

Mobile and Fixed Broadband Prices in Europe 2022

EXECUTIVE SUMMARY

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Contact: CNECT-B3@ec.europa.eu

European Commission B-1049 Brussels

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1. INTRODUCTION

The current study provides comprehensive data on 2022 retail prices of fixed and mobile broadband offers for consumers in the EU27, the United Kingdom, Iceland, Norway, Japan, South Korea and the USA. The five largest Internet Service Providers (ISPs) and the two or three largest Mobile Network Operators (MNOs) in each country were included. Data was collected from ISPs' and MNOs' websites within a period of three weeks, from 5th to 26th October 2022.

The baskets defined in the study follow the guidelines issued by the Body of European Regulators for Electronic Communications (BEREC). The set of baskets covers 5 fixed broadband baskets of different download speeds and 5 mobile broadband baskets (for tablet/modem/data card use) of different download volumes purchased individually (standalone), 7 individual handheld mobile baskets with voice telephony and a set of 17 baskets for representative households.

The usage baskets in this study have been updated to better reflect the current market structure and consumers' demand. As the telecommunications industry evolves, new technologies, higher data demands, and changing consumer preferences shape the market. To accurately assess and compare broadband prices and offers, it is important to adapt the usage baskets to reflect these changes. By considering factors such as data allowances, download speeds, and bundled services, the updated usage baskets provide a more accurate representation of the broadband services available in the market and align with the evolving needs of consumers.

To support valid cross-national comparison of retail prices of fixed and mobile broadband offers in each bundle and basket, consistent **price normalisation procedures were applied**. These take full account of features such as one-off fees, volume limits, discounts, different contract durations and limits for telephony call time and data volumes.

2. RESULTS

2.1. Results: Fixed broadband baskets

The baskets defined here cover:

- Standalone fixed broadband (with no telephony, TV, or mobile services) in five speed categories, from very low (10 30 Mbps) to very high (≥ 1 Gbps).
- **Double Play with fixed telephony** in four speed categories, from low (30 100 Mbps) to very high (≥ 1 Gbps).
- Triple Play with fixed telephony and TV. The range of fixed broadband varies from low (30 100 Mbps) to very high (≥ 1 Gbps).

2022 prices across the EU for fixed broadband offers

Figure 1 shows the average lowest prices across the EU for each of the three service bundles and for the four speed baskets above 30 Mbps. The impact on prices of adding value through increased speed is clearly visible, with a distinction in the ≥ 1 Gbps baskets (see section 4.1.8 for a discussion of "speed premiums"), as is the increase in price from bundling television and

fixed telephony services with standalone internet (see section 4.1.9 for details on the "bundle premiums").1

60 50 40 **EUR PPP** 30 20 10 0 Double Play | Triple Play Standalone Telephony ■≥30 - <100 €19.96 €27.84 €36.12 **■** ≥100 - <200 €37.20 €21.32 €28.73 **■** ≥200 - <999 €24.94 €32.60 €40.37 ■ ≥ 1 Gbps €35.17 €43.73 €50.65

Figure 1 – EU27 average of the lowest prices for each service bundle across four speed baskets

Figure 2 shows the lowest price found in the EU for each service bundle and speed basket. Standalone fixed internet delivered at more than 30 Mbps can be obtained at a normalised price of only 8.24² EUR/PPP per month. The Double Play service bundles start from 14.40³ EUR/PPP per month while the lowest price in Europe for Triple Play service bundles with over 30 Mbps speed is provided at 19.99 EUR/PPP ⁴.

¹ Please note that ≥ 1 Gbps offers are not available in all EU27 countries.

² This offer is available in Finland.

³ This offer is available in Bulgaria.

⁴ This offer is available in Lithuania.



Figure 2 - EU27 absolute lowest prices for each service bundle across four speed baskets

To provide a more comprehensive understanding of the pricing trends without introducing the distraction of small price differences, four clusters of countries were identified⁵ in each category of offer, that is, for each combination of service bundle and speed basket, based on the prices of the least expensive offer in the bundle/basket category in each country.

A dark green symbol (1) in a bundle/basket category stands for countries in the cluster with inexpensive offers for that category. Light green (2) symbols indicate clusters of relatively inexpensive, orange symbols (3) of relatively expensive price levels. A red symbol (4) stands for countries in the expensive cluster of offers in a bundle/basket category. A dash signifies that no offer was collected in 2022 in that offer category and country.

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k-means clustering was used with k=4; observations (offer categories) are assigned to clusters so as to minimise the average squared Euclidean distance of observations to each cluster centroid.

Figure 3 – Price variation per offer category across the EU, country clusters (fixed broadband)

| | Single Play | | | | | Double Play | | | | Triple Play | | | |
|--------------|-------------------------------|--------------------------------|---------------------------------|---------------------------------|-------------------------|---|---|---|---|--|--|---|---|
| | ≥10 - <30 Mbps fixed internet | >30 - <100 Mbps fixed internet | ≥100 - <200 Mbps fixed internet | ≥200 - <999 Mbps fixed internet | ≥ 1 Gbps fixed internet | ≥30 - <100 Mbps fixed internet with fixed phone | ≥100 - <200 Mbps fixed internet with fixed phone | ≥200 - <999 Mbps fixed internet with fixed phone | ≥ 1 Gbps fixed internet with fixed phone | ≥30 - <100 Mbps fixed internet with fixed phone and TV | ≥100 - <200 Mbps fixed internet with fixed phone and TV | ≥200 - <999 Mbps fixed internet with fixed phone and TV | 1 Gbps fixed internet with fixed phone and TV |
| RO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| LT | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 1 | 1 | 1 | 1 | 1 |
| FI | 1 | 1 | 1 | 1 | 2 | - | - | - | - | - | - | - | - |
| LV | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 1 |
| BG | 1 | 0 | 2 | 0 | 2 | 1 | 0 | 2 | 2 | 1 | 1 | 2 | 2 |
| HU | 2 | 2 | 2 | 0 | 1 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 |
| SK | 2 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 0 |
| CZ | 2 | 1 | 1 | 1 | 1 | 1 | 0 | 2 | 2 | 2 | 2 | 2 | 2 |
| PL | | | | | | | | | | | | | |
| | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 0 |
| ES | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 1 |
| SI | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| IT | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | 2 | 2 | 1 |
| FR | 4 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 |
| DE | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 |
| LU | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | 4 | 3 | 3 | 2 |
| HR | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 |
| SE | 3 | 2 | 2 | 2 | 3 | 1 | 2 | 3 | 3 | 4 | 3 | 4 | 3 |
| DK | 3 | 2 | 2 | 1 | 1 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 |
| CY | 4 | 4 | 4 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 |
| EL | 4 | 3 | 4 | 4 | 4 | 1 | 2 | 3 | 4 | 2 | 2 | 3 | - |
| MT | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 2 |
| EE | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 4 |
| ΑT | 3 | 2 | 4 | 3 | 4 | 2 | 4 | 4 | 4 | 3 | 3 | 4 | 4 |
| ΙE | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 8 | 3 | 4 | 4 | 4 | 3 |
| NL | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 3 |
| PT | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 |
| BE | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | | | | | | | | | | | | |
| • | 40.77 | 44.00 | 44.00 | 45.40 | 00.50 | | r Centres | | 04.00 | 22.24 | 22.22 | 04.57 | 04.00 |
| 1 2 | 10.77 | 11.90 | 11.92 15.88 | 15.42 | 20.58 30.32 | 21.31 28.51 | 18.08 25.60 | 14.40 25.13 | 24.90 | 22.84 | 23.39 32.17 | 24.57 | 31.99 45.35 |
| 3 | 14.34 19.22 | 16.42 23.28 | 22.65 | 26.02 32.55 | 40.89 | 35.64 | 32.18 | 36.05 | 33.63 47.36 | 31.42 37.71 | 42.83 | 31.28 42.59 | 62.30 |
| 4 | 26.60 | 29.51 | 29.54 | 36.37 | 71.69 | 44.35 | 42.77 | 51.50 | 86.17 | 50.48 | 54.29 | 56.58 | 101.32 |
| - | | | ' | | | | cases in e | | | | | | |
| 1 | 4 | 7 | 6 | 10 | 8 | | 5 | 1 | 5 | 5 | 5 | 3 | 9 |
| 1 2 3 | 6 | 6 | 6 | 7 | 8 | 8 | 11 | 12 | 10 | 9 | 10 | 9 | 8 |
| 3 | 7 | 9 | 5 | 7 | 8 | 3 | 5 | 9 | 7 | 5 | 6 | 7 | 5 |
| 4 | 10 | 5 | 10 | 3 | 3 | 3 | 5 | 4 | 4 | 7 | 5 | 7 | 3 |

Dark green symbol ① – inexpensive cluster
Light green symbol ② - relatively inexpensive cluster
Yellow symbol ③ – relatively expensive cluster
Red symbol ④ – expensive cluster

The following general country groupings can be observed:

- Overall, Romania and Lithuania have the most attractive prices for broadband internet in the EU. All the offers in Romania belong to the cluster of the least expensive in their respective baskets.
- Finland, Latvia, Bulgaria and Hungary follow. Spain and Slovenia have low prices especially for Double and Triple Play offers.
- Greece and Malta tend to have attractive prices for lower bandwidth Triple Play offers, but also tend to be in the cluster of more expensive countries for Single Play offers.
- Ireland, the Netherlands, Portugal and Belgium have no offers in the inexpensive or relatively inexpensive clusters.

Development of prices

- On the EU level, there has been an overall decrease in prices compared to last year for offers in the speed categories of ≥100 Mbps.
- A price decline was observed for Single Play 30 100 Mbps, while Double Play and Triple Play offers experienced a slight increase (1.69% and 2.42%, respectively) in comparison to last year.
- The most notable change can be observed in Single Play offers with speeds ranging from 100 Mbps to 999 Mbps, where prices have decreased by approximately 9%.
- In the gigabit category, Triple Play offers have experienced a decrease as prices dropped by approximately 4.14%.

The EU compared with selected non-EU countries

The comparison of EU27 prices with prices in selected non-European countries in 2022 yielded the following picture:

- The EU27 region tends to offer the most affordable prices, particularly for Single Play offers below 999 Mbps.
- Japan stands out with the most attractive prices for gigabit Single, Double, and Triple Play offers, closely followed by the EU27.
- In comparison to the EU27 region, consumer prices across all baskets in Korea, Norway, Iceland and the USA are more expensive.

2.2. Results: Converged broadband baskets

In line with BEREC guidelines, converged baskets include both mobile broadband and household requirements for fixed broadband as defined in the representative household (HH) baskets from HH9 to HH17 (see section 3.1.1, Table 3. Overview of all consumer baskets and basket elements). All baskets include fixed and mobile voice and two of the baskets are for mobile service with two active SIM cards. The use of 2 SIM cards is to be interpreted as representing the demand of a two-person household, where everyone uses one SIM card with their own unique usage profile. Normalisation of prices assumes usage of twice the Mobile Broadband range and twice the Mobile Voice range shown. If a household needed both mobile and fixed broadband, and there was no converged basket offer available to meet their requirements, synthetic offers were created by combining different offers to fulfil the customer's needs for the given basket.

2022 prices across the EU for fixed broadband offers

Figure 4 – Price variation per offer category across the EU, country clusters (converged offers)

| | HH9 | HH10 | HH11 | HH12 | HH13 | HH14 | HH15 | HH16 | HH17 | |
|---|--|---|---|---|---|---|--|---|--|--|
| | 230 - <100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 5 GB mobile | ≥100 - <200 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 5 GB mobile | ≥100 - <200 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 10 GB mobile | ≥100 - <200 Mbps fixed internet with fixed phone and TV with 1- SIM, 100 calls 10 GB mobile | >200 - <999 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 10 GB mobile | ≥200 - <999 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 20 GB mobile | >200 - <999 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 20 GB mobile | ≥200 - <999 Mbps fixed internet with fixed phone and TV with 2- SIM, 300 calls 20 GB mobile | ≥ 1 Gbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 20 GB mobile | |
| RO | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| LT | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | |
| BG | 1 | 1 2 | 2 | 1 2 2 2 | 1 | 1 | 2 | 2 | 3 | |
| ES | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | |
| PL | 2 | 2 | 2 | 2 | 1 | 0 | U | 1 | 2 | |
| SI IT | 2 | 2 | 3 | | 1 | 1 | 0 | 1 2 | 2 | |
| FR | 3 | 3 | 3 | 2 | 2 | 1 | 2 | • | 2 | |
| LV | 3 | 3 | | 2 2 3 3 3 3 3 3 3 3 3 3 | 2 | 2 | | 1 3 3 3 | 2 | |
| SK | 2 | 2 | 3 4 3 3 | 3 | 3 | 2 2 | 3 | 3 | 2 | |
| CY | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | |
| DK | 2 3 3 4 2 3 3 3 | 3 | 3 | 4 | 3 | 1 | 4 | 3 | 3 | |
| SE | 2 | 2 | 3 3 | 3 | 3 | 2 | 4 | 3 | 3 | |
| DE | 3 | 3 | 3 | 3 | 3 | 2 2 3 | 3 | 3 | 3 | |
| IE | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | |
| LU MT | 2 | 2 | 3 | 6 | 2 | 3 | 4 | 4 | 0 | |
| HR | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 2 4 3 3 | 3 | |
| EE | 2 | 3 | 3 | 3 | 3 | 8 | 4 | 3 | 4 | |
| HU | 3 | 3 | 4 | 3 | 3 | 2 | 3 | 4 | 3 | |
| AT | 3 | 4 2 3 3 3 4 | 3 4 3 4 3 3 | 3 | 3 3 3 3 3 | 2 3 2 2 3 | 4 | 4 3 | 3 3 3 4 4 | |
| EL | 3 | 3 | 3 | 3 | 3 | | 4 | 4 | - | |
| CZ | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | |
| NL | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | |
| PT | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | |
| BE FI | 4 | 4 | 4 | - | 4 | 4 | - | 4 | 3 | |
| • | _ | - | _ | | er Centres | | | _ | | |
| • | 23.64 | 24.57 | 22.02 | 31.95 | 32.20 | 37.13 | 36.27 | 49.62 | 28.30 | |
| 2 | 34.00 | 33.88 | 41.20 | 42.71 | 44.97 | 54.16 | 45.53 | 67.98 | 51.59 | |
| 1 2 3 | 41.29 | 41.75 | 56.92 | 55.39 | 51.55 | 64.42 | 62.05 | 91.43 | 76.18 | |
| 4 | 53.94 | | 76.92 | 67.17 | 65.33 | 79.76 | 74.22 | 107.61 | 129.41 | |
| - | Number of cases in each cluster | | | | | | | | | |
| 1 | 3 | 3 | 1 | 3 | 7 | 9 | 3 | 5 | 1 | |
| 1 2 3 4 | 8 | | 5 | 7 | 5 | 9 | 5 | 5 | 9 | |
| 3 | 11 | 11 | 13 | 11 | 11 | 6 | 8 | 11 | 13 | |
| 4 | 4 | 5 | 7 | 5 | 3 | 2 | 10 | 5 | 2 | |



The following general country groupings can be observed:

- Romania has the most attractive prices for converged offers in the EU. All the offers in this country belong to the least expensive cluster.
- The majority of offers in Lithuania and Bulgaria belongs to the cluster of the least expensive in the respective baskets.
- Spain, Poland, Slovenia, and Italy follow. Spain and Poland have particularly low prices for Triple Play and Quadruple Play offers in the 200 999 Mbps speed category.
- Greece, Czechia, the Netherlands, Portugal, and Belgium have no offers belonging to the two less expensive clusters.

Development of prices

On the EU level, prices have become lower than last year among all household baskets in each usage/speed category.

- The most significant change in pricing can be observed in basket HH11 (100 200 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 10 GB mobile) with a 27.1% price drop.
- Similarly, HH13 (200 999 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 10 GB mobile) has seen a substantial average price decrease of 24.2%.
- The price decrease for the rest of the household baskets ranges from 14.6% in HH9 (30 100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 5 GB mobile) to 19.2% in HH16 (200 999Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 20 GB mobile).

The EU compared with selected non-EU countries

Prices for all converged bundles are lower in the EU27 compared to the USA, Norway, Iceland, Japan, South Korea, apart from the UK, which consistently shows lower prices in eight out of nine usage baskets. The EU27 shows similar price patterns with the UK forthree of the converged bundles. The USA, Norway and Japan exhibit significantly higher prices than the rest of the countries among converged bundles.

2.3. Results: Mobile broadband baskets

The baskets defined here cover:

- Mobile data-only baskets in five different data volume categories, ranked from very low (1 GB) to very high (50 GB).
- Handset-based baskets defined in seven different baskets by the volume of data (GB) and the mobile voice telephony (number of calls) the average user requires. The values for Low, Medium, and High mobile voice consumption in number of calls are 30 calls, 100 calls and 300 calls, respectively.

2022 prices across the EU for fixed broadband offers

Light green symbol 2 - relatively inexpensive cluster
Yellow symbol 3 - relatively expensive cluster
Red symbol 4 - expensive cluster

Figure 5 - Price variation per offer category across the EU, country clusters (mobile broadband)

| MBB1 | MBB2 | MBB3 | MBB4 | MBB5 | I1 | 12 | 13 | 14 | 15 | 16 | 17 |
|------------------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|--------------------------------|--------------------------------|----------------------------------|-------------------------|----------------------------------|---------------------------------|----------------------------------|
| | | | | | | | | | | | |
| ω. | <u>ر</u> | <u>≈</u> | S | <u>s</u> | v | ς I | calls | calls | calls | <u>s</u> | 50 GB mobile data with 100 calls |
| eg | <u>a</u> | s | o ca | g | <u>=</u> | | 00 | 00 | 00 | ა 0 | 00 |
| 2 | 2 | ا <u>د</u> | r u | Ę. | 30 | 30 | h 1 | ë - | ë - | e | h 1 |
| vith | l if | wit | wit | ×iŧ | vith | ۸ith | wit. | ×it | , wit | × × | × |
| ıta v | ıta v | data | data | data | ıta v | ıta v | data | data | data | data | data |
| e d | e d | e e | ile | ie e | e da | e da | ie | ie | ie | <u>ë</u> | ile |
| GB mobile data with no calls | ligo | don | nob | GB mobile data with no calls | opij | obil | don | GB mobile data with 300 | don | don | nob |
| Bm | Bm | l gB | 3B r | 3B. | Bm | B B | 3B1 | 3B1 | 3B1 | 98 | 3B. |
| 1 | 5 GB mobile data with no calls | 10 GB mobile data with no calls | 20 GB mobile data with no calls | 50 | 1 GB mobile data with 30 calls | 5 GB mobile data with 30 calls | 10 GB mobile data with 100 calls | 20 | 50 GB mobile data with 300 calls | 20 GB mobile data with 30 calls | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 0 | 1 | 2 | 1 |
| 2 | 2 | 0 | 1 | 0 | 2 | 1 | 2 | 2 | 2 | 1 | 1 |
| 1 | 2 | 1 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 2 | 1 |
| 1 | 2 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 0 | 2 | 1 |
| 2 | 3 | 1 | 2 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 2 |
| 4 | 3 | 2 | 2 | 2 | 4 | | 2 | 1 | 1 | 2 | 1 |
| 2 | | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 3 | 2 |
| 4 | 4 | 0 | 2 | 2 | | 3 | 2 | 1 | 1 | 2 | 1 |
| 3 | 3 | 2 | 2 | 3 | 3 | 0 | | | | 2 | 1 |
| 1 | 1 | 2 | 3 | 4 | 1 | 2 | 1 2 | 3 | 3 | 3 | 3 |
| 1 | 2 | 2 | 3 | 4 | 1 | 2 | 2 | 3 | 3 | 4 | 3 |
| 2 | 3 | 2 | 3 | 4 | 3 | 2 | 1 | 2 | 3 | 3 | 3 |
| 2 | 3 | 2 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 3 | 2 |
| 3 | 4 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| 1 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 2 |
| 3 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 3 |
| 2 | 2 | 1 | 2 | 3 | 4 | 3 | 2 | 3 | 4 | 4 | 4 |
| 2 | 4 | 3 | 3 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 3 |
| 2 | 4 | 4 | 3 | 4 | 1 | 3 | 3 | 3 | 3 | 4 | 3 |
| 3 | 3 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 3 |
| 1 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 |
| 4 | 4 | 3 | 4 | 4 | 4 | 3 | 2 | 3 | 3 | 4 | 3 |
| 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| 2 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 1 | 1 1 | | | uster Cen | | | | | | |
| 3.1 | | | 6.10 | 4.86 | 4.11 | 5.21 | 8.31 | 10.65 | 12.54 | 4.86 | 11. |
| 5.2 | | - | 20.03 | 12.06 | 6.50 | 8.69 | 12.76 | 19.63 | 22.07 | 11.64 | 20. |
| 7.8 | | | 20.03 | 19.24 30.77 | 9.18 12.15 | 12.47 19.00 | 21.49 36.80 | 27.92 42.16 | 30.05 43.54 | 19.95 28.76 | 30.7 |
| 10.3 | 55 13.09 | 22.06 | 33.03 | | r of cases | | | 42.10 | 43.34 | 20.70 | 44.0 |
| | 8 3 | 6 | 3 | 2 | 5 | 3 | 7 | 8 | 8 | 2 | |
| <u>-</u> | 10 5 | | 11 | 8 | 5 | 8 | 13 | 8 | 6 | 8 | |
| | 5 10 | - | 11 | 8 | 9 | 12 | 5 | 9 | 8 | 7 | |
| | 4 9 | | 2 | 9 | 8 | 4 | 2 | 2 | 5 | 10 | |

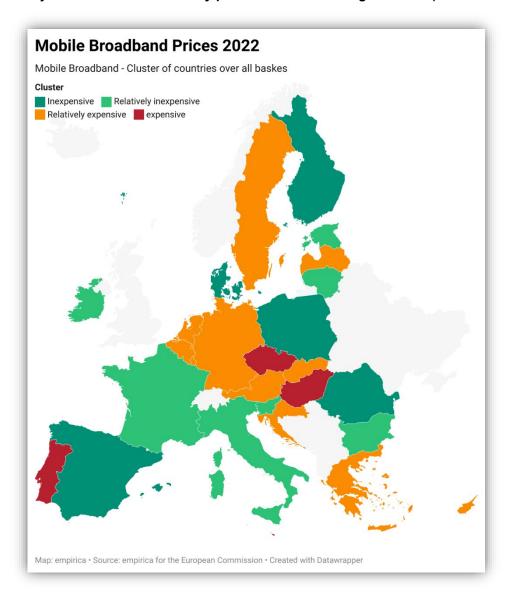
- The most inexpensive offers among all usage baskets are found in Romania, Denmark and Finland, with an average cluster membership score⁶ of 1.5 or less. Romania has all its offers belonging to the inexpensive cluster.
- The **relatively inexpensive** cluster is made up of Poland, Spain Slovenia, Italy, Lithuania, France, Ireland, Bulgaria, Estonia, and Luxembourg. These countries have an average cluster membership score of 2.5 or less. Poland, Spain, and Slovenia have at least four offers belonging to the inexpensive cluster.
- France and Ireland show particularly attractive prices for the high and very high individual handheld mobile baskets (20 GB and >100 voice calls).
- The relatively expensive offers are found in the following countries: Luxembourg, Austria, Cyprus, the Netherlands, Sweden, Slovakia, Greece, Belgium, Germany, Latvia, and Croatia.
- The expensive cluster is made up of Portugal, Malta, Hungary, and Czechia.

Averaging all the baskets of mobile broadband usage and distinguishing the four main clusters, we get the pattern shown in the map, Figure 6 below.

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The average cluster membership score is the average of the cluster memberships (ranging from 1 to 4) of a country across all twelve baskets.

Figure 6 - Major clusters of countries by price level over all usage baskets (mobile broadband)



Development of prices

According to the information provided in the table below, mobile broadband prices have decreased compared to October 2021. On average, prices for mobile broadband across all baskets are approximately 15% lower. The first two usage baskets have experienced significant price declines in comparison to the previous year. Specifically, the EU average price for the 1 GB basket has experienced a decline of 18.6%, while the 5 GB basket has seen a decline of 13.4%. These price reductions indicate more affordable mobile broadband options for consumers with lower data consumption. Furthermore, it is evident that the most considerable decrease in EU average mobile broadband prices is observed in the highest data allowance basket, with prices approximately 24.1% lower compared to the previous year. This indicates a substantial reduction in prices for mobile broadband plans with higher data allowances, offering more value for consumers.

Table 1 – Development of mobile broadband prices

| Basket | Least expensive [EUR/PPP] | EU27 average 2022 [EUR/PPP] | EU27 average 2021 [EUR/PPP] | Variation 2022/21 |
|--------|------------------------------|--------------------------------|--------------------------------|----------------------|
| 1 GB | 1.81 | 5.88 | 6.97 | -18.6% |
| 5 GB | 3.81 | 9.43 | 10.69 | -13.4% |
| 10 GB | 3.81 | 11.64 | 12.78 | -9.8% |
| 20 GB | 3.81 | 16.15 | 17.38 | -7.6% |
| 50 GB | 3.81 | 19.89 | 24.69 | -24.1% |

Comparing the average prices of handset baskets in the EU27, we observe a consistent decrease in prices across all baskets, ranging from -3% (1 GB, 30 calls) to -22% (10 GB, 100 calls) compared to 2021.

Table 2 - Development of mobile broadband and voice prices

| Basket | Least expensive [EUR/PPP] | EU27 average 2022 [EUR/PPP] | EU27 average 2021[EUR/PPP] | Variation 2022/21 |
|------------------|------------------------------|--------------------------------|-------------------------------|----------------------|
| 1 GB, 30 calls | 3.71 | 8.63 | 8.85 | -3% |
| 5 GB, 30 calls | 3.81 | 11.52 | 13.44 | -17% |
| 10 GB, 100 calls | 3.81 | 15.02 | 18.29 | -22% |
| 20 GB, 300 calls | 4.85 | 21.41 | 24.69 | -15% |
| 50 GB, 300 calls | 4.85 | 25.59 | 29.55 | -15% |
| 20 GB, 30 calls | 3.81 | 19.64 | 23.72 | -21% |
| 50 GB, 100 calls | 3.81 | 24.86 | 29.45 | -18% |

The EU compared with selected non-EU countries

Mobile Broadband prices in the EU27 are on average more expensive than in the UK, among all usage baskets (apart from the lowest basket – 1 GB, 30 calls), and more expensive than in Iceland for the handset-based baskets. South Korea, Japan and the USA have significantly higher prices for the majority of mobile broadband usage baskets.

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