential fallout of a full-scale conflict, which could have far-reaching economic consequences, impacting global trade and investment flows. The recent victory of a US leaning political party in Taiwan has exacerbated the geopolitical crisis, compared with last year.
- **Israel-Gaza conflict:** The conflict could escalate further into the wider region, which produces about 35%[5] of the world's oil exports and 14%[5] of its gas exports. Any further escalation could result in wider military deployments and significant disruptions to global energy supplies.
- **Other factors:** Other downside risks include commodity price spikes amid geopolitical and weather shocks, persistent core inflation requiring tighter monetary policy stances and faltering growth in China.

Despite these challenges, there is cause for optimism, particularly fuelled by robust growth in emerging and developing economies. Emerging and developing Asia is expected to witness accelerated growth, with projections indicating a rise to 5.2%[6] in 2024 which is 2.1% above the global average. Growth in India, especially, is estimated to remain strong at 6.5%[6] in both 2024 and 2025.

While inflationary pressures and supply chain disruptions persist in various countries, underlying trends suggest gradual improvement. Technological advancements continue

[1] Inflation Peaking amid Low Growth (imf.org)
[2] World Economic Outlook Update, January 2024: Moderating Inflation and Steady Growth Open Path to Soft Landing (imf.org)
[3] World Economic Outlook, October 2023: Navigating Global Divergences (imf.org)
[4] Top 10 geopolitical risks for 2024 | EY - Global
[5] Oil Market Report - October 2023 – Analysis - IEA
[6] World Economic Outlook Update, January 2024: Moderating Inflation and Steady Growth Open Path to Soft Landing (imf.org)

to drive economic productivity, with a focus on fostering sustainable consumption patterns. Institutions are urged to embrace strategic digital transformations to adapt to the evolving landscape and harness the potential of the ongoing digital revolution.

INDUSTRY OVERVIEW

Despite economic uncertainties impacting the stock market and companies' financial health in 2023, IT leaders are making significant strides in modernising their IT infrastructure in preparation for the next cycle of digital innovation. Worldwide IT spending is projected to be $5[7] trillion in 2024, an increase of 6.8%[7] from 2023, per the latest forecast by Gartner.

For the first time in 2024, spending on IT Services, specifically digital transformation, will surpass spending on communications services. IT Services will become the largest segment of IT spend, expected to grow by 8.7%[7] to $1.5 trillion. This growth is driven by enterprises investing in organisational efficiency and optimisation projects. Major growth driver is the IaaS (Infrastructure as a Service) vertical, projected to reach $178[7] billion in 2024, growing at 30%.

- According to Gartner's 2024 Gartner CIO and Technology Executive Survey, 45%[8] of CIOs are collaborating with their CXO peers to co-lead digital delivery on an enterprise-wide scale.
- According to Foundry's State of the CIO Survey 2023, 54%[9] of CIOs expect their tech budgets to increase in 2024.
- The technology initiatives expected to drive the most IT investments for the next five years are security and risk management, data and business analytics, application and legacy systems modernisation, telecoms IT on a SaaS basis, machine learning and AI, and customer experience technologies.

This acceleration of digitalisation across industries has propelled the Information & Communications Technology (ICT) sector to innovate rapidly as a part of digital services, introducing cutting-edge technologies, products, and services while attracting increased investment and talent. The demand for flexible, affordable, and accessible ICT solutions continues to surge, alongside an ongoing need for enhanced computing capabilities and cybersecurity measures. These trends are fostering innovation and reshaping value chains and business models within the industry.

Businesses across diverse sectors, including finance, healthcare, heavy industries (such as steel), education, and transportation, are embracing digital technologies to engage with target audiences, streamline operations, reduce costs, and drive revenue growth. The adoption of automation, robotics, and the proliferation of data and intelligence are poised to bring about significant disruptions and opportunities for growth.

The concept of digital ecosystems has gained prominence, reshaping collaboration and competition dynamics among businesses. Many major corporations are part of extensive digital ecosystems that transcend industry boundaries, leading to widespread disruption to achieve faster digital transformation. Effective orchestrators of these ecosystems prioritise community-building and trust while ensuring mutual benefits for all participants. Collaboration within these ecosystems spans various players, including independent software vendors, system integrators, IT consultants, OEMs, value-added resellers, cloud service providers, SaaS companies, and telecom providers, with shared growth being a central focus.

Digital technology continues to drive productivity growth, with projections indicating its increasing contribution to global GDP. The evolution of network architectures is poised to incorporate a mix of terrestrial and non-terrestrial networks, facilitating seamless connectivity. This next-generation architecture will encompass terrestrial nodes, LEO satellites, High Altitude Platform Systems (HAPS), and other ad-hoc networks, paving the way for enhanced connectivity and data exchange.

Furthermore, a new computing paradigm is emerging, blending centralised and distributed computing aspects (Core and Edge). The global multi-cloud networking market is anticipated to nearly double in revenue over the next five years, while technologies like quantum computing are projected to become a $10[10] billion industry. The proliferation of consumer and business devices, including IoT sensors, will lead to a substantial increase in data volume, with estimates suggesting around 207[11] billion connected devices in 2024. This surge in data generation will drive demand for big data and analytics technology, fuelled by AI applications across various sectors such as education, retail, pharmaceuticals, and agriculture, further amplifying data usage worldwide.

In recent times, various technological developments in digital communication sector have resulted in the convergence of devices, services, and networks, and play an important role in society from the economic, social, and development perspective. There has been a massive increase in the storing, processing, and functional capabilities of network systems and consumer devices due to explosion of data sets. Digital transformation has drastically increased the computing and information delivery capabilities of communication networks resulting in the development of global-scale digital platforms which can deliver virtually any service to any person and at any place through the internet. To explore

[7] Gartner Forecasts Worldwide IT Spending to Grow 8% in 2024
[8] Technology Priorities CIOs Must Address in 2024 | Gartner
[9] CIOs Emerge as Champions of Change in 2024 State of the CIO Survey • Foundry (foundryco.com)
[10] Why Quantum Computing Will Surge in 2023 | Entrepreneur
[11] 2024 IoT And Smart Device Trends: What You Need To Know For The Future (forbes.com)

and address the challenges and opportunities presented by the rapid advancement of emerging technologies, the concept of Regulatory Sandbox is underway, which will have a vital role in promoting innovation for digital applications. Regulatory Sandbox enables live-testing of new products and devices in a controlled regulatory environment.

Policy developments in India to foster growth in the ICT Industry:

- **The Ministry of Electronics and IT (MeitY), Government of India is discussing a proposal to set up a cluster of 25,000[12] GPUs (graphic processing units)** under a public-private partnership (PPP) model, costing close to ₹8,000-10,000[12] crore. This initiative responds to petitions from Indian AI startups, companies, and top CEOs, aiming to invest in computing capacity and ensure the sovereignty of Indian data amidst multiple digital transformations. Investing in these GPUs would also support India's needs for building giant supercomputers, attracting foreign investments, and training large language models (LLMs) in multiple Indian languages.

- **The Telecommunications Act[13], 2023** ('Telecom Act') notified on December 24, 2023, is going to be a key legislation going forward for Digital India. The Telecom Act amends and consolidates the laws relating to development, expansion and operation of telecommunications services and telecommunications networks; assignment of spectrum; and matters connected therewith or incidental thereto. The Telecom Act repeals presently applicable laws namely - the Indian Telegraph Act, 1885 and other laws such the Indian Wireless Telegraphy Act, 1933 and the Telegraph Wires (Unlawful Possession) Act, 1950; and also amends the Telecom Regulatory Authority of India (TRAI) Act, 1997. It provides a legal framework for authorisation of telecommunications services, telecommunications network, possession of radio equipment; assignment and efficient utilisation of spectrum including provisions for harmonisation and re-farming; development of new technologies; and regulatory sandbox for innovation using spectrum. The Telecom Act has spectrum allocation provisions with adequate clarity and transparency. Under the Telecom Act, spectrum will be assigned by auction, except for specified uses (entries listed in First Schedule to the Telecom Act), where it will be allocated on an administrative basis. The Telecom Act also has a provision for administrative allocation of radio backhaul spectrum for telecommunications services but these cannot be used for last mile connectivity. Telecommunications may be intercepted on specified grounds, including security of the state, public order, or prevention of offences. Telecom services may also be suspended on similar grounds. The Telecom Act provides mechanisms to exercise the right of way for laying telecom infrastructure on public and private property. Measures to protect users, such as requiring prior consent to receive specified messages, and creating a do-not-disturb register, are also included to protect the interests of end users. The Telecom Act has also provided significant reduction in the quantum of penalty for violation of terms of the license.

- **India's interim Union Budget for FY 2024-25[14]** emphasised that the next five years would be critical for realising the vision of Viksit Bharat @2047 (Developed India @2047). The Budget highlights unprecedented development initiatives in technology, with the telecom sector acting as a catalyst for this transformation.

  - The Budget also focuses on providing support for domestic manufactures by increasing the allocation for BSNL's technology upgradation and for BharatNet project (Bharat Broadband Network Limited).

  - The Budget outlines a continued commitment towards the Make-In-India policy with increased funding for the production linked incentive scheme in the telecom sector. (As of February 2023, the policy has generated ₹1,330 crore[15] in investments aiming to boost domestic manufacturing, employment, capital investment and import substitution in the sector).

TELECOM MARKET AND KEY TRENDS IMPACTING OUR INDUSTRY

Over the years, enterprises around the globe have undergone multiple digital transformation initiatives. To capitalise on these developments, the telecommunications sector has also been evolving. With fundamental changes in how communications service providers (CSPs) run their networks and operations and rapidly evolving customer demands, there has been a constant shift towards a data and software-centric world. While these evolving circumstances bring certain operating challenges, they also present multiple opportunities for CSPs to differentiate themselves. This wave of developments is blurring lines in telecom's value chain, bringing together networks, cloud, and IT solutions under one roof. This consolidation is critical for optimising the operations of CSPs and meeting consumer expectations for connectivity services. The rise in technological savviness among enterprise consumers and the increased adoption of sophisticated technologies has led to intra-industry and cross industry competition across several segments of the telecom sector to provide more end-to-end solutions. This is compounded by a challenging macroeconomic landscape, geopolitical tensions, and the rapidly escalating impact of climate change.

[12] Govt considering proposal to set up 25K GPUs - IndBiz | Economic Diplomacy Division | IndBiz | Economic Diplomacy Division
[13] The Telecommunications Bill, 2023 (prsindia.org)
[14] Interim Budget 2024 – Highlights on Telecom sector | EY India
[15] Indian PLI Schemes: Promoting Growth and Innovation (investindia.gov.in)

Here are a few key trends that are shaping the telecom industry:

- **Growth strategies keep varying between traditional and emerging players:**
  - Traditional telcos are heavily focused on 5G roll-out in retail market and servicing their respective home market.
  - Emerging players are utilising software / cloud solutions for greater agility, visibility, and controllability over the infrastructure layer.
  - New age players are expanding their enterprise (B2B) operations, driven by a product-led-growth model with a focus on platform play and diversified go-to-market (GTM) channels.
  - There are limited, truly global commtech (communications technology) players like Tata Communications, which are filling gaps by developing new services, or through acquisitions organically as well as inorganically.
- **Growing competition from non-telcos:**
  - These are players from different sectors (System Integrators - SIs), security, and networking OEMs, hyperscalers, CDN providers, emerging tech, who are trying to capture a greater market share of enterprise digital transformation expenditure.
  - Enterprise (B2B) connectivity is also seeing growing **competition from non-traditional players like cloud providers** who offer their own connectivity solutions optimised for clouds, with scalability and consumption-based fees.
- **Emerging technologies are creating new revenue streams:** CSPs are continuing to create new solutions to generate incremental revenue.
  - Investment in **5G development and deployment**, now demanding a return on investment.
  - 6G, which aims to support microsecond latency communications and significantly faster speeds than 5G, is also gaining pace. Other potential applications of 6G internet include an integrated space-air-ground-sea network for truly global network coverage, and more efficient wireless access points which can handle more users simultaneously.
  - There is also innovation in networks, particularly in moving towards **software-defined, cloud-native networks and IT**.
  - **Rising interest in multi-access edge computing and private cellular networks:** Telcos are exploring multiple use cases like video monitoring, monitoring and treating illnesses, augmented reality (AR), and task automation. As telcos look to deliver these, they will face rising costs from energy consumption, network maintenance, and investments associated with reconfiguring network backhaul and backbone.
  - **Generative AI integration in telecom:** The markets expect CSPs to showcase proof of concept.
- **Increased focus on customer experience (CX) + platforms:** Telcos are providing an enhanced customer experience with platform-based ordering and life cycle management, supported by business units like CRM, customer engagement, customer experience management (CEM), and data management.
- **Potential for more competitive broadband markets:** Faster mobile and fixed wireless connections creates more viable alternatives to wired connections leading to new opportunities for bundled service offerings and business models. With ever-expanding options for high-quality communication and internet services from telecom, cable, wireless, and satellite internet providers, consumers will enjoy enhanced flexibility. Voice, messaging, and data services also face commoditisation, with diminishing returns on network innovation.
- **Increasing competition between CSPs and SIs:** Service providers are combining capabilities from the network to the business process, offering digital UX, applications interoperability, and more integrated experience as key differentiators. Customers are seeking greater simplicity, flexibility, observability, and controllability of the full cloud, networking, and security stack with ease of integration with existing ecosystem, partners, and applications.

As the telecom industry continues to navigate competition, market saturation, and commoditisation of technology, there would be an **increased focus on service delivery**. The ease of integration with existing processes and systems, will remain a critical point of differentiation.

SUSTAINABILITY IN TELECOM

Tata Communications recognises the vital role the ICT sector can play in helping enterprises achieve their Net Zero goals and promoting sustainable growth. As a digital ecosystem enabler, we believe that the hyperconnected systems and other ICT platforms can help businesses to secure a sustainable future by solving some of world's pressing issues in the following ways.

- **Tackling the climate crisis :** Technologies such as 5G, AI, and Internet of Things (IoT) can transform business operations, to meet international decarbonisation targets and help limit global warming to 1.5 °C above pre-industrial levels. Furthermore, hyperconnected systems can utilise energy efficiency and renewable energy technologies to reduce carbon emissions through real-time adjustments for efficiency and cost-effectiveness.
- **Augmenting resource efficiency :** AI, IoT and other technologies that empower hyperconnected systems can facilitate monitoring resource usage and waste management, etc. Digital tracking techniques can refurbish and reuse discarded devices and materials, reducing costs and creating a positive environmental impact.

- **Fostering Social Accountability :** Enhancing human capital through efficient systems, upgrading skillsets, and expanding knowledge, will create new capabilities for employees and communities. This 'skillification' helps adapt to the hyperconnected ecosystem without creating inequalities due to structural shifts in workforce patterns and digital workflows. It also enhances organisations' social responsibility through increased cultural intelligence and a deeper appreciation of the relationship between business and society.
- **Securing new and innovative business models :** A hyperconnected ecosystem helps build better products, improve customer experience and supplier relationships, and enhance transparency throughout the value chain. This provides sustainable competitive advantages to enterprises by building rich and interconnected communities.

Sustainability at Tata Communications

Tata Communications prioritises sustainability by implementing sustainable practices across its operations. We have defined targets and a roadmap to foster sustainability practices within our operations and value chain. The Natural Capital section of our Integrated Annual Report and the Business Responsibility and Sustainability Report ('BRSR') provides detailed information on our sustainability initiatives.

Greater competition also requires greater collaboration

The digital ecosystem is highly competitive and increasingly complex for customers to navigate due to several factors:

- Hyper-scale cloud service providers are evolving into the traditional telecom industry with bundled cloud and network offerings, investing heavily in the underlying infrastructure.
- SIs too, are competing with telecom players, expanding their managed services portfolio and overseeing customer relationships.
- Product OEMs are particularly active in the overlay services like SD-WAN.
- Pure-play technology vendors are offering niche services directly to enterprises, thereby increasing competition.
- There is increased competition from conventional telecom companies as well. Especially in India, following the Indian telecom sector consolidation, consumer mobility players have intensified their focus towards serving enterprises.

As a digital ecosystem enabler, Tata Communications places the customer's business needs at the heart of everything we do, integrating various components into cohesive solutions, thus eliminating the need for customers to manage various components individually.

ORGANISATION OVERVIEW

Tata Communications is a leading global digital ecosystem enabler. With a leadership position in emerging markets, and an infrastructure that spans the globe, we leverage our advanced solutions capabilities and domain expertise across our global network to deliver managed solutions to multi-national companies and service providers. We partner with 300 of the Fortune 500 companies with our state-of-the-art solutions, including a wide range of communication, collaboration, cloud, mobility, connected solutions, network and data services.

Tata Communications' global network includes one of the most advanced and largest submarine cable networks. We are in the Top five IP providers on five continents and offer public and private network connectivity to more than 190 countries and territories.

A part of the Tata Group, Tata Communications is powering the fast-growing digital economy. We are orchestrating the digital ecosystem to assist enterprises globally in their digital transformation journeys.

Through our global digital infrastructure, we empower business by enabling borderless growth, boosting product innovation and customer experience, improving productivity and efficiency, building agility, and managing risk.

We are simplifying the design and management of digital solutions for our customers to provide them the ability to concentrate on their core business with ease by unlocking opportunities that digital transformation provides.

Along with our globally established subsidiaries and associate companies, we serve customers across countries and additional dependent territories worldwide leveraging our technology capabilities and partnerships.

OUR CULTURE

We have refined our core values to reflect the Reimagine Strategy, focussing on six key tenets:

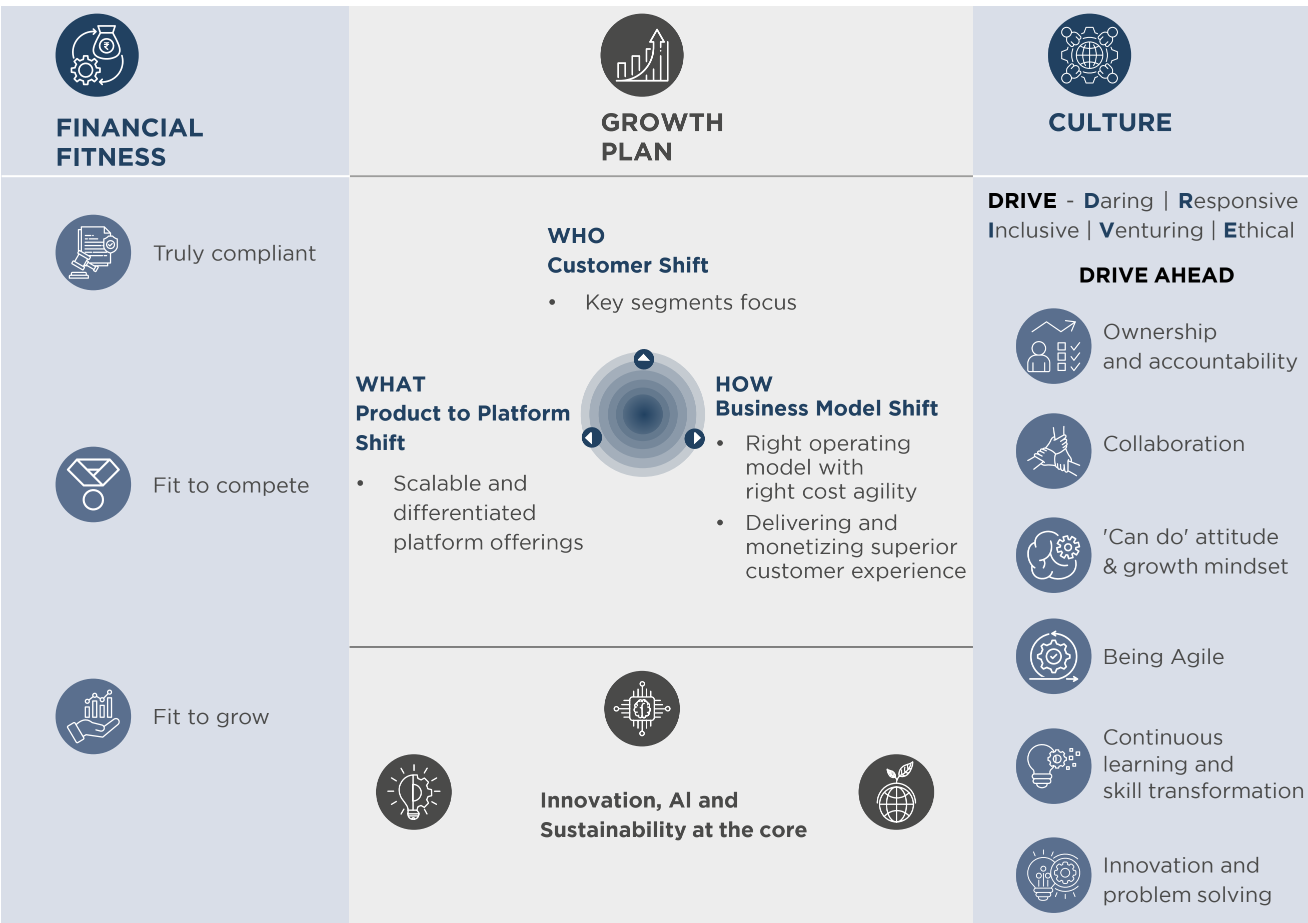
- Ownership and Accountability
- Being Agile
- Collaboration
- Continuous Learning and Skills Transformation
- Can-do attitude and Growth mindset
- Innovation and Problem Solving

In addition, we foster digital dexterity in the workplace by ensuring employees understand the importance of upskilling and its alignment with the organisation's business objectives. We actively encourage employees to explore, learn and create exceptional digital experiences for our customers. Additionally, we have created an innovation framework that inspires them to innovate.

Inclusive Leadership was introduced as an immersive learning journey to empower people managers in effectively managing a diverse workforce. This initiative includes webinars led by world-class D&I (Diversity and Inclusion) leaders, as well as customised e-learning modules featuring assignments, case studies, and online social discussions.

STRATEGY

We have defined our strategic objectives under three key strategic themes, Financial Fitness, Growth Plan and Culture.



- The strategic theme around Financial Fitness guides us to maintain a healthy balance sheet and double-digit profitable growth while maintaining stringent compliance.
- Around growth plan, we aim to increase our relevance by enhancing capabilities to drive accelerated growth from Product-to-Platform to a digital fabric.
- WHO: This articulates our goals of deepening focus, relevance and intimacy with top customers, approaching them with solution orientation and ensuring flawless execution of services to elevate them to higher revenue bands.
- WHAT: This articulates our goals towards developing scalable and differentiated platform offerings.
- Sustainability, AI & innovation, and Automation remain core focus areas to fuel growth.
- HOW: This articulates our goals associated with operational efficiency.
- The strategic theme around Culture guides us to foster a culture of collaboration, ownership, accountability, a "can do" attitude, growth mindset, agility, continuous learning, skills-transformation, innovation, and problem solving.

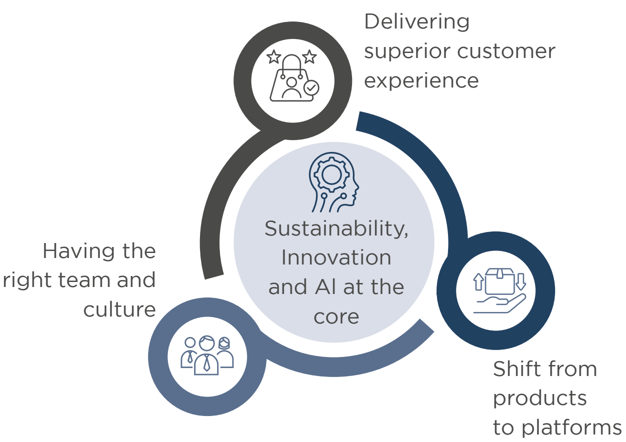
These strategic themes guide our short and long-term priorities, ensuring that we:

- Collaborate closely with our customers to create complex, seamless solutions that aggregate our capabilities and deliver real value.

- Invest in technological innovations to enhance offerings and optimise assets, driving demand for our services and expanding market presence.

For our strategy to be successful, these strategic shifts must interlock and work harmoniously to realise our shared ambition.

We have made good progress on our strategy shifts that are focused on:



CUSTOMER SEGMENTATION

We have three major customer segments:

- Enterprise
- Hyperscale cloud providers (OTTs)
- Service Providers

Each of these segments have a well-defined route-to-market (RTM) approach.

Enterprises

In the post-pandemic world, digital transformation is revolutionising business operations, accelerating the shift toward hybrid work models and e-commerce, particularly among enterprises.

Enterprises recognise the strategic implications of this transformation and are crafting digital strategies to maximise benefits from these opportunities, especially in sectors needing to reinvent themselves to overcome challenges.

Digital transformation is now the key to enabling borderless growth, boosting product innovation and customer experience, improving productivity and efficiency, building agility, and managing risk. These five customer drivers present opportunities for us to provide differentiated platforms, solutions, and services. We aim to be the partner of choice in our customers' digital transformation journeys, facilitating workforce collaboration, enterprise mobility and omnichannel access to end-customers.

To capitalise on emerging changes and opportunities, we have further segmented our enterprise market strategy, targeting specific verticals and sectors beyond media.

Service Providers

The service provider segment is driven by global data consumption growth, primarily fuelled by consumers. To support this segment, we offer an integrated set of services, including:

- Wholesale voice
- Domestic and international data connectivity - Internet backbone connectivity (IP transit)
- Value-added roaming services for mobile operators
- Carrier-specific business process outsourcing services, through platforms which are reliable for service providers and keep their business relevant and in-tune with market dynamics and end-user demands.

Hyperscale Cloud Providers (OTT players)

OTTs are a fast-growing segment which are dominating the bulk of the world IP traffic. We offer them a set of connectivity services across the globe.

- Point-to-point network connectivity in India and globally
- Sub-sea cable capacity for inter-continental needs
- Inter-city and intra-city connectivity across data centres

We enable OTTs to address the spurt in global growth in data consumption in a reliable and scalable manner.

BUSINESS EXCELLENCE

At Tata Communications, we are committed to achieving business excellence by continually developing and strengthening our key management systems and processes. Our focus is on improving performance and delivering greater value for all our stakeholders. To guide our efforts, we rely on the 'Tata Business Excellence Model' ('TBEM'), which draws inspiration from the Malcolm Baldridge Business Excellence Framework.

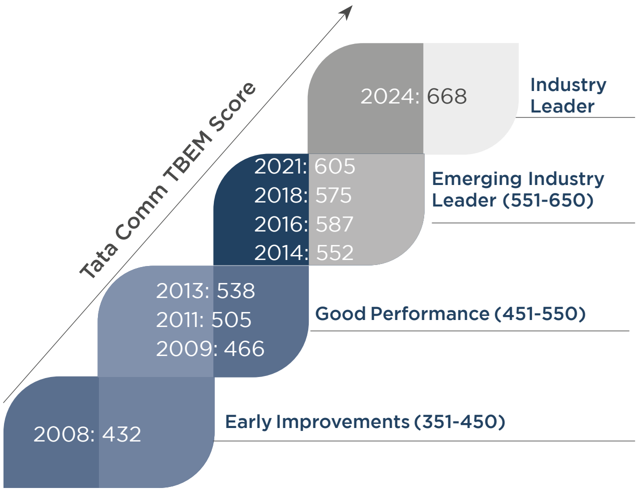
The TBEM framework helps us to analyse our business processes and to identify areas of improvement across various areas ranging from leadership, strategy, customers, analysis and knowledge management, workforce, operations and business results. Regular rigorous assessments of our key processes and associated results occur every two years, enabling us to evaluate the current maturity of our processes and results, guiding us to greater levels of excellence.

In the 2023 assessment cycle, Tata Communications underwent two simultaneous assessments:

- Business Excellence Assessment (TBEM): We achieved a TBEM score of 668, marking a significant improvement of 63 points from our previous score (on a 1000-point scale). As a result, we were recognized as an 'Industry Leader' in the TBEM Assessment.

- Data Maturity Assessment (DATOM): Our data operations received a DATOM assessment score of 3.23, reflecting a 'synergized' maturity level — an improvement over the previous score of 3.17. This consistent progress underscores our commitment to data-driven excellence across core dimensions: Data, Technology, Process, and People.

TATA COMMUNICATIONS TBEM JOURNEY



FINANCIAL PERFORMANCE

We have maintained our commitment to enhancing our products and services to better support our customers in their digital transformation journeys, while also bolstering the health of our balance sheet. Our Financial Fitness strategy prioritises profitable revenue growth, driving strong cash flows and optimising working capital efficiency.

This emphasis on sustainable, profitable growth is reflected in our our finance strategy built on the twin pillars of 'Fit to Compete' and 'Fit to Grow'. These pillars serve as the cornerstone of our efforts to enhance market capitalisation and shareholder value. With our continued focus on profitable growth and improving our balance sheet, we aim to forge new pathways of organic and inorganic growth, further solidifying our position in the market.

Financial Performance (Standalone)

Particulars	FY 2023-24	FY 2022-23	YoY growth (%)	Reasons for deviation more than 25%
Net Revenue (₹ in crores)	7,991.68	7,236.28	10.44	-
EBITDA (₹ in crores)	1,903.51	1,846.10	3.11	-
PAT (₹ in crores)	638.63	666.15	(4.13)	-
Debt Equity Ratio (in times)	0.27	0.05	448.60	Increased mainly due to issuance of unsecured debentures, short-term borrowings availed and repayment of secured debentures as per the terms.
Interest Coverage Ratio (in times)	12.24	20.50	(40.29)	Decreased mainly due to issuance of unsecured debentures, short-term borrowings availed and repayment of secured debentures as per the terms.
Current Ratio (in times)	0.43	0.67	(35.82)	Decreased mainly due to short-term borrowings availed during the period.
Debtors Turnover (in times)	6.69	6.39	4.69	-
Operating Profit Margin (in %)	10.83	11.75	(7.83)	-
Net Profit Margin (in %)	7.99	9.21	(13.25)	-
Return on Net Worth (in %)	6.46	6.76	(4.44)	-

HUMAN RESOURCES

The Human Capital section of our Integrated Annual Report elucidates the capabilities, competencies and experience of our workforce, alongside our endeavours to cultivate a comprehensive employee experience and foster a thriving work culture.

RISK MANAGEMENT

We operate across the globe and in numerous industry segments which create a complex and competitive environment for us and expose us to multiple threats and risks from internal as well as external sources. We take adequate measures and steps to mitigate risks covering all our business operations and have adopted a holistic risk management framework to oversee rigorous systems which help us to identify any material impacts on our operations. By taking numerous possible scenarios into account, we make informed decisions to sustain our market leadership globally.

Internal control systems and their adequacy

Tata Communications maintains robust internal control mechanisms, with clearly defined financial authority delegated at appropriate management levels through our Delegation of Powers policies and procedures. Our technical and financial operations are overseen by state-of-the-art technology and systems.

Enterprise Risk Management ('ERM')

Risk assessments are a key input for our annual internal audit programme and cover various businesses and functions. In tandem with internal audits, we conduct a detailed review and testing of key internal controls related to financial reporting, providing assurance in their effectiveness to the Management, Risk Management Committee, Audit Committee and the Board of Directors.

To manage risks, our Board has instituted a comprehensive ERM framework, facilitating early risk identification and proactive management. The Risk Management Committee oversees critical risks impacting organisational performance and strategic initiatives. After identifying and assessing risks across strategic, financial, operational, sectoral (market / competition), legal and regulatory, technology, ESG, etc., we define risk treatments and control measures to mitigate their impact. Additionally, we monitor events that may present opportunities, leveraging them to benefit the organisation. The responsibility for effective and efficient implementation and maintenance of the risk management system rests with the Global Management Committee ('GMC'), which comprises of the CEO, CFO and key business and operations heads. Tata Communications' risk management procedures are subject to a continual improvement process.

We adhere to a suite of established risk management policies and procedures across all business units and operations, guided by experience, industry best practices and principles of good governance. This proactive approach helps mitigate potential adverse impact on the business due to changes in the external and internal environment, aligning with our commitment to achieving corporate objectives and delivering long-term value to stakeholders.

An overview of key business risks and mitigation strategies is provided in the Integrated Annual Report.

Ongoing legal cases with risk implications

1. **Disputed Tax Matters**

   In past fiscal years, Tata Communications made certain tax holiday and expense claims based on its understanding of the tax laws, as reinforced by legal precedent and advice received from external tax counsel. In some cases, the Indian tax authorities have not accepted these claims and in a few instances, have sought to levy penalties against the Company. The disallowances and penalties have been challenged by the Company under the applicable legal appeals processes, which are at various stages of adjudication. Though no such appeal has been finally decided against us, in the unlikely event of all of the disputes culminating in judgments against us, this could have adverse financial implications on our business.

2. **License Fee Matters**

   i. In 2005, the Company had approached the Telecom Disputes Settlement and Appellate Tribunal ('TDSAT') to challenge the definition of 'gross revenue' and 'adjusted gross revenue' ('AGR') as interpreted by the Department of Telecommunications ('DoT') for the purpose of levying license fees. Some other telecom operators, mostly UAS Licensees, had also separately approached TDSAT for the same relief. TDSAT vide a common judgment dated August 30, 2007 decided the petition, which was broadly in line with the Company's arguments. However, not being satisfied on two issues viz., (i) date of applicability of the TDSAT order and (ii) disallowance by the TDSAT on deduction of certain charges passed on to other service providers, the Company had challenged TDSAT's order before the Hon'ble Supreme Court of India. Concurrently, DoT also filed an appeal against TDSAT's order. Based on submissions made by the Company, the appeals filed by the Company and the DoT were de-tagged from the other wider batch appeals. While the Company's appeal and DoT's cross-appeal remained pending, the Hon'ble Supreme Court passed its judgment on October 11, 2011, setting aside the TDSAT order dated August 31, 2007, and permitted telecom operators to approach the TDSAT for challenging the demands. This round before TDSAT culminated in the judgment dated April 23, 2015. Once again, appeals and cross-appeals were filed by the parties. The Company was not a party to these proceedings as its earlier appeals were still pending before the Hon'ble Supreme Court for adjudication. During these proceedings, which were in challenge to TDSAT judgment dated April 23, 2015, the Company's pending appeal and DoT's cross-appeal against TDSAT's judgment of August 30, 2007 were again de-tagged from the other appeals. While the Company's appeal and DoT's cross-appeal were directed to be heard separately, the Supreme Court heard the appeals filed by other Telecom Operators and DoT, against the TDSAT judgment dated April 23, 2015, and pronounced its judgement on October 24, 2019. The Company believes that this judgment of the Supreme Court is not applicable to the appeals and licenses of the Company. In August / September 2019, the Company received Show cause cum Demand notices from DoT regarding license fees for financial years 2006-07 up to 2017-18, for which the Company had submitted its responses and awaits revert from DoT. Subsequently, in October 2022, the Company received revised Show Cause cum Demand notices from DoT towards License Fee on its Adjusted Gross Revenue ('AGR') for financial years 2006-07 till 2017-18 in respect of its ILD, NLD and ISP-IT licenses. The Company had duly responded in detail to these Show Cause cum Demand notices highlighting the apparent errors in the computation of license fee dues and provided detailed submissions against the items of revenue basis which demands were raised.

Also, detailed justification had been provided as to why the Supreme Court AGR judgement dated October 24, 2019 is not applicable and also for exemption for levy of license fees on non-telecom / unlicensed revenue.

Subsequently, acting on the Company's various representations, DoT issued fresh Show Cause cum Demand notices on various dates i.e., on June 30, 2023 for financial years from 2006-07 to 2007-08, on July 5, 2023 for financial years from 2008-09 to 2012-13, on July 10, 2023 for financial year 2021-22 and on July 13, 2023 for financial years from 2013-14 to 2017-18 respectively. These latest Show Cause Cum Demand Notices gave an opportunity to the Company to make representation within 15 days of the issue of the Show Cause Cum Demand Notice. The Company made representations against the revised Show Cause Cum Demand notices. Thereafter, DoT issued Demand Notices on various dates between July and September 2023 as detailed below.

(i) Vide its demand letter dated July 20, 2023, DoT called upon the Company to pay an amount of ₹875.80 crores within 7 days, in respect of the fiancial years 2005-06 (ILD), 2006-07 and 2009-10 (NLD) and 2010-11 (ISP) stating that demands for these fiancial years have been finalized in terms of Supreme Court's 2019 AGR judgment dated October 24, 2019 and Septemebr 1, 2020. The Company challenged the said demand in Petition-16/2023, before TDSAT wherein after a detailed hearing, the TDSAT directed the DoT not to take any coercive actions against the Company till the final disposal of the Petition and the matter is pending adjudication.

(ii) Vide its demand letter dated August 8, 2023, DoT called upon the Company to pay an amount of ₹992 crores within 7 days, towards license fee in respect of the fiancial years 2006-07 and 2007-08. The Company challenged the said demand in Petition-18/2023, before TDSAT wherein after a detailed hearing, the TDSAT directed the DoT not to take any coercive actions against the Company till the final disposal of the Petition and the matter is pending adjudication.

(iii) Vide its demand letter dated August 11, 2023, DoT called upon the Company to pay an amount of ₹51 crores within 7 days, in respect of the IP-II & TCISL-ISP licenses. The Company challenged the said demand in Petition-22/2023, before TDSAT wherein after a detailed hearing, the TDSAT directed the DoT not to take any coercive actions against the Company till the final disposal of the Petition and the matter is pending adjudication.

(iv) DoT vide its demand letter dated August 17, 2023 raised certain license fee demands of ₹6,159 crores (of which, enforceable demand is of ₹3,785 crores and ₹2,374 crores are realizable based on outcome of CA-220/2021 pending before the Hon'ble Supreme Court of India) pertaining to NLD, ILD, ISP-IT and ULISP licenses of the Company for the fiancial years from 2008-2009 to 2021-2022 [excluding FY 2009-10 (NLD), FY 2010-11(ISP-IT) and FY 2021-22 (UL-ISP)]. These demands were also challenged in Petition-25/2023, before TDSAT wherein after a detailed hearing, the TDSAT directed the DoT not to take any coercive actions against the Company till the final disposal of the Petition and the matter is pending adjudication.

(v) DoT by its demand letter dated September 13, 2023 called upon the Company to pay an amount of ₹49.96 crores within 7 days, in respect of the fiancial year 2021-22 for UL-ISP. The Company challenged the said demand in Petition-26/2023, before TDSAT wherein after a detailed hearing, the TDSAT directed the DoT not to take any coercive actions against the Company till the final disposal of the Petition and the matter is pending adjudication.

Furthermore, DoT has raised Demand cum Show Cause Notice dated Jaunry 12, 2024 for the FY 2022-23 in respect of UL-ILD, NLD and ISP Service Authorisations wherein non-telecom revenue earned by the Company has been exempted from levy of License Fees except few items namely data centre revenue, CPE, dark fibre and certain cost items and has raised demand in tune of ₹77.95 crores. The Company had duly responded to the said Demand cum Show Cause Notice on Jaunry 31, 2024. DoT vide its Demand Notice dated April 16, 2024 called upon the Company to pay alleged License Fee dues of ₹77.95 crores (₹15.73 Crores under UL-NLD & ₹62.22 crores under UL-ISP licenses). The Company challenged the said demand in Petition-13/2024, before TDSAT wherein after a detailed hearing, the TDSAT directed the DoT not to take any coercive actions against the Company till the next date of hearing and the matter is pending adjudication.

ii. The Company had filed a petition before TDSAT challenging the penalty provisions under its International and National Long Distance License Agreements. Some other telecom operators had also filed petitions before TDSAT on the same issue. By a common order dated February 11, 2010, TDSAT allowed the said petitions, thereby entitling the Company for a refund of ₹115.73 crores being the penalty and interest thereon realised by DoT, in January 2008. Under TDSAT's order of May 2012, DoT refunded to the Company, an amount of ₹226.23 crores (₹115.73 crores plus interest), and simultaneously challenged the order in the Supreme Court of India, for which DoT's appeal is still pending.

iii. In 2013, the Company filed a Writ Petition before Madras High Court challenging the demand notice dated February 19, 2013, for additional license fee issued by DoT, which was issued pursuant to a special audit carried out for financial years 2006-07 and 2007-08, seeking the quashing of the said demand notice. The Madras High Court by its order dated March 1, 2013, stayed the demand. DoT has issued a fresh demand notice dated August 08, 2023 pertaining to the same period i.e., financial years 2006-07 and 2007-08 and includes the components which were part of the demand notice under challenge before the Madras Hon'ble Court. This notice, dated August 8, 2023 has been challenged by the Company before TDSAT in Telecom Petition 18/2023. TDSAT has granted a stay in favour of the Company, against the demand notices, till final disposal of the petition, thereby making this Writ Petition infructuous. Therefore, this matter has been withdrawn vide order dated January 8, 2024.

iv. In 2013, the DoT introduced a new Unified License ('UL') regime for Internet Service Providers ('ISPs') that replaced the old service-specific license regime and imposed a license fee of 8% of AGR on internet services revenue under the new UL-ISP Licenses. This created a non-level playing field among ISPs. In 2014, the Company applied to the DoT for a new UL-ISP license with the condition that the Company would not pay the new license fee on internet services revenue to maintain a level playing field with service providers not yet subject to the new license fee regime and requested an extension for the old service-specific ISP license. DoT, while extending the old license to enable the Company to complete the formalities for obtaining UL, imposed a license fee on internet services, which was challenged by the Company along with Internet Service Providers Association of India before TDSAT. At its hearing on March 25, 2014, TDSAT granted a stay on payment of license fee on pure internet services and provisionally extended the Company's license during the pendency of the litigation. TDSAT granted similar stays on petitions filed by other service providers on imposition of license fee on pure internet revenue by DoT. Vide judgement dated October 18, 2019, TDSAT allowed the petition, and the decision of DoT to include the revenue from pure internet services as part of AGR, for levy of license fee on ISPs under Unified License regime, was set aside, with direction to DoT to raise revised demands of license fee, based on the same concept of AGR as was being done in respect of ISPs holding a license under the old regime. TDSAT expressed its expectation for the DoT to expedite the process of taking a decision keeping in view the relevant recommendations of TRAI as well as the constitutional requirement of providing and safeguarding a 'level playing field' for all ISPs. DoT was further directed to take action without any delay to end the uncertainty. DoT filed a Civil Appeal before the Hon'ble Supreme Court challenging TDSAT's judgment dated October 18, 2019. The said Civil Appeal was listed on January 5, 2021 and the Supreme Court, after hearing the submissions, condoned the delay in filing of the appeal and issued notice that in the event the appeal succeeded, the respondents would be subject to such final directions as may be passed by the Supreme Court in its judgement. The Supreme Court further directed all the respondents to file their counter affidavit. While the Civil Appeal is pending, DoT on March 31, 2021, issued amendments to licences granted under the 2002 and 2007 guidelines, subjecting such licensees to payment of 8% licence fee on the revenue from pure internet services with immediate effect.

On August 6, 2021, the Company has been granted a UL with internet service authorisation with January 25, 2014 as the effective date.

In October 2021, DoT again amended the definition of Gross Revenue provided in various licenses, accepting the representations of various operators that revenue from non-licensed activities should not be included while calculating license fees.

The matter is pending before Supreme Court for final adjudication.

3. Access Costs on Cable Landing Stations ('CLS')

The Telecom Regulatory Authority of India ('TRAI') issued the International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007 ('2007 Regulations') on June 7, 2007, authorising the owners of Cable Landing Stations ('CLS') to fix their own cost-based charges for access to CLS, after obtaining approvals from TRAI to ensure that the charges were cost based. In 2012, TRAI amended the 2007 Regulations vide Amendment Regulation dated October 19, 2012, empowering itself to specify / prescribe these charges, and thereafter issued another regulation dated December 21, 2012 prescribing a uniform access charge in the form of a ceiling which led to an almost 90% reduction in the charges prevailing prior to issuance of these regulations. All these regulations were challenged by the Company by way of a Writ Petition filed in the Hon'ble High Court of Madras.

In 2016, a single judge bench of the Madras High Court, dismissed the Writ Petition filed by the Company and the Company filed an appeal before the division bench of the Madras High Court. Since the division bench refused to grant interim stay to the Company while deciding to hear the Writ Appeal finally and kept the Misc. Petition ('CMP') for interim stay pending, the Company filed a Special Leave Petition ('SLP') before the Hon'ble Supreme Court of India. The Supreme Court requested the division bench of the Madras High Court to dispose of the appeal at the earliest. The Division Bench of Madras High Court, vide its judgment dated July 2, 2018, partly allowed the Writ Appeal and quashed the schedules to the regulations which prescribed charges, kept the CLS Regulations in abeyance and further directed TRAI to rework the schedules within a period of six months. In October 2018, TRAI and other parties filed an SLP in Supreme Court against the judgement of July 2018 in which the Supreme Court ordered TRAI to re-work the figures within a period of six weeks from October 8, 2018. TRAI reworked and re-enacted the schedules and issued amendment regulations with effect from November 28, 2018.

On November 11, 2018, the Company filed another SLP before the Supreme Court challenging the jurisdiction of TRAI, which was admitted by the Supreme Court.

In December 2018, the Association of Competitive Telecom Operators ('ACTO') filed an application in Supreme Court seeking direction and interpretation that the November 28, 2018 regulations may be declared to be effective retrospectively. This application was disposed of by the Supreme Court on January 28, 2019, stating that it is not for the Supreme Court to give any interpretation and the matter may be taken up in Appellate Court and consequently remanded the matter to TDSAT.

ACTO and Reliance Jio filed their separate petitions before TDSAT in pursuance of the Supreme Court's order dated January 28, 2019. BSNL also filed a petition before TDSAT. Vide its judgement dated April 16, 2020, TDSAT dismissed the petitions filed by ACTO, Reliance Jio and BSNL in favour of the Company and held that the amendment regulations would be applicable prospectively. Aggrieved by the said order of TDSAT, ACTO, Reliance Jio and BSNL have filed their Civil Appeals before the Supreme Court challenging the TDSAT order dated April 16, 2020 and sought stay of the TDSAT order, which was not granted.

Subsequently, as there was no stay order in the matter, the Company, in consultation with Senior Advocate and Counsel, issued a disconnection notice dated July 19, 2022 against Reliance Jio wherein Reliance Jio was asked to clear its AFA (Access Facilitation Charges) outstanding at the earliest, failing which its services would be disconnected. Reliance Jio filed an application for staying the said disconnection notice before Hon'ble Supreme Court. The said application was listed before the Court of Hon'ble Chief Justice and during the course of hearing, the Company highlighted the fact that Reliance Jio has not been granted any stay in the matter and is enjoying the services without clearing its pending outstanding. The Hon'ble Supreme Court directed Reliance Jio to make a payment of ₹70 crores and subject to the payment of the said amount, directed the Company, not to disconnect the services.

The matter was adjourned and the same is pending final adjudication before Hon'ble Supreme Court.

4. **Premature termination of exclusivity and compensation**

As previously reported, the Government of India ('GoI') terminated the Company's exclusivity in the International Long Distance ('ILD') business two years ahead of schedule and allowed other players to enter the ILD business from April 1, 2002. The GoI offered the Company a compensation package for this early termination under the terms of a letter dated September 7, 2000. The GoI also gave the Company an assurance that it would consider additional compensation, if found necessary, following a detailed review of its decision to open up the ILD market.

Contrary to its assurances, on January 18, 2002, the GoI issued a further letter to the Company, unilaterally declaring that the compensation package provided in its original letter was to be treated as full and final settlement of every sort of claim against the early termination of the Company's exclusivity rights in the ILD business. The Company filed a suit in the Bombay High Court in 2005. On July 7, 2010, the Bombay High Court ruled that it did not have the jurisdiction to hear this suit, in view of the provisions of the Telecom Regulatory Authority of India Act, 1997. Aggrieved by this order, the Company instituted an appeal before a division bench of the Bombay High Court on various grounds. This appeal was admitted and is yet to come up for a hearing.

CAUTIONARY STATEMENT

Certain statements in the Integrated Annual Report, Board's Report and MDA describing Tata Communications' objectives, projections, estimates and expectations may be 'forward-looking statements' within the meaning of applicable securities laws and regulations. Actual results could differ substantially or materially from those expressed or implied. Important factors that could make a difference to our operations include economic conditions affecting demand / supply and price conditions in the domestic and overseas markets in which we operate, changes in government regulations, policies, tax laws and other incidental factors. Further, Tata Communications retains the flexibility to respond to fast-changing market conditions and business imperatives. Therefore, Tata Communications may need to change any of the plans and projections that may have been outlined in this report, depending on market conditions.