

Mobile and Fixed Broadband Prices in Europe 2020

FINAL REPORT and **EXECUTIVE SUMMARY**

A study prepared for the European Commission
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by:



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Table of contents

Abstract.....	6
0.1 English.....	6
0.2 Français.....	8
1. Executive Summary.....	10
1.1 English.....	10
1.1.1 Introduction.....	10
1.1.2 Results: Fixed broadband baskets	10
1.1.3 Results: Converged broadband baskets.....	14
1.1.4 Results: Mobile broadband baskets.....	17
1.2 Français.....	22
1.2.1 Introduction.....	22
1.2.2 Résultats : Paniers à large bande fixe	22
1.2.3 Résultats : Paniers convergents à large bande.....	26
1.2.4 Résultats : Paniers du haut débit mobile	29
A note on the limitations of the study.....	34
2. Introduction.....	35
2.1 Overall study objectives.....	35
2.2 Monitoring internet prices in Europe.....	35
2.3 Methodological approach.....	36
3. The study methodology.....	38
3.1 The BEREC approach.....	38
3.1.1 Basket definition	38
3.1.2 Fixed access and converged baskets.....	39
3.1.3 Mobile broadband baskets.....	42
3.1.4 Individual handheld baskets.....	43
3.2 Provider and country sampling	43
3.2.1 Country sample.....	43
3.2.2 Sample of fixed broadband operators	44
3.2.3 Sample of mobile broadband operators.....	44
3.3 Data collection and product inclusion	45
3.3.1 Inclusion by source and target customer.....	45
3.3.2 Inclusion by technology and service bundle	45
3.3.3 Inclusion by price and quality.....	46

3.3.4	Excluding bundled devices	47
3.3.5	List of parameters per offer	48
3.4	Price normalization.....	49
3.4.1	Overall approach	49
3.4.2	Normalisation of broadband services.....	50
3.4.3	Normalisation of telephony and TV services.....	51
3.4.4	Normalisation of fixed charges and discounts with SCD.....	55
3.4.5	Bundled and added equipment.....	57
3.4.6	Rental, maximum charge and contract duration.....	58
3.5	Data collected and cheapest offer	58
3.6	Quality assurance	58
4.	Key findings.....	60
4.1	Fixed prices at a glance.....	60
4.1.1	2020 prices across the EU for fixed broadband offers.....	60
4.1.2	Who is best in class in the EU?	64
4.1.3	Single Play (standalone internet) across Europe (FBB1-5).....	65
4.1.4	Double Play with fixed telephony across Europe	70
4.1.5	Triple Play across Europe (HH5-8)	74
4.1.6	Findings from the map visualization	78
4.1.7	Price trends	78
4.1.8	The bigger picture: the EU in the world.....	79
4.1.9	Speed premiums.....	81
4.1.10	Bundle premiums.....	84
4.2	Converged household baskets	90
4.2.1	2020 prices across the EU for converged (fixed & mobile) offers	90
4.2.1.1	Who is best in class in the EU?	93
4.2.2	Basket HH9 – 12-30 Mbps, fixed voice, 1 SIM, 1 GB, 30 calls.....	94
4.2.3	Basket HH10 – 30-100 Mbps, fixed voice, 1 SIM, 1 GB, 30 calls.....	95
4.2.4	Basket HH11 – 30-100 Mbps, fixed voice, 2 SIM, 2 GB, 100 calls.....	96
4.2.5	Basket HH12 – 30-100 Mbps, fixed voice, 1 SIM, 2 GB, 100 calls, TV	97
4.2.6	Basket HH13 – 100-200 Mbps, fixed voice, 1 SIM, 2 GB, 100 calls.....	98
4.2.7	Basket HH14 – 100-200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls.....	99
4.2.8	Basket HH15 – 100-200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls, TV	100
4.2.9	Basket HH16 – 100-200 Mbps, fixed voice, 2 SIM, 5 GB, 300 calls, TV	101
4.2.10	Basket HH17 – >200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls, TV	102

4.2.11	Price trends	103
4.2.12	The bigger picture: the EU in the world.....	103
4.3	Mobile prices at a glance	107
4.3.1	2020 prices across the EU for mobile broadband offers.....	107
4.3.2	Who is best in class?	110
4.3.3	Basket MBB1 – 0.5 GB.....	111
4.3.4	Basket MBB2 – 1 GB.....	112
4.3.5	Basket MBB3 – 2 GB.....	113
4.3.6	Basket MBB4 – 5 GB.....	114
4.3.7	Basket MBB5 – 20 GB.....	115
4.3.8	Basket I1 – 0.5 GB, 30 calls.....	116
4.3.9	Basket I2 – 1 GB, 30 calls.....	117
4.3.10	Basket I3 – 2 GB, 100 calls.....	118
4.3.11	Basket I4 – 5 GB, 300 calls.....	119
4.3.12	Basket I5 – 20 GB, 300 calls.....	120
4.3.13	Basket I6 – 5 GB, 30 calls.....	121
4.3.14	Basket I7 – 20GB, 100 calls.....	122
4.3.15	Are performances similar between data-only and handset-based usage baskets?	123
4.3.16	Price trends	124
4.3.17	The bigger picture: the EU in the world.....	125
5.	ANNEX I - List of Internet Service Providers (ISPs) and Mobile Network Operators (MNOs) included in the study sample	129
6.	ANNEX II – Country Reports.....	133

Abstract

0.1 English

The current study provides comprehensive data on 2020 retail prices of fixed and mobile broadband offers for consumers in the **EU27, the UK, 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 ISP and MNO websites within a period of three weeks, from **5th to 25th October 2020**.

The baskets defined in the study fully conform to the guidelines issued by the Body of European Regulators for Electronic Communications (BEREC). The set of baskets cover 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 (stand-alone), 7 individual mobile handheld baskets with voice telephony and a set of 17 baskets for representative households.

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.

Applying the normalised prices in Euro in Purchasing Power Parity (€/PPP), the **least expensive countries** for fixed broadband in the EU in 2020 were **Bulgaria, Latvia, Romania and Lithuania**. **Prices differ considerably** between the least and most expensive countries in the EU.

Fixed Broadband prices show mixed trends in 2020.

- Retail prices for **Single Play offers increased** in the **12-30 Mbps** (4.24%), while prices in the **30-100 Mbps** basket remained stable (+0.19%). A **significant decrease** is observed in the **100-200 Mbps** (-4.33%) basket and in the top speed **basket >200 Mbps** (-18.45%).
- Retail **prices for bundles, which include fixed telephony increased** on average over the year **in the lower end baskets** (3.12%, 12-30 Mbps basket; 3.55%, 30-100 Mbps basket) while a **significant decrease** is observed in the 100-200 Mbps (-6.31%) and >200 Mbps (-20.57%) baskets.
- Retail prices for **Triple Play offers decreased in all baskets**: by 2.23% (**12-30 Mbps** basket), by 6.31% (**30-100 Mbps** basket), by 6.86% in the **100-200 Mbps** basket and by 17.89% in the **<200 Mbps** basket.

The comparison of EU27 prices with prices in selected non-European countries in 2020 yielded the following picture:

- **South Korea** shows the **least expensive** offers for **Double Play with Telephony**.
- The **EU27** has **slightly lower prices** for **Double Play with Telephony and Triple Play offers** compared to **Japan, the USA, Norway, Iceland**
- **Japan** and **South Korea**, on the other hand, show **lower prices** for **Standalone internet** in the top speed baskets **100-200 Mbps** and **>200 Mbps**.
- Prices for **bundles in all speed baskets** are **lower in the EU27** than in the **USA, Norway, Iceland, and** (with the exception of Triple Play 30-100 Mbps) **the UK**.

Following BEREC Guidelines, the study also monitors **converged bundles**, that is, bundles of usage including both mobile broadband services (data and voice) and fixed access products.

Comparing normalised prices in Euro (€/PPP), **Poland, Romania, France** and **Latvia** exhibit the **most attractive prices for converged offers** in the EU. **Prices differ considerably** between the least and most expensive countries **in the EU**.

Prices for **all converged bundles in every basket** are **lower in the EU27** than in the **USA, Norway** and **Iceland, Japan** and **South Korea** but mostly **higher than in the UK**.

Comparing normalised prices in Euro(€/PPP), the **least expensive countries** for **mobile broadband** in the EU are **Poland, Romania, Estonia** and **Spain**. **Prices differ considerably** between the least and most expensive countries **in the EU**.

Mobile broadband was found to be **significantly less expensive** than in October 2019 in all baskets, ranging **from -14.8%** in the **5GB** basket up to **-22.5%** in the **1GB** basket.

Comparing the EU27 average in the **handset baskets** reveals a **similar trend**. Prices in **all baskets** experienced a **decrease between 10% and 17%**.

Comparison of EU27 prices with prices in **selected non-EU countries** (the UK, Iceland, Norway, Japan, South Korea and the USA) in 2020 showed that, on average, mobile broadband in the EU27 is more expensive than in the UK, but **about as expensive as or less expensive** than in the other non-EU countries for most of the mobile broadband usage baskets.

0.2 Français

L'étude présente des données complètes sur les prix de détail en 2019 des offres de haut débit fixe et mobile pour les clients de l'UE27, du Royaume-Uni, de l'Islande, de la Norvège, du Japon, de la Corée du Sud et des États-Unis. Les cinq plus grands fournisseurs d'accès à Internet (FAI) et les deux ou trois plus grands opérateurs de réseaux mobiles (ORM) de chaque pays ont été inclus. Les données ont été recueillies sur les sites web des FAI et des ORM dans un délai de trois semaines, du 5 au 25 octobre 2020.

Les paniers définis dans cette étude sont conformes aux recommandations émises par l'Organe des Régulateurs Européens des Communications Électroniques (ORECE). L'ensemble des paniers couvre 5 paniers fixes à large bande de différentes vitesses de téléchargement et 5 paniers mobiles à large bande (pour utilisation sur tablette/modem/carte de données) de différents volumes de téléchargement achetés individuellement (autonomes), 7 paniers mobiles individuels de téléphonie vocale et un ensemble de 17 paniers pour les ménages représentatifs.

Pour assurer une comparaison transnationale valable des prix de détail des offres de haut débit fixe et mobile dans chaque paquet et chaque panier, des procédures de normalisation des prix ont été appliquées. Celles-ci prennent en considération des caractéristiques telles que les frais uniques, les limites de volume, les rabais, les différentes durées de contrat et les limites de temps d'appel téléphonique et de volume de données.

Sur la base des prix normalisés en euros en parité de pouvoir d'achat (€/PPP), les pays les moins chers pour le haut débit fixe dans l'UE en 2020 étaient la Bulgarie, la Lettonie, la Roumanie et la Lituanie. Les prix diffèrent considérablement entre les pays les moins chers et les plus chers de l'UE.

Les prix du haut débit fixe montrent des tendances mixtes en 2020.

- Les prix de détail des offres Single Play ont augmenté dans le panier 12-30 Mbps (4,24 %), tandis que les prix dans le panier 30-100 Mbps sont restés inchangés (0,19 %). Une baisse significative peut être observée dans le panier 100-200 Mbps (-4,33 %) et dans le panier de vitesse supérieure >200 Mbps (-18,45 %)
- Les prix de détail des forfaits incluant la téléphonie fixe ont augmenté en moyenne sur l'année dans les paniers inférieurs (3,12 %, panier 12-30 Mbps ; 3,55 %, panier 30-100 Mbps), tandis qu'une baisse significative est observée dans les paniers 100-200 Mbps (-4,94 %) et >200 Mbps (-20,57 %).
- Les prix de détail des offres Triple Play ont diminué dans tous les paniers : de 2,23 % (panier 12-30 Mbps), de 6,31 % (panier 30-100 Mbps), de 6,86 % dans le panier 100-200 Mbps et de 17,89 % dans le panier <200 Mbps.

La comparaison des prix de l'UE 27 avec les prix dans certains pays non européens en 2019 montre le résultat suivant :

- La Corée du Sud présente les offres les moins chères pour le Double Play avec téléphonie dans chaque panier.
- L'UE27 affiche des prix un peu plus bas pour les offres Double Play avec téléphonie et Triple Play par rapport au Japon, aux États-Unis, à la Norvège et à l'Islande.
- Le Japon et la Corée du Sud, quant à eux, affichent des prix plus bas pour l'Internet autonome dans les paniers de vitesse les plus élevés 100-200 Mbps et >200 Mbps.
- Les prix de tous les paquets de chaque panier sont plus bas dans l'UE27 qu'aux États-Unis, en Norvège, en Islande et (à l'exception de Triple Play 30-100 Mbps) le Royaume-Uni.

Suivant les lignes directrices de l'ORECE, l'étude surveille également les offres convergentes, c'est-à-dire les offres d'utilisation comprenant à la fois les services mobiles à large bande (données et voix) et les produits d'accès fixe.

La comparaison des prix normalisés en euros (€/PPP) montre que la Pologne, la Roumanie, la France, et la Lettonie affichent les prix les plus avantageux pour les offres convergentes dans l'UE. Les prix diffèrent considérablement entre les pays les moins chers et les plus chers de l'UE.

Les prix de toutes les offres convergentes dans chaque panier sont plus bas dans l'UE27 qu'aux États-Unis, en Norvège et en Islande, au Japon et en Corée du Sud, mais surtout plus élevés qu'au Royaume-Uni.

Les pays les moins chers pour le haut débit mobile dans l'UE sont la Pologne, la Roumanie, l'Estonie et l'Espagne. Les prix diffèrent considérablement entre les pays les moins chers et les plus chers de l'UE.

Le haut débit mobile s'est montré nettement moins cher qu'en octobre 2019 dans tous les paniers, allant de -14,7 % dans le panier 5GB jusqu'à -22,5 % dans le panier 1GB.

La comparaison de la moyenne de l'UE27 dans les paniers de combinés révèle une tendance similaire. Les prix dans tous les paniers ont connu une baisse comprise entre 10 % et 17 %.

La comparaison des prix de l'UE27 avec ceux de certains pays tiers (Royaume-Uni, Islande, Norvège, Japon, Corée du Sud et États-Unis) en 2020 montre qu'en moyenne, le haut débit mobile dans l'UE27 est plus cher qu'au Royaume-Uni, mais à peu près aussi cher ou moins cher que dans les autres pays tiers pour la plupart des paniers d'utilisation du haut débit mobile.

1. Executive Summary

1.1 English

1.1.1 Introduction

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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.

1.1.2 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 (4 – 12 Mbps) to very high (>200 Mbps).
- **Double Play with fixed telephony** in four speed categories, from low (12 – 30 Mbps) to very high (>200 Mbps).
- **Triple Play with fixed telephony and TV**. The range of fixed broadband varies from low (12 – 30 Mbps) to very high (>200 Mbps).

2020 prices across the EU for fixed broadband offers

Figure 1 shows the average across the EU of the lowest prices found in each country for each of the three service bundles and for the four speed baskets above 12 Mbps. These EU average figures provide a reference point for international comparison and for comparison of markets within the EU. The impact of different broadband speed levels on prices is clearly visible - see section 4.1.9 for a discussion of these "speed premiums" - as is the increase in price from bundling television and fixed telephony services with standalone internet - see section 4.1.10 for detail on the "bundle premiums". Please note that 200+ Mbps offers are not available in all EU27 countries.

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

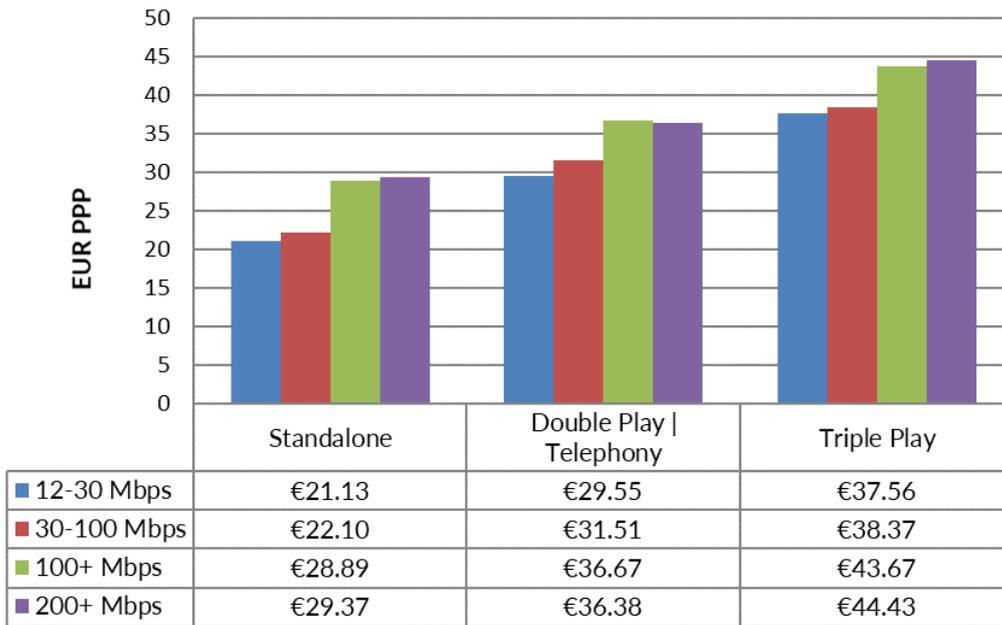


Figure 2 shows the lowest prices observed anywhere in the EU for each service bundle and speed basket. As can be seen, standalone fixed internet delivered at more than 12 Mbps can be obtained starting from a normalised price of only €10.54 per month (PPP)¹. At the top end of the speed basket set and for both selected bundled services (Triple Play, 200+Mbps), the cheapest price in Europe is €18.29 (PPP)².

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



¹ This offer is available in Romania only.

² This offer is available in Romania only.

To present a fuller picture, but without introducing the distraction of small price differences, four clusters of countries were identified³ 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.

Figure 3 shows the results. A green symbol (1) in a bundle/basket category stands for countries in the cluster with inexpensive offers for that category, a red symbol (4) for countries in the expensive cluster of offers in a bundle/basket category. Blue (2) symbols indicate clusters of relatively inexpensive, yellow symbols (3) of relatively expensive price levels. A dash signifies that no offer was collected in 2020 in that offer category and country.

³ 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)

	< 12 Mbps fixed internet	12-30 Mbps fixed internet	30-100 Mbps fixed internet	100-200 Mbps fixed internet	>200 Mbps fixed internet	12-30 Mbps fixed internet with fixed phone	30-100 Mbps fixed internet with fixed phone	100-200 Mbps fixed internet with fixed phone	>200 Mbps fixed internet with fixed phone	12-30 Mbps fixed internet with fixed phone and TV	30-100 Mbps fixed internet with fixed phone and TV	100-200 Mbps fixed internet with fixed phone and TV	>200 Mbps fixed internet with fixed phone and TV
LT	1	1	1	1	1	1	1	1	1	1	1	1	1
LV	1	1	1	1	1	1	1	1	1	1	1	1	1
RO	1	1	1	1	1	1	1	1	1	1	1	1	1
BG	1	1	1	1	1	1	1	1	1	1	1	1	2
PL	1	2	2	1	1	2	1	1	1	2	1	1	1
HU	1	1	2	1	1	2	2	2	2	1	1	1	1
SK	1	1	1	1	1	2	2	2	1	2	2	1	1
FR	2	2	3	1	1	2	1	1	1	2	1	1	1
CZ	2	2	2	1	1	2	2	2	2	2	1	1	2
FI	1	2	2	1	3								
IT	3	3	3	2	3	2	2	1	1	2	1	1	1
AT	1	1	2	2	3	2	2	3	3	2	1	2	2
DE	2	2	3	2	3	2	2	3	3	2	2	2	2
EE	1	1	1	2	4	3	3	3	3	3	2	2	3
LU	3	4	3	2	3	3	3	2	2	3	3	2	2
MT	3	3	4	2	3	3	3	3	3	3	2	2	2
SE	2	3	3	2	3	3	3	3	3	4	3	2	3
DK	2	3	3	1	3	3	3	2	3	4	4	3	4
ES	4	4	4	2	3	3	3	2	2	3	2	3	3
EL	2	3	4	4		2	3	4		2	2	4	
SI	4	4	4	3	3	3	3	3	3	3	2	2	2
HR	3	4	3	2	4	4	3	3		3	3	2	
NL	2	3	3	3	4	3	4	4	4	3	3	3	4
CY	3	4	4	3	4	3	3	3	4	3	3	3	4
PT	4	4	4	3	4	4	4	3	4	3	3	2	3
BE	3	3	3	3	4	4	4	4	4	4	4	4	4
IE	4	4	4	3	3	4	4	3	4	4	4	3	4

Cluster Centres [EUR]

1	12.09	12.5	11.66	17.29	15.23	17.09	19.03	21.86	22.91	21.74	26.56	28.39	28.09
2	21.8	18.72	16.27	30.81	3.33	24.58	27.24	31.67	33.18	30.91	38.91	46.82	41.87
3	25.93	24.04	24.66	40.7	33.63	33.34	35.16	42.31	39.71	42.91	46.89	58.41	52.44
4	31.01	29.76	31.88	68.09	45.16	44.61	47.45	62.4	55.76	58.52	61.01	68.85	67.71

Number of cases in each cluster

1	10	8	6	11	9	4	6	7	8	5	10	10	8
2	7	5	5	9	0	9	6	6	4	8	7	9	7
3	6	7	9	6	11	9	10	10	7	9	6	5	4
4	4	7	7	1	6	4	4	3	5	4	3	2	5

Green symbol 1 - inexpensive cluster
 Blue 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, Lithuania, Latvia, and Romania have the most attractive prices for broadband internet in the EU. All the offers in these countries belong to the cluster of the least expensive in their respective baskets.
- Bulgaria, Poland, Hungary and Slovakia follow. France, Czechia and Italy have low prices especially for Triple Play offers.
- Austria and Estonia tend to have attractive prices for lower bandwidth offers, but also tend to be in the cluster of more expensive countries for speeds above 100 Mbps.
- Cyprus, Belgium and Ireland have no offers within the two least expensive clusters.

Development of prices

Fixed Broadband prices show mixed trends in 2020.

- Retail prices for Single Play offers increased in the 12-30 Mbps (4.24%), while prices in the 30-100 Mbps basket remained stable (+0.19%). A significant decrease is observed in the 100-200 Mbps (-4.33%) basket and in the top speed basket >200 Mbps (-18.45%).
- Retail prices for bundles, which include fixed telephony increased on average over the year in the lower end baskets (3.12%, 12-30 Mbps basket; 3.55%, 30-100 Mbps basket) while a significant decrease is observed in the 100-200 Mbps (-6.31%) and >200 Mbps (-20.57%) baskets.
- Retail prices for Triple Play offers decreased in all baskets: by 2.23% (12-30 Mbps basket), by 6.31% (30-100 Mbps basket), by 6.86% in the 100-200 Mbps basket and by 17.89% in the <200 Mbps basket.

The EU compared with selected non-EU countries

The comparison of EU27 prices with prices in selected non-European countries in 2020 yielded the following picture:

- South Korea shows the least expensive offers for Double Play with Telephony.
- The EU27 has slightly lower prices for Double Play with Telephony and Triple Play offers compared to Japan, the USA, Norway, Iceland
- Japan and South Korea, on the other hand, show lower prices for Standalone internet in the top speed baskets 100-200 Mbps and >200 Mbps.
- Prices for bundles in all speed baskets are lower in the EU27 than in the USA, Norway, Iceland, and (apart from Triple Play 30-100 Mbps) the UK.

1.1.3 Results: Converged broadband baskets

In line with the Body of European Regulators for Electronic Communications (BEREC), converged baskets include both mobile broadband and household requirements for fixed broadband as defined in the representative household baskets HH9 to HH17. All baskets include fixed voice and there are also baskets with two active SIM cards. The use of 2 SIM cards is to be interpreted as representing the demand of a household with 2 persons, each using one SIM card and with their own usage profile. Normalisation of prices assumes usage of twice the Mobile Broadband range and twice the Mobile Voice range shown.

In those cases where a basket required both mobile broadband and fixed broadband for the same household and there was no offer matching a converged basket, combinations of offers (synthetic offers) were identified which satisfied customer needs for the given basket once amalgamated.

2020 prices across the EU for convergent broadband offers

Figure 4 shows the results. A green symbol (1) in a bundle/basket category stands for countries in the cluster with inexpensive offers for that category, a red symbol (4) for countries in the expensive cluster of offers in a bundle/basket category. Blue (2) symbols indicate clusters of relatively inexpensive, yellow symbols (3) of relatively expensive price levels. A dash signifies that no offer was collected in 2020 in that offer category and country.

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

	12-30 Mbps fixed internet with fixed phone plus 1 SIM, 30 calls, 1GB mobile data	30-100 Mbps fixed internet with fixed phone plus 1 SIM, 30 calls, 1GB mobile data	30-100 Mbps fixed internet with fixed phone plus 2 SIM, 100 calls, 2GB mobile data	30-100 Mbps fixed internet with fixed phone and TV plus 1 SIM, 100 calls, 2GB mobile data	100-200 Mbps fixed internet with fixed phone plus 1 SIM, 100 calls, 2GB mobile data	100-200 Mbps fixed internet with fixed phone plus 1 SIM, 300 calls, 5GB mobile data	100-200 Mbps fixed internet with fixed phone and TV plus 1 SIM, 300 calls, 5GB mobile data	100-200 Mbps fixed internet with fixed phone and TV plus 2 SIM, 300 calls, 5GB mobile data	>200 Mbps fixed internet with fixed phone and TV plus 1 SIM, 300 calls, 5GB mobile data
PL	1	1	1	1	1	1	1	1	1
RO	1	1	1	1	1	1	1	1	1
FR	2	1	2	1	1	1	1	1	1
LV	2	1	2	1	1	2	1	1	2
BG	1	1	1	1	1	3	2	2	2
LT	2	1	2	2	1	2	1	1	2
AT	2	1	1	1	2	3	2	1	2
DE	1	1	1	2	2	3	2	1	2
IT	2	2	2	2	1	2	1	1	2
ES	2	2	1	2	2	2	2	1	2
SK	1	1	2	2	1	3	2	2	2
LU	2	2	2	3	1	2	2	1	2
SI	3	2	2	2	2	3	2	1	2
EE	2	2	2	2	2	3	2	2	3
SE	3	2	2	3	2	3	2	2	3
HR	3	3	3	3	2	3	2	2	3
IE	3	3	2	4	2	3	2	2	3
CZ	3	3	4	3	2	4	2	3	3
DK	3	3	3	4	2	3	3	2	4
MT	3	3	2	3	3	4	3	3	3
NL	2	3	4	2	4	4	3	2	3
HU	2	2	4	3	3	4	3	4	4
EL	2	3	3	3	4	4	4	4	4
PT	4	4	4	3	3	4	3	3	4
BE	4	4	4	4	4	4	3	2	4
CY	3	3	4	4	4	4	4	4	4
FI	-	-	-	-	-	-	-	-	-

Cluster Centres [EUR]

1	27.4	30.39	38.52	34.82	35.3	28.42	39.57	57.22	33.42
2	34.73	40.15	51.7	45.95	49.47	41.68	59.2	83.05	52.99
3	46.66	47.88	65.58	57.5	60.95	51.64	77.6	101.66	70.44
4	60.41	61.63	78.07	70.92	75.92	77.18	97.16	130.98	85.23

Number of cases in each cluster

1	5	9	6	6	9	3	6	11	3
2	11	7	11	8	10	5	12	9	10
3	8	8	3	8	3	10	6	3	6
4	2	2	6	4	4	8	2	3	5

Green symbol 1 - inexpensive cluster
 Blue symbol 2 - relatively inexpensive cluster
 Yellow symbol 3 - relatively expensive cluster
 Red symbol 4 - expensive cluster

In the following, general country groupings can be observed:

- Poland, Romania, France and Latvia have the most attractive prices for converged offers in the EU. The majority of offers in these countries belongs to the cluster of the least expensive in the respective baskets.
- Bulgaria, Lithuania, Austria and Germany follow. Bulgaria and Austria have low prices especially for Quadruple Play offers.
- Portugal and Cyprus have no offers belonging to the two less expensive clusters.
- Poland and Romania are the only countries to have offers in the least expensive cluster for all the converged baskets.

The EU compared with selected non-EU countries

Prices for all converged bundles are lower in the EU27 than in the USA, Norway and Iceland, Japan and South Korea, but mostly higher than in the UK. The EU27 shows similar price patterns with Norway in the low – speed converged bundles and with Iceland in the top – speed Quadruple Play offers. The USA exhibits significantly higher prices than the rest of the countries among all converged bundles.

1.1.4 Results: Mobile broadband baskets

The baskets defined here cover:

- **Mobile data-only** baskets in five different data – volume categories, ranking from very low (0.5 GB) to very high (20 GB).
- **Handset-based baskets** defined in seven different baskets by the volume of data the average user requires and the mobile voice telephony. The values for Low, Medium and High call minutes for mobile voice telephony are 30, 100, 300, respectively.

2020 prices across the EU for mobile broadband offers

Green symbols in the following table *indicate* the cluster⁴ of countries with the least expensive offers for the usage basket in question and red the cluster with the most expensive offers. Blue and orange are used for the cluster of countries with relatively inexpensive and relatively expensive offers, respectively.

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

	0,5GB mobile data with no calls	1GB mobile data with no calls	2GB mobile data with no calls	5GB mobile data with no calls	20GB mobile data with no calls	0,5GB mobile data with 30 calls	1GB mobile data with 30 calls	2GB mobile data with 100 calls	5GB mobile data with 300 calls	20GB mobile data with 300 calls	5GB mobile data with 30 calls	20GB mobile data with 100 calls
PL	1	1	1	1	1	1	1	1	1	1	1	1
RO	2	2	1	1	1	1	1	1	1	1	1	1
EE	1	1	1	1	2	1	1	1	2	2	1	2
ES	1	1	1	1	2	1	1	2	1	2	1	2
IE	3	3	2	1	1	1	1	1	1	1	1	1
SI	1	1	1	2	1	2	2	2	1	2	1	2
AT	2	2	2	2	2	2	2	2	1	1	2	1
DE	2	2	3	2	2	1	1	2	1	2	2	2
LU	2	2	2	2	3	1	1	2	1	3	1	3
NL	2	3	2	3	2	2	1	2	2	2	2	2
SE	2	2	2	3	2	2	2	2	2	2	2	2
SK	2	2	2	2	3	1	1	3	3	2	2	2
FR	4	3	3	3	2	3	2	3	2	1	2	1
IT	4	3	3	2	1	4	3	3	2	1	2	1
BE	2	2	3	3	3	2	2	3	2	3	2	3
FI	2	3	4	3	2	2	2	3	3	2	3	2
HR	2	2	2	3	3	3	2	3	3	3	3	3
LV	3	2	2	2	1	3	4	3	3	3	3	3
BG	3	3	2	2	3	3	3	3	3	3	3	3
DK	4	4	3	3	2	4	3	3	2	2	2	2
EL	3	3	2	3	2	3	3	3	4	4	3	4
HU	2	2	3	3	4	3	2	4	4	4	3	4
LT	4	4	4	4	3	3	3	3	3	3	3	3
MT	4	4	3	4	4	3	3	3	4	3	3	3
PT	4	4	4	4	3	2	3	3	3	4	4	4
CY	4	4	4	4	4	3	4	4	4	4	4	4
CZ	4	4	4	4	3	4	4	4	4	4	4	4

Cluster Centres [EUR]

1	2.43	2.43	3.12	5.19	7.53	5.53	5.53	5.52	8.09	10.2	6.67	9.87
2	4.15	4.29	7.41	9.05	14.55	8.44	9.2	9.21	13.12	18.75	12.21	19.29
3	6.23	7.75	10.29	12.62	24.74	11.37	13.14	14.87	22.69	33.69	19.9	34.8
4	11.36	13.97	17.45	22.3	42.31	14.93	18.37	27.26	36.62	52.83	29.03	52.83

Number of cases in each cluster

1	4	4	5	5	6	8	9	4	8	6	7	6
2	11	10	10	8	10	7	8	7	7	9	9	9
3	4	7	7	9	8	9	7	13	7	7	8	7
4	8	6	5	5	3	3	3	3	5	5	3	5

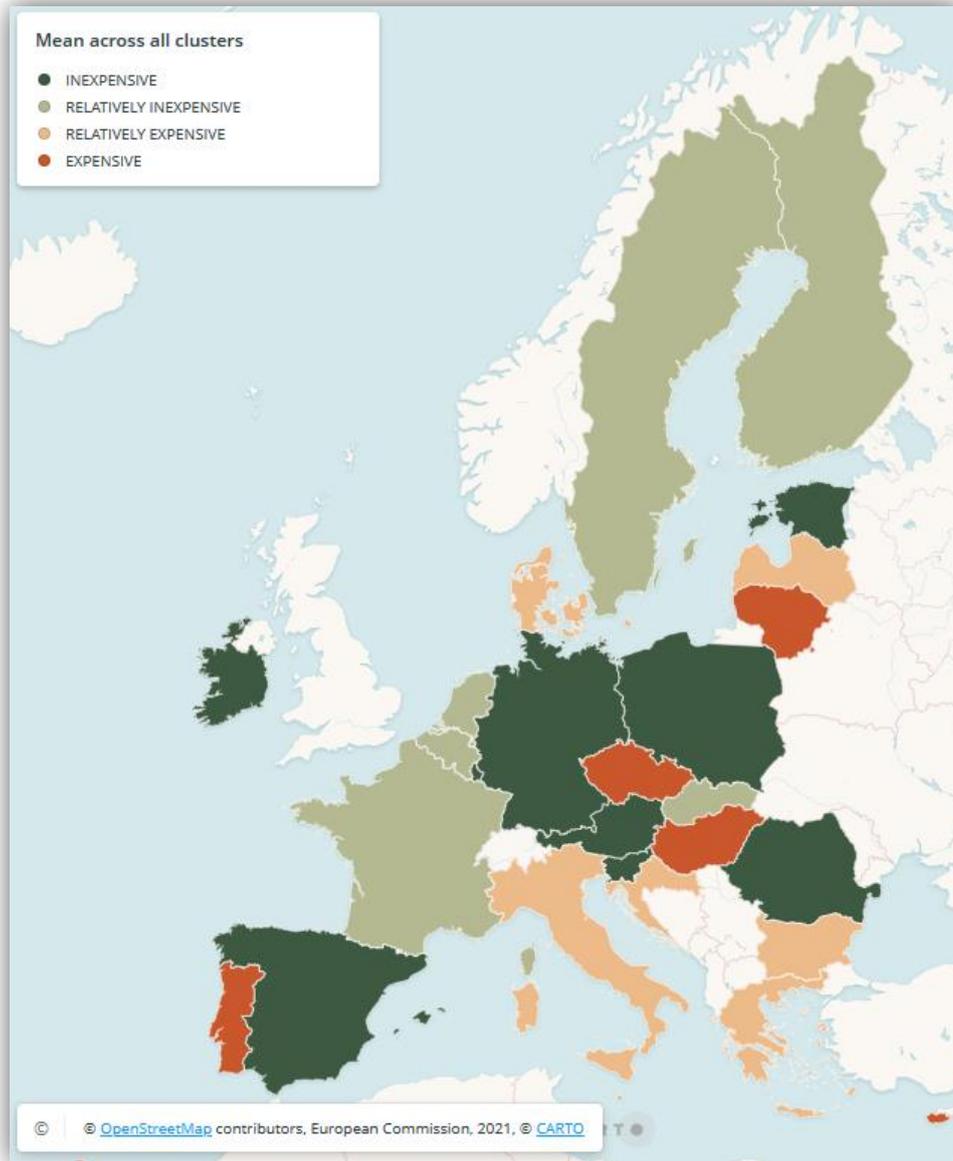
Green symbol 1 - inexpensive cluster
 Blue symbol 2 - relatively inexpensive cluster
 Yellow symbol 3 - relatively expensive cluster
 Red symbol 4 - expensive cluster

- Poland, Romania, Estonia, Spain, Ireland and Slovenia have the most attractive prices overall, with a cluster ratio of 1.5 or less.
- Austria, Germany, Luxembourg, the Netherlands, Sweden, Slovakia, France and Italy follow with a cluster ratio of 2.5 or less. Austria, Germany and Italy have at least three offers belonging to the cheapest cluster.
- The next group has very heterogeneous members, with a ratio of 3.2 or less. It includes Belgium, Finland, Croatia, Latvia, Bulgaria, Denmark, Greece and Hungary.
- Cyprus and Czechia have no offer belonging to one of the inexpensive clusters.
- Only Poland has offers in the inexpensive cluster for all the usage baskets, Romania for all but two usage basket.

Averaging all the baskets of mobile broadband usage and distinguishing the four main clusters, we get the pattern shown in the map (Figure 6 - Major clusters of countries by price level over all usage baskets (mobile broadband)Figure 6) below.

- The inexpensive countries are Poland, Romania, Estonia, Spain, Ireland, Slovenia, Austria, Germany and Luxembourg.
- The relatively inexpensive countries are the Netherlands, Sweden, Slovakia, Belgium, Finland and France.
- The relatively expensive countries are Croatia, Italy, Bulgaria, Latvia, Denmark and Greece.
- The expensive countries are Hungary, Lithuania, Malta, Portugal, Cyprus and Czechia.

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



Development of prices

Mobile broadband was found to be significantly less expensive than in October 2019 with prices being around 20% lower in every basket. It is only in the 5GB basket that the price drop is not quite as pronounced, but at -15% it is still significant.

Table 1 - Development of mobile broadband prices

Basket	Least expensive [EUR/PPP]	EU27 average 2020 [EUR/PPP]	EU28 average 2019 [EUR/PPP]	Variation 2019/20
500 MB	1.94	6.30	7.98	-20.4%
1 GB	1.94	7.07	9.12	-22.5%
2 GB	2.44	9.23	11.38	-18.9%
5 GB	3.88	11.99	14.07	-14.8%
20 GB	3.95	19.11	23.64	-19.2%

Comparing the EU28 average in the handset baskets reveals a similar trend. Prices are significantly lower than in 2019 in all baskets, ranging from -10% (5GB, 300 calls) to -17% (1GB, 30 calls).

Table 2 - Development of mobile broadband and voice prices

Basket	Least expensive [EUR/PPP]	EU27 average 2020 [EUR/PPP]	EU28 average 2019 [EUR/PPP]	Variation 2019/20
0.5 GB, 30 calls	3.95	9.18	10.33	-11.1%
1 GB, 30 calls	3.95	10.03	12.07	-16.9%
2 GB, 100 calls	3.95	13.40	15.66	-14.4%
5 GB, 300 calls	5.61	18.47	20.5	-9.9%
20 GB, 300 calls	5.93	27.60	32.51	-15.1%
5 GB, 30 calls	3.95	14.93	17.61	-15.2%
20GB, 100 calls	3.95	27.44	31.01	-11.5%

The EU compared with selected non-EU countries

Comparison of EU27 prices with prices in selected non-EU countries (the UK, Iceland, Norway, Japan, South Korea and the USA) in 2020 showed that, on average, mobile broadband in the EU27 is more expensive than in the UK, but about as expensive as or less expensive than in the other non-EU countries for most of the mobile broadband usage baskets.

1.2 Français

1.2.1 Introduction

L'étude présente des données complètes sur les prix de détail en 2019 des offres de haut débit fixe et mobile pour les clients de l'UE27, du Royaume-Uni, de l'Islande, de la Norvège, du Japon, de la Corée du Sud et des États-Unis. Les cinq plus grands fournisseurs d'accès à Internet (FAI) et les deux ou trois plus grands opérateurs de réseaux mobiles (ORM) de chaque pays ont été inclus. Les données ont été recueillies sur les sites web des FAI et des ORM dans un délai de trois semaines, du 5 au 25 octobre 2020.

Les paniers définis dans cette étude sont conformes aux recommandations émises par l'Organe des Régulateurs Européens des Communications Électroniques (ORECE). L'ensemble des paniers couvre 5 paniers fixes à large bande de différentes vitesses de téléchargement et 5 paniers mobiles à large bande (pour utilisation sur tablette/modem/carte de données) de différents volumes de téléchargement achetés individuellement (autonomes), 7 paniers mobiles individuels de téléphonie vocale et un ensemble de 17 paniers pour les ménages représentatifs.

Pour assurer une comparaison transnationale valable des prix de détail des offres de haut débit fixe et mobile dans chaque paquet et chaque panier, des procédures de normalisation des prix ont été appliquées. Celles-ci prennent en considération des caractéristiques telles que les frais uniques, les limites de volume, les rabais, les différentes durées de contrat et les limites de temps d'appel téléphonique et de volume de données.

1.2.2 Résultats : Paniers à large bande fixe

Les paniers définis ici comprennent :

- Le haut débit fixe autonome (sans téléphonie, TV ou services portables) dans cinq catégories de vitesse, de très basse (4 - 12 Mbps) à très haute (>200 Mbps)
- Double Play avec la téléphonie fixe dans quatre catégories de vitesse, de basse (12 - 30 Mbps) à très haute (>200 Mbps).
- Triple Play avec la téléphonie fixe et la télévision. La gamme de haut débit fixe varie de basse (12 - 30 Mbps) à très haute (>200 Mbps).

Prix 2020 dans l'UE pour les offres de haut débit fixe

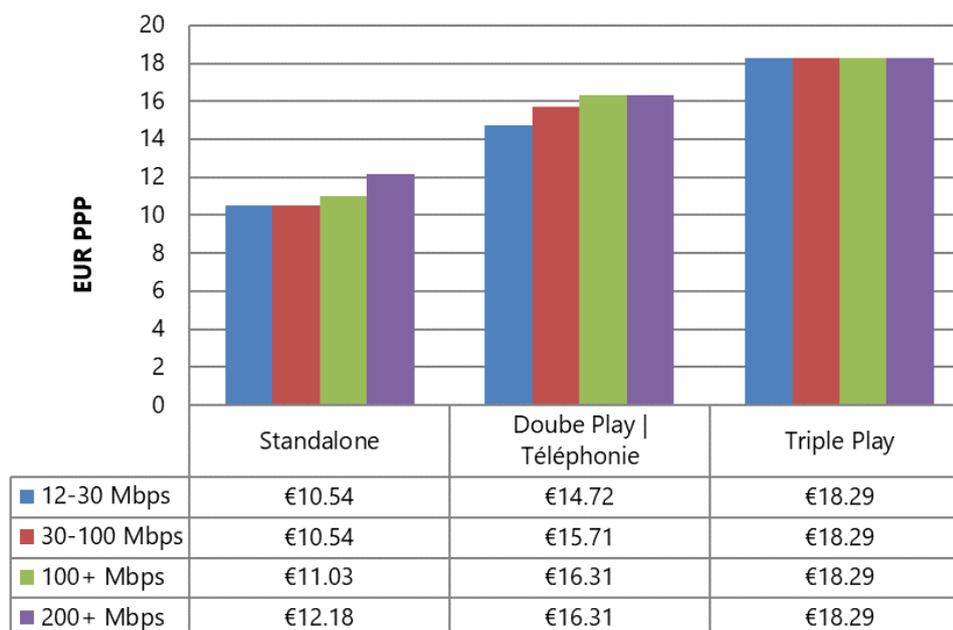
La Figure 7 montre la moyenne dans l'UE des prix les plus bas constatés dans chaque pays pour chacun des trois forfaits de services et pour les quatre paniers de vitesse supérieurs à 12 Mbps. Ces chiffres moyens de l'UE constituent un point de référence pour la comparaison internationale et pour la comparaison des marchés au sein de l'UE. L'impact sur les prix de la valeur ajoutée par l'augmentation de la vitesse est clairement visible - voir la section 4.1.9 (en anglais) pour une discussion de ces "primes de vitesse" - tout comme l'augmentation de prix due au regroupement des services de télévision et de téléphonie fixe avec l'internet autonome - voir la section 4.1.10 (en anglais) pour plus de détails sur les "primes de regroupement". Veuillez noter que les offres de 200+ Mbps ne sont pas disponibles dans tous les pays de l'UE27.

Figure 7 - Moyenne de l'UE27 des prix les plus bas pour chaque forfait de services sur quatre paniers de vitesse



La Figure 8 montre le prix le plus bas constaté dans l'UE pour chaque forfait de services et chaque panier de vitesse. On voit que l'internet fixe standalone à plus de 12 Mbps peut être acheté à un prix normalisé de seulement 10,54 Euros par mois (PPP)⁵ dans au moins un pays. Dans la partie la plus haute du panier de vitesses et pour les deux services groupés sélectionnés (Triple Play, 200+Mbps), le prix le plus bas en Europe est de 18,29 € (PPP)⁶.

Figure 8 - Les prix les plus bas en termes absolus dans l'UE27 pour chaque forfait de services sur quatre paniers de vitesse



⁵ Cette offre n'est disponible qu'en Roumanie.

⁶ Cette offre n'est disponible qu'en Roumanie.

Pour présenter un tableau plus complet, sans introduire la distraction de petites différences de prix, quatre groupes de pays ont été identifiés dans chaque catégorie d'offre, c'est-à-dire pour chaque combinaison de forfait de services et de panier de vitesse, sur la base des prix de l'offre la moins chère dans la catégorie de forfait/panier dans chaque pays.

La Figure 9 montre les résultats. Une balle verte (1) dans une catégorie de forfait/panier correspond aux pays du cluster ayant des offres peu coûteuses pour cette catégorie, une balle rouge (4) aux pays du cluster d'offres coûteuses dans une catégorie de forfait/panier. Les balles bleues (2) indiquent des groupes d'offres relativement peu coûteuses, les balles jaunes (3) des niveaux de prix relativement coûteux. Un tiret signifie qu'aucune offre n'a été collectée en 2020 dans cette catégorie d'offres et dans ce pays.

Figure 9 - Variation des prix par catégorie d'offre dans l'UE, clusters de pays

	< 12 Mbps internet fixe	12-30 Mbps internet fixe	30-100 Mbps internet fixe	100-200 Mbps internet fixe	>200 Mbps internet fixe	12-30 Mbps internet fixe avec téléphonie fixe	30-100 Mbps internet fixe avec téléphonie fixe	100-200 Mbps internet fixe avec téléphonie fixe	>200 Mbps internet fixe avec téléphonie fixe	12-30 Mbps internet fixe avec téléphonie fixe et TV	30-100 Mbps internet fixe avec téléphonie fixe et TV	100-200 Mbps internet fixe avec téléphonie fixe et TV	>200 Mbps internet fixe avec téléphonie fixe et TV
LT	1	1	1	1	1	1	1	1	1	1	1	1	1
LV	1	1	1	1	1	1	1	1	1	1	1	1	1
RO	1	1	1	1	1	1	1	1	1	1	1	1	1
BG	1	1	1	1	1	1	1	1	1	1	1	1	1
PL	1	2	2	1	1	2	1	1	1	2	1	1	2
HU	1	1	2	1	1	2	2	2	2	1	1	1	1
SK	1	1	1	1	1	2	2	2	2	2	2	1	1
FR	2	2	3	1	1	2	1	1	1	2	1	1	1
CZ	2	2	2	1	1	2	2	2	2	2	1	1	2
FI	1	2	2	1	3	-	-	-	-	-	-	-	-
IT	3	3	3	2	3	2	2	1	1	2	1	1	1
AT	1	1	2	2	3	2	2	3	3	2	1	2	2
DE	2	2	3	2	3	2	2	3	3	2	2	2	2
EE	1	1	1	2	4	3	3	3	3	3	2	2	3
LU	3	4	3	2	3	3	3	2	2	3	3	2	2
MT	3	3	4	2	3	3	3	3	3	3	2	2	2
SE	2	3	3	2	3	3	3	3	3	4	3	2	3
DK	2	3	3	1	3	3	3	2	3	4	4	3	4
ES	4	4	4	2	3	3	3	2	2	3	2	3	3
EL	2	3	4	4	-	2	3	4	-	2	2	4	-
SI	4	4	4	3	3	3	3	3	3	3	2	2	2
HR	3	4	3	2	4	4	3	3	3	3	3	2	-
NL	2	3	3	3	4	3	4	4	4	3	3	3	4
CY	3	4	4	3	4	3	3	3	4	3	3	3	4
PT	4	4	4	3	4	4	4	3	4	3	3	2	3
BE	3	3	3	3	4	4	4	4	4	4	4	4	4
IE	4	4	4	3	3	4	4	3	4	4	4	3	4

Centroïde de cluster [EUR]

	1	2	3	4
1	12.09	12.5	11.66	17.29
2	15.23	17.09	19.03	21.86
3	21.8	18.72	16.27	30.81
4	3.33	24.58	27.24	31.67
	25.93	24.04	24.66	40.7
	33.63	33.34	35.16	42.31
	31.01	29.76	31.88	68.09
	45.16	44.61	47.45	62.4
	55.76	58.52	61.01	68.85
	28.39	28.09	41.87	52.44
	67.71			

Nombre de cas dans chaque cluster

	1	2	3	4
1	10	8	6	11
2	9	4	6	7
3	7	5	5	9
4	0	9	6	6
	11	9	10	10
	9	10	10	7
	4	4	3	5
	5	4	8	7
	10	7	9	6
	10	9	5	2
	8	7	4	5

Balles vertes 1 – cluster peu coûteux
Balles bleues 2 – cluster relativement peu coûteux
Balles jaunes 3 – cluster relativement coûteux
Balles rouges 4 – cluster coûteux

On peut observer certains groupes généraux de pays :

- La Lituanie, la Lettonie et la Roumanie ont les prix les plus bas pour l'internet à large bande dans l'UE. Tous de ces pays n'ont toutes les offres que dans un seul groupe, celui des offres peu coûteuses.

- La Bulgarie, la Pologne, la Hongrie et la Slovaquie suivent. La Hongrie et la Pologne ont des prix particulièrement bas pour les offres Triple Play.
- La Tchéquie, la France et l'Italie tendent à avoir des prix plus attractifs pour les combinaisons de services Triple Play par comparaison avec les offres standalone ou Double Play.
- L'Autriche et l'Estonie ont tendance à avoir des prix attractifs pour les offres à bande passante faible, mais ont également tendance à se trouver dans le groupe des pays les plus chers pour les vitesses supérieures à 100 Mbps.
- Chypre, la Belgique et l'Irlande n'ont pas d'offres appartenant aux deux groupes les moins coûteux.

Évolution des prix

Les prix du haut débit affichent des tendances variées en 2020 :

- Les prix de détail des offres Single Play ont augmenté dans le panier 12-30 Mbps (4,06%), tandis que les prix dans le panier 30-100 Mbps sont restés inchangés (-0,08%). Une baisse significative est observée dans le panier 100-200 Mbps (-5,04%) et dans le panier de vitesse supérieure >200 Mbps (-18,50%).
- Les prix de détail des offres groupées, qui incluent la téléphonie fixe, ont augmenté en moyenne sur l'année dans les paniers inférieurs (4,00%, panier 12-30 Mbps ; 4,05%, panier 30-100 Mbps), tandis qu'une baisse significative est observée dans les paniers 100-200 Mbps (-5,11%) et >200 Mbps (-19,70%).
- Les prix de détail des offres Triple Play ont diminué dans tous les paniers : de 3,0% (panier 12-30 Mbps), de 6,86% (panier 30-100 Mbps), de 6,95% dans le panier 100-200 Mbps et de 19,54% dans le panier <200 Mbps.

L'UE comparée à certains pays non-UE

La comparaison des prix de l'UE 27 avec ceux de certains pays non européens en 2020 montre le résultat suivant :

- La Corée du Sud affiche les offres les moins chères pour le Double Play avec téléphonie dans chaque panier.
- L'UE27 affiche des prix un peu plus bas pour les offres Double Play avec téléphonie et Triple Play par rapport au Japon, aux États-Unis, à la Norvège et à l'Islande.
- Le Japon et la Corée du Sud, en revanche, ont des prix plus bas pour l'Internet fixe dans les paniers de vitesse les plus élevés 100-200 Mbps et 200+ Mbps
- Les prix de tous les paquets de chaque panier sont plus bas dans l'UE27 qu'aux États-Unis, en Norvège et en Islande.

1.2.3 Résultats : Paniers convergents à large bande

Conformément à l'Organe des régulateurs européens des communications électroniques (ORECE), les paniers convergents comprennent à la fois la téléphonie et le haut débit mobile et les besoins des ménages en haut débit fixe tels que définis dans les paniers représentatifs des ménages HH9 à HH17. Tous les paniers comprennent la téléphonie fixe. Il y a aussi des paniers avec deux cartes SIM actives. L'utilisation de deux cartes SIM représente la demande d'un ménage de deux personnes, chacune utilisant une carte SIM et ayant son propre profil d'utilisation. La normalisation des prix suppose l'utilisation de deux fois la gamme Mobile Broadband (haut débit mobile) et de deux fois la gamme Mobile Voice (voix sur mobile) indiquée.

Quand un panier nécessitait à la fois du haut débit mobile et du haut débit fixe pour le même ménage et qu'aucune offre ne correspondait à un panier convergent, des combinaisons d'offres (offres synthétisées) ont été identifiées qui, ensemble, répondaient aux besoins des clients pour le panier donné.

Prix 2020 dans l'UE pour les forfaits convergents

La Figure 10 montre les résultats. Une balle verte (1) dans une catégorie de forfait/panier correspond aux pays du cluster ayant des offres peu coûteuses pour cette catégorie, une balle rouge (4) aux pays du cluster d'offres coûteuses dans une catégorie de forfait/panier. Les balles bleues (2) indiquent des groupes d'offres relativement peu coûteuses, les balles jaunes (3) des niveaux de prix relativement coûteux. Un tiret signifie qu'aucune offre n'a été collectée en 2020 dans cette catégorie d'offres et dans ce pays.

Figure 10 - Variation des prix par catégorie d'offre dans l'UE, clusters de pays

	12-30 Mbps internet fixe avec téléphonie fixe plus 1 SIM, 30 appels, 1Go données mobiles	30-100 Mbps internet fixe avec téléphonie fixe plus 1 SIM, 30 appels, 1Go données mobiles	30-100 Mbps internet fixe avec téléphonie fixe plus 2 SIM, 100 appels, 2Go données mobiles	30-100 Mbps internet fixe avec téléphonie fixe et TV plus 1 SIM, 100 appels, 2Go données mobiles	100-200 Mbps internet fixe avec téléphonie fixe plus 1 SIM, 100 appels, 2Go données mobiles	100-200 Mbps internet fixe avec téléphonie fixe plus 1 SIM, 300 appels, 5Go données mobiles	100-200 Mbps internet fixe avec téléphonie fixe et TV plus 1 SIM, 300 appels, 5Go données mobiles	100-200 Mbps internet fixe avec téléphonie fixe et TV plus 2 SIM, 300 appels, 5Go données mobiles	>200 Mbps internet fixe avec téléphonie fixe et TV plus 1 SIM, 300 appels, 5Go données mobiles
PL	1	1	1	1	1	1	1	1	1
RO	1	1	1	1	1	1	1	1	1
FR	2	1	2	1	1	1	1	1	1
LV	2	1	2	1	1	2	1	1	2
BG	1	1	1	1	1	3	2	2	2
LT	2	1	2	2	1	2	1	1	2
AT	2	1	1	1	2	3	2	1	2
DE	1	1	1	2	2	3	2	1	2
IT	2	2	2	2	1	2	1	1	2
ES	2	2	1	2	2	2	2	1	2
SK	1	1	2	2	1	3	2	2	2
LU	2	2	2	3	1	2	2	1	2
SI	3	2	2	2	2	3	2	1	2
EE	2	2	2	2	2	3	2	2	3
SE	3	2	2	3	2	3	2	2	3
HR	3	3	3	3	2	3	2	2	-
IE	3	3	2	4	2	3	2	2	3
CZ	3	3	4	3	2	4	2	3	3
DK	3	3	3	4	2	3	3	2	4
MT	3	3	2	3	3	4	3	3	3
NL	2	3	4	2	4	4	3	2	3
HU	2	2	4	3	3	4	3	4	4
EL	2	3	3	3	4	4	4	4	-
PT	4	4	4	3	3	4	3	3	4
BE	4	4	4	4	4	4	3	2	4
CY	3	3	4	4	4	4	4	4	4
FI	-	-	-	-	-	-	-	-	-

Centroïde de cluster [EUR]

1	27.4	30.39	38.52	34.82	35.3	28.42	39.57	57.22	33.42
2	34.73	40.15	51.7	45.95	49.47	41.68	59.2	83.05	52.99
3	46.66	47.88	65.58	57.5	60.95	51.64	77.6	101.66	70.44
4	60.41	61.63	78.07	70.92	75.92	77.18	97.16	130.98	85.23

Nombre de cas dans chaque cluster

1	5	9	6	6	9	3	6	11	3
2	11	7	11	8	10	5	12	9	10
3	8	8	3	8	3	10	6	3	6
4	2	2	6	4	4	8	2	3	5

Balles vertes 1 – cluster peu coûteux
Balles bleues 2 – cluster relativement peu coûteux
Balles jaunes 3 – cluster relativement coûteux
Balles rouges 4 – cluster coûteux

Certains groupes deviennent clairs dans ce diagramme :

- La Pologne, la Roumanie, la France et la Lettonie ont les prix les plus attractifs pour les offres convergentes dans l'UE. La majorité des offres dans ces pays appartient au groupe des offres les moins chères dans les paniers respectifs.

- La Bulgarie, la Lituanie, l'Autriche et l'Allemagne suivent. La Bulgarie et l'Autriche ont des prix bas, notamment pour les offres Quadruple Play.
- Le Portugal et Chypre n'ont aucune offre appartenant aux deux groupes les moins chers.
- La Pologne et la Roumanie sont les seuls pays à avoir des offres dans le groupe le moins cher pour tous les paniers convergents.

L'UE comparée à certains pays non-UE

Les prix de tous les forfaits convergents sont plus bas dans l'UE27 qu'aux États-Unis, en Norvège et en Islande, au Japon et en Corée du Sud, mais surtout plus élevés qu'au Royaume-Uni. L'UE27 présente des tendances de prix similaires avec la Norvège pour les offres convergentes à vitesse basse et avec l'Islande pour les offres Quadruple Play à vitesse haute. Les États-Unis affichent des prix nettement plus élevés que le reste des pays pour tous les forfaits convergents.

1.2.4 Résultats : Paniers du haut débit mobile

Les paniers définis ici comprennent :

- Des paniers de données mobiles dans cinq catégories allant de très faible (0,5 Go) à très élevé (20 Go).
- Les paniers basés sur les téléphones portables sont définis dans sept paniers différents selon le volume de données et la téléphonie mobile. Les valeurs pour les minutes d'appel basses, moyennes et hautes pour la téléphonie mobile sont respectivement de 30, 100 et 300.

Prix 2020 dans l'UE pour le haut débit mobile

La Figure 11 montre les résultats. Une balle verte (1) correspond aux pays du cluster⁷ ayant des offres peu coûteuses pour cette catégorie, une balle rouge (4) aux pays du cluster d'offres coûteuses. Les balles bleues (2) indiquent des groupes d'offres relativement peu coûteuses, les balles jaunes (3) des niveaux de prix relativement coûteux.

⁷ La mise en clusters k-means a été utilisée avec k=4 ; les observations (catégories d'offre) sont attribuées aux clusters de manière à minimiser la distance euclidienne carrée moyenne des observations à chaque centroïde de cluster

Figure 11 - Variation des prix par catégorie d'offre dans l'UE, clusters de pays

	0,5Go données mobiles sans appels	1Go données mobiles sans appels	2Go données mobiles sans appels	5Go données mobiles sans appels	20Go données mobiles sans appels	0,5Go données mobiles avec 30 appels	1Go données mobiles avec 30 appels	2Go données mobiles avec 100 appels	5Go données mobiles avec 300 appels	20Go données mobiles avec 300 appels	5Go données mobiles avec 30 appels	20Go données mobiles avec 100 appels
PL	1	1	1	1	1	1	1	1	1	1	1	1
RO	2	2	1	1	1	1	1	1	1	1	1	1
EE	1	1	1	1	2	1	1	1	2	2	1	2
ES	1	1	1	1	2	1	1	2	1	2	1	2
IE	3	3	2	1	1	1	1	1	1	1	1	1
SI	1	1	1	2	1	2	2	2	1	2	1	2
AT	2	2	2	2	2	2	2	2	1	1	2	1
DE	2	2	3	2	2	1	1	2	1	2	2	2
LU	2	2	2	2	3	1	1	2	1	3	1	3
NL	2	3	2	3	2	2	1	2	2	2	2	2
SE	2	2	2	3	2	2	2	2	2	2	2	2
SK	2	2	2	2	3	1	1	3	3	2	2	2
FR	4	3	3	3	2	3	2	3	2	1	2	1
IT	4	3	3	2	1	4	3	3	2	1	2	1
BE	2	2	3	3	3	2	2	3	2	3	2	3
FI	2	3	4	3	2	2	2	3	3	2	3	2
HR	2	2	2	3	3	3	2	3	3	3	3	3
LV	3	2	2	2	1	3	3	3	3	3	3	3
BG	3	3	2	2	3	3	3	3	3	3	3	3
DK	4	4	3	3	2	4	3	3	2	2	2	2
EL	3	3	2	3	2	3	3	3	4	4	3	4
HU	2	2	3	3	4	3	2	4	4	4	3	4
LT	4	4	4	4	3	3	3	3	3	3	3	3
MT	4	4	3	4	4	3	3	3	4	3	3	3
PT	4	4	4	4	3	2	3	3	3	4	4	4
CY	4	4	4	4	4	3	4	4	4	4	4	4
CZ	4	4	4	4	3	4	4	4	4	4	4	4

Centroïde de cluster [EUR]

	1	2	3	4	5	6	7	8	9	10	11	12
1	2.43	2.43	3.12	5.19	7.53	5.53	5.53	5.52	8.09	10.2	6.67	9.87
2	4.15	4.29	7.41	9.05	14.55	8.44	9.2	9.21	13.12	18.75	12.21	19.29
3	6.23	7.75	10.29	12.62	24.74	11.37	13.14	14.87	22.69	33.69	19.9	34.8
4	11.36	13.97	17.45	22.3	42.31	14.93	18.37	27.26	36.62	52.83	29.03	52.83

Nombre de cas dans chaque cluster

	1	2	3	4	5	6	7	8	9	10	11	12
1	4	4	5	5	6	8	9	4	8	6	7	6
2	11	10	10	8	10	7	8	7	7	9	9	9
3	4	7	7	9	8	9	7	13	7	7	8	7
4	8	6	5	5	3	3	3	3	5	5	3	5

Balles vertes 1 – cluster peu coûteux
Balles bleues 2 – cluster relativement peu coûteux
Balles jaunes 3 – cluster relativement coûteux
Balles rouges 4 – cluster coûteux

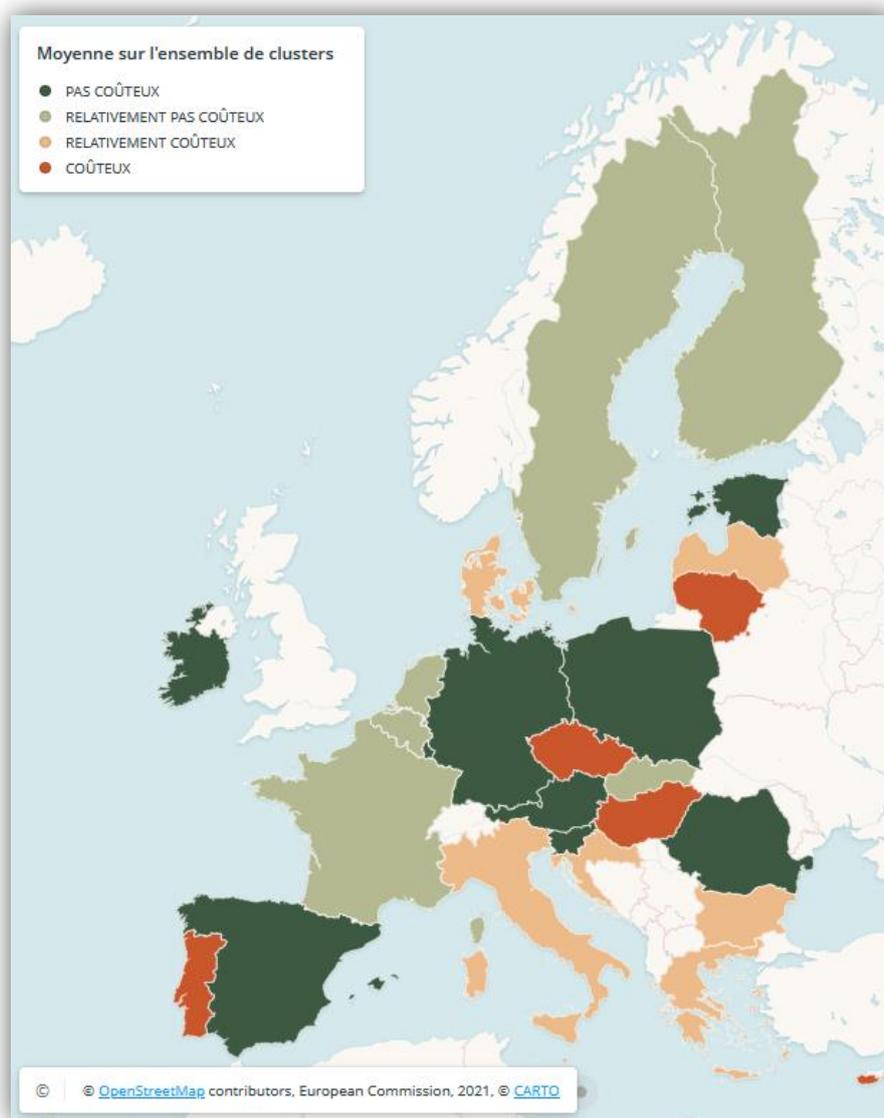
- La Pologne, la Roumanie, l'Estonie, l'Espagne, l'Irlande et la Slovénie ont les prix les plus avantageux dans l'ensemble, avec un ratio de cluster de 1,5 ou moins.

- L'Autriche, l'Allemagne, le Luxembourg, les Pays-Bas, la Suède et la Slovaquie, la France et l'Italie suivent avec un ratio de 2,5 ou moins. L'Autriche, l'Allemagne, Le Luxembourg et l'Italie ont au moins trois offres appartenant au groupe le moins coûteux.
- Le groupe suivant a des membres très hétérogènes, avec un ratio de 3,2 ou moins. Il comprend la Belgique, la Finlande, la Croatie, la Lettonie, la Bulgarie, le Danemark et la Grèce et la Hongrie.
- Chypre et la Tchéquie n'ont aucune offre appartenant à l'un des groupes peu coûteux.
- Seule la Pologne a des offres dans le cluster peu coûteux pour tous les paniers d'utilisation, la Roumanie pour tous les paniers d'utilisation sauf deux.

En faisant la moyenne de tous les paniers d'utilisation du haut débit mobile et en distinguant les quatre principaux clusters, on obtient le schéma présenté dans la carte (Figure 7) ci-dessous.

- Les pays les moins coûteux sont : La Pologne, la Roumanie, l'Estonie, l'Espagne, l'Irlande, la Slovénie, l'Autriche, l'Allemagne, le Luxembourg.
- Les pays relativement peu coûteux sont : Les Pays-Bas, la Suède, la Slovaquie, la Belgique, le Finlande et la France.
- Les pays relativement coûteux sont : La Croatie, l'Italie, la Bulgarie, la Lettonie, le Danemark et la Grèce.
- Les pays les plus coûteux sont les suivants : la Hongrie, la Lituanie, Malte, le Portugal, Chypre et la Tchéquie.

Figure 12 - Principaux clusters de pays par classe de prix sur tous les paniers d'utilisation (haut débit mobile)



Évolution des prix

Le haut débit mobile s'est révélé nettement moins cher qu'en octobre 2019, les prix étant inférieurs d'environ 20 % dans chaque panier. Ce n'est que dans le panier 5GB que la baisse des prix n'est pas aussi marquée, mais à -15%, elle reste significative.

Tableau 1 – Évolution des prix pour le haut débit mobile

Panier	Moins coûteux [EUR/PPP]	Moyenne EU27 (Oct.) 2020 [EUR/PPP]	Moyenne EU28 (Oct.) 2019 [EUR/PPP]	Variation 2019/20
500 Mo	1,94	6,30	7,98	-20,4%
1 Go	1,94	7,07	9,12	-22,5%
2 Go	2,44	9,23	11,38	-18,9%
5 Go	3,88	11,99	14,07	-14,8%
20 Go	3,95	19,11	23,64	-19,2%

La comparaison de la moyenne de l'UE27 dans les paniers de combinés montre une tendance similaire. Les prix sont nettement plus bas qu'en 2019 dans tous les paniers, allant de -10 % (5 Go, 300 appels) à -17 % (1 Go, 30 appels).

Tableau 2 - Évolution des prix pour les paniers du haut débit mobile avec téléphonie

Panier	Moins coûteux [EUR/PPP]	Moyenne EU27 (Oct.) 2020 [EUR/PPP]	Moyenne EU28 (Oct.) 2019 [EUR/PPP]	Variation 2019/20
500 Mo, 30 appels	3,95	9,18	10,33	-11,1%
1 Go, 30 appels	3,95	10,03	12,07	-16,9%
2 Go, 100 appels	3,95	13,40	15,66	-14,4%
5 Go, 300 appels	5,61	18,47	20,5	-9,9%
20 Go, 300 appels	5,93	27,60	32,51	-15,1%
5 Go, 30 appels	3,95	14,93	17,61	-15,2%
20 Go, 100 appels	3,95	27,44	31,01	-11,5%

L'UE comparée à certains pays non-UE

La comparaison des prix de l'UE27 avec ceux de certains pays tiers (Royaume-Uni, Islande, Norvège, Japon, Corée du Sud et États-Unis) en 2020 montre qu'en moyenne, le haut débit mobile dans l'UE27 est plus cher qu'au Royaume-Uni, mais à peu près aussi cher ou moins cher que dans les autres pays tiers pour la plupart des paniers d'utilisation du haut débit mobile.

A note on the limitations of the study

Readers are advised to note some limitations of the information presented in this report:

- The data on the offers on supply fixed and mobile internet services in 2020 represents a snapshot of prices, limited to three weeks in October 2020.
- All reasonable steps were taken to obtain a complete data set for each offer; however, some gaps remain.⁸
- Following the consistent methodology agreed with the European Commission, only offers advertised and purchasable on provider websites were considered. In consequence, offers which may have been referred to in documents on the website but which were not available for sale on the site were not included in the analysis.
- Offers from a maximum of five internet service providers (ISP) per country were considered. The ISPs selected were those with the largest market share, determined after consultation with the relevant National Regulatory Authorities (NRA). This ensures that the selected offers are representative even though a very small proportion of customers may subscribe to cheaper offers of ISPs, which were not considered.
- Only the two or three largest Mobile Network Operators (MNO) in a country have been included. Although those MNOs combined have a market share of at least 70% and this ensures that the selected offers are representative, it remains possible that a smaller MNO or Mobile Virtual Network Operator (MVNO) has a less expensive offer for one or more mobile broadband usage baskets.
- Where an ISP / MNO sets different prices for the same offer so that prices vary by city or region, a sample of 5 - 15 locations was drawn, and the mode of the sampled prices recorded as the price of the offer in the country concerned⁹.
- The data represents only offers as advertised. Moreover, the advertised speeds reported cannot be taken as a reliable guide to speeds actually experienced by customers.
- The usage baskets have been developed together with BEREC based on the usage patterns of the EU countries. Nevertheless, not all baskets may be representative in each country. The selected offers with the least expensive prices may not necessarily be the ones with the highest sales volume in the market.
- For mobile broadband services, up to three add-ons/top-ups were included for each tariff. In some markets, like Greece, consumers willing to research an optimal, larger number of add-ons/top-ups may be able to save a little more.
- This study does not include aspects of quality of service.

⁸ Gaps include in several cases missing download speeds, missing upload speeds and missing information on type of technology. Some price information had to be simplified.

⁹ Sample sizes were 5 - 10 in the USA, 10 - 15 in European countries.

2. Introduction

2.1 Overall study objectives

The overall objective of the study is to investigate the level of prices for standardised offers of fixed, mobile and converged broadband services in the EU, Norway and Iceland, South Korea and Japan, as well as three states of the United States of America (USA) - California, Colorado and New York.

The price of fixed and mobile broadband services in any country represents an informative indicator of key developments in electronic communications in the retail market. As such, broadband prices are part of European Commission's monitoring exercise in the context of the Digital Single Market strategy, launched in 2015. The monitoring activity is of great relevance to steering policy in this area, providing key resources for an evidence-based approach to policymaking.

The definition of baskets of consumer and household internet usage for the international price comparison follows guidelines on the topic published by the Body of European Regulators for Electronic Communications (BEREC) in 2018. A comparison with OECD guidelines has allowed the outline basket characteristics set out by BEREC to be completed, e.g. in terms of specific ranges of download speed and usage volumes. The composition of baskets has also been informed by feedback provided on price comparison to date from national regulators and related market research and analysis of global price patterns.

The complete set of baskets is to represent the full range of current consumer usage of internet services in Europe. Baskets are defined in terms of one or more service components such as mobile and fixed internet access, telephony or TV and the degree of usage of each component service.

The set of baskets cover fixed and mobile broadband services purchased individually (stand-alone), mobile broadband with voice telephony and a set of baskets for representative households.

2.2 Monitoring internet prices in Europe

This study took place as continuation of the annual cycle of the European Commission's (EC) monitoring of retail prices of broadband internet access, which has been in place since 2007. Results are used to provide policy feedback, including constructing indicators for both the Digital Scoreboard as well the Digital Economy and Society Index (DESI).¹⁰

The focus in this study, which is not limited to fixed retail offers but also includes converged as well as mobile offers, is on the offers that are available to residential customers on broadband services. Fixed broadband services are supplied to homes via xDSL, cable modem, FTTx, satellite or fixed wireless systems, while converged broadband services are a combination of fixed internet, additional bundled services such as fixed telephony or TV and a mobile component. Mobile internet service is delivered via LTE, 4G and in most of the countries through 5G.

Though fixed broadband internet access is sometimes provided as a stand-alone service, this basic service is often bundled with other services, such as telephony and web space. Three specific bundles of services, each of which include fixed broadband internet access, were included in the study. The three specific "fixed bundles" are all combinations of fixed internet access with or without telephony

¹⁰ Indicator 1d1: The broadband price index measures the prices of representative baskets of fixed, mobile and converged broadband offers. Indicator 1d1 belongs to the Connectivity dimension of DESI, which has five principal dimensions in total.

and television, referred to as Single Play (or as "standalone" internet), Double Play with fixed telephony and Triple Play.

For each offer, prices were analysed in each of the several download speed baskets, ranging from 0,144 Mbps to more than 200 Mbps. Offers at the lower limit, such as the ISDN Basic Rate Interface payload rate of 144 kbps¹¹ are now rare. As is evident from the targets set in the Digital Agenda, interest in policy and the market has now moved on significantly to higher speeds of internet access. The results presented in this report therefore focus on offers in much higher speed baskets, from 12 Mbps upwards.

A major novelty to this study is the representative household basket approach in line with BEREC (2018) guidelines. A representative household is a basket of usage, which always includes fixed broadband internet access and fixed telephony. Standalone baskets, as the name suggests, cover usage of either mobile or fixed internet access only. The approach is presented in more detail in chapter 3.

Fixed and mobile broadband products were subject of separate annual EC price monitoring exercises and are now reported in combination.

Data on offers on the market were gathered throughout Europe and beyond in order to identify the least expensive offers of each bundle in a given country. Comprehensive data has been compiled on the 2019 retail prices of the fixed, converged and mobile broadband offers available by the largest Internet Service Providers (ISPs) in each country for consumers in the EU28, Iceland, Norway, Japan, South Korea and the USA. For intra-annual comparability and consistency, data was collected from ISP websites during a period of three weeks in October 2019.

To support valid cross-national comparison of retail prices of broadband offers in each bundle and basket, consistent price normalisation procedures were applied. These take full account of a range of marketing, sales, service and payment features such as one-off fees, discounts, different contract durations and varying telephony time limits.

Price normalisation did not involve the creation of fictitious or proxy offers. All offers considered are such, which consumers could buy on the market. Consumer profiles were agreed upon with the Commission and applied to normalise actual service use where flat rates were not provided or would be often exceeded, causing greater cost. In line with this real customer view of the market, real offers that provide more than a customer profile requests - e.g. have a faster speed or more services - but are cheaper than offers which match the customer profile, were accepted as the lowest price offer for that profile.

2.3 Methodological approach

This report includes the methodology agreed with the European Commission for the monitoring of *Broadband Prices in Europe* study, starting with the definition of usage baskets and describing the scope of data collection and the methodology for price normalisation.

The applied methods in this study are closely aligned to the guidelines set by BEREC¹². A comparison with OECD guidelines has allowed the outline basket characteristics set out by BEREC to be completed, e.g. in terms of specific ranges of download speed and usage volumes. The composition of baskets has

¹¹ The ISDN Basic Rate Interface provides 144 kbit/s over a twisted pair line, comprising two 64 kbit/s bearer "B" channels and a 16 kbit/s signalling "D" channel.

¹² See BEREC Guidelines 2018

also been informed by feedback provided on price comparison to date from national regulators and related market research and analysis of global price patterns.

To ensure the validity of the international comparisons made in this report required a clear set of criteria. This is because the comparisons made on the retail broadband prices covered a range of complex products taken across many different countries. This enabled that the inclusion of offers and the procedure of the normalisation of prices can be rendered comparable. Details of the methodology applied for this are provided below.

3. The study methodology

3.1 The BEREC approach

In their 2018 Guidelines, BEREC proposed the development of "representative households" and "standalone" baskets. A representative household basket always includes fixed broadband internet access and fixed telephony. Standalone baskets, as the name suggests, cover usage of either mobile or fixed internet access only.

In order to simplify reporting in respect of levels or intensity of use - download volumes, numbers of calls etc. - baskets are defined using a general qualitative scale - low, medium and high - rather than specific volume or time boundaries. The specific values or ranges for download speeds or volumes corresponding to high, medium or low are not defined by BEREC, though BEREC has made statistical data available to assist in drawing appropriate boundaries around baskets and data has been obtained from national regulatory authorities on the issue.

The 17 representative households include baskets differing in their intensity of use of fixed telephony services, TV services, mobile broadband internet access and mobile voice telephony. The set of representative household baskets includes several relating to "converged" offers, that is, bundles of usage including both mobile broadband services (data and voice) and fixed access products. Some of these representative households may require two SIM cards for their mobile services.

Combinations of fixed and broadband services are an innovation by BEREC compared to the baskets applied in previous pricing studies. In line with the importance of converged bundles, more than half of the household baskets represent usage of this kind of service bundle. The intention is to allow a more accurate comparison of offers in countries where mobile and fixed broadband services are bundled and countries where they are not.

The baskets defined thus include both classic Double Play with fixed telephony and Triple Play, as well as flavours of Quadruple Play (fixed+mobile, converged baskets). Baskets covering Double Play with TV reported on in previous studies were not included in the set.

BEREC's suggestion not to distinguish baskets in respect of use on tablets or laptops is in line with previous practice. In the case of mobile broadband, BEREC report from their 2017 questionnaire that the average consumption of data volume per month and subscriber continues to differ between handset (2.2 GB) and card/modem/tablet users (13.6 GB). Therefore, the distinction between baskets for handset-based (individual mobile handheld) baskets and card/modem/tablet baskets applied in previous years is maintained.

3.1.1 Basket definition

The baskets defined for the internet pricing study fully conform to the guidelines issued by BEREC. To complete the basket definitions in operational terms, usage intensity ranges were defined for all usage baskets.

In respect of volume caps, the set of ranges used in previous studies was updated by removing those with the smallest capacity limits and adding categories with very high capacity. Following BEREC, where a household requires only fixed services ("standalone") or only mobile services, a lower usage level is considered compared to household baskets which comprise both fixed and mobile bundles of services. In line with this, there are 5 fixed broadband baskets of different download speeds and 5 mobile broadband baskets (for tablet/modem/data card use) of different download volumes.

All baskets are for private individuals and households - business packages are not included.

The following sections describe the baskets defined for

- Fixed access
- Converged and
- Mobile broadband bundles

Some of the abbreviations used, introduced by BEREC (2018), are:

- FBB — Fixed broadband; FV — Fixed voice; TV — Pay-TV; MBB — Mobile Broadband I — Individual handheld mobile basket
- VL — Very Low; L — Low; M — Medium; H — High; VH — Very High

3.1.2 Fixed access and converged baskets

Baskets for standalone fixed broadband

In line with BEREC's proposal that offers should be found in a minimum number of countries which provide no more than the lowest download speed category, the lowest speed is 4-12 Mbps, combining previous baskets. Offers were found in twelve countries which have this download speed or a speed lower than the next higher category.

The values for fixed broadband speed categories VL to VH are the following:

FBB Speed	
VL	4-12 Mbps
L	12-30 Mbps
M	30-100 Mbps
H	100-200 Mbps
VH	>200 Mbps

Applying these categories, the baskets for standalone fixed broadband (FBB) defined in the BEREC Guidelines are as follows:

Name	Speed
FBB1	VL
FBB2	L
FBB3	M
FBB4	H
FBB5	VH

Metered fixed broadband offers are now relatively rare in the market. In the 2018 price monitoring study, such were found within the EU only in Belgium. Metering is more common outside the EU, e.g. in the USA in particular. Based on feedback received from the NRAs, no data cap was included i.e. only unmetered offers were analysed.

FBB Datacap	
VL	Unlimited
L	Unlimited

M	Unlimited
H	Unlimited
VH	Unlimited

Baskets for telephony Double Play

The household baskets for fixed broadband FBB with fixed voice FV defined in the BEREC Guidelines are as follows:

Name	FBB range
HH1	L
HH2	M
HH3	H
HH4	VH

BEREC reports that the current average number of minutes of fixed national telephone calls is 107 per user and month. Call volumes which are set too high would result in prices not being representative of those experienced by consumers, particularly in countries with high prices per minute.

It has been decided that previous practice was continued, applying a single user profile defined by the OECD comprising 14 and 6 calls to fixed and mobile lines respectively, with calls of 5 minutes average duration.

Baskets for Triple Play

The household baskets for fixed broadband (FBB) combined with fixed voice FV and TV as defined in the BEREC Guidelines are as follows:

Name	FBB range
HH5	L
HH6	M
HH7	H
HH8	VH

Triple Play baskets contain fixed broadband internet access (FBB), voice telephony (FV/FT) and TV. The range of fixed broadband varies from Low to Very High based on the speed category. The values proposed for the categories of FBB range are those shown above.

For fixed voice telephony, again, use was in line with previous practice. A single user profile was applied, comprising 14 and 6 calls to fixed and mobile lines respectively, with calls of 5 minutes average duration.

The BEREC representative households (baskets) include profiles with TV. In line with previous price monitoring practice, there was no distinction made in quality of television service. The wide variation

and fast change in the type, amount and quality of TV services included in European offers continue to make it difficult to select useful categories.

Information on different TV packages were not taken into account in basket definition or price normalisation. On the more formal point that TV programming as content is not an electronic communication service, BEREC considers that it is best only to take into consideration whether an offer includes multi-channel TV services (more than 5 channels) or not. This excluded offers with high value content from comparison, making the benchmarking studies appropriately focussed on differences in the pricing of electronic communication services, not on differences in content provision.

Baskets for converged services

A key extension of previous price monitoring proposed in the BEREC Guidelines was to include baskets which include both mobile broadband and household requirements for fixed broadband. This has been adopted in the basket set for future price monitoring as baskets HH9 to HH17. There were also baskets with two active SIM cards.

The baskets for fixed broadband (FBB) combined with fixed voice (FV) and TV are shown below.

Name	FBB range	FV	Number of SIM cards	Mobile BB range	Mobile Voice range	TV
HH9	L	yes	1	L	L	no
HH10	M	yes	1	L	L	no
HH11	M	yes	2	M	M	no
HH12	M	yes	1	M	M	yes
HH13	H	yes	1	M	M	no
HH14	H	yes	1	H	H	no
HH15	H	yes	1	H	H	yes
HH16	H	yes	2	H	H	yes
HH17	VH	yes	1	H	H	yes

As can be seen, all baskets include fixed voice and none represent Double Play with TV.

The use of 2 SIM cards is to be interpreted as representing the demand of a household with 2 persons, each using one SIM card and with their own usage profile. Normalisation of prices assumes usage of twice the Mobile BB range and twice the Mobile Voice range shown.

Synthesis of converged baskets

Given that in some countries no operator will provide a matching converged offer for a converged service basket, BEREC suggested considering combinations of a fixed offer and a mobile offer to meet household demand for a mixture of fixed and mobile services. When a mobile offer was required to satisfy the household needs, the selection of this offer was determined in such a way that total costs were minimized while the overall requirements of the profile in question are still fulfilled. This methodology allowed for combining offers from different operators.

In markets where converged offers were not available (or overpriced), the price of the combination of a mobile package and a fixed-only package which together provided all the services required in the basket. Synthesis of mobile offers with a fixed offer to mimic converged offers was applied in the baskets / representative households HH9 to HH17. The method simulates how consumers address this issue: the household profile is split into fixed-only and mobile-only bundles and the lowest priced offers

in the market for each are selected for adding as the price for the synthesised converged offer. The two offers combined may be from different operators and as BEREC points out, this is not foreign to consumers: many already purchase this way.

A converged basket is seen as composed of simpler baskets, each of which can separately be matched by an offer or offers on the market. The bundles of simpler baskets together form "synthetic baskets", matching the profile of the converged basket.

Converged baskets can be synthesised from simpler baskets as shown below (compare Table 6 of BEREC (2018) - the "+" symbol indicates that the prices should be added).

Name	Synthetic baskets
HH9	HH1+I2
HH10	HH2+I2
HH11	HH2+I3+I3
HH12	HH6+I3
HH13	HH3+I3
HH14	HH3+I4
HH15	HH7+I4
HH16	HH7+I4+I4
HH17	HH8+I4

As can be seen from the table, HH11 and HH16 require doubling the I3 and I4 basket profiles, respectively, in line with the interpretation of the requirements of baskets with two SIM cards. The rationale given by BEREC for 2 as the maximum value of the number of SIM cards is that the EU average of number living in a household is around 2.4.

3.1.3 Mobile broadband baskets

The baskets for standalone mobile broadband (MBB) defined in the BEREC Guidelines are those shown below. These baskets are suitable for use with a tablet, modem or data card. Baskets for handset use are defined separately.

Name	Volume/Datacap
MBB1	VL
MBB2	L
MBB3	M
MBB4	H
MBB5	VH

BEREC did not make proposals for the values of basket data volumes and the values used are those drawn from previous studies. The download volume requirements (possibly affected by a data cap) in mobile broadband baskets are the following:

MBB Volumes	
VL	500 MB

L	1 GB
M	2 GB
H	5 GB
VH	20 GB

Previous studies already extended the OECD categories. However, compared to previous studies, the categories 250 MB and 10 GB have been dropped. This is possible without loss of market insight because previous price monitoring has shown that the market structures for 250 MB are very similar to those for 500 MB and the distribution of prices for 10 GB over markets is similar to that for 5 GB.

3.1.4 Individual handheld baskets

Basket definitions now exclude SMS completely from individual mobile handheld baskets. The baskets for a typical use of smartphones and similar handheld devices defined in the BEREC Guidelines are as follows:

Name	MBB	MV
I1	VL	L
I2	L	L
I3	M	M
I4	H	H
I5	VH	H
I6	H	L
I7	VH	M

BEREC research reports an average 157 mobile voice minutes per month (86 on-net and 58 off-net). With this in mind, values for the simplified BEREC categories Low, Medium and High are those previously used: 30, 100 and 300 calls. The values for Low, Medium and High call minutes for mobile voice telephony are therefore:

MV number of calls	
L	30
M	100
H	300

BEREC Guidelines confirm continued exclusion of voice roaming and international calls from price monitoring.

3.2 Provider and country sampling

3.2.1 Country sample

The study covers the following countries:

- all Member States of the EU27;
- the United Kingdom, Norway, Iceland;

- the USA, South Korea and Japan.

As in previous years, three states of the USA — California, Colorado and New York – are each treated as countries in order to represent the USA.

In the first phase of the study (2019), the United Kingdom was included as part of the EU28.

3.2.2 Sample of fixed broadband operators

The study aims to reflect good coverage of the market in all countries, with clear rules for ISP and product inclusion to avoid distortions of comparisons.

The coverage of fixed broadband operators is as follows:

- For each country selected, a list of the top broadband Internet Service Providers (ISP) is compiled, ranked by number of users. For all Member States of the EU, Norway and Iceland the list covered at least 90% of the overall national fixed broadband market. For other countries the list covered at least 80% of the market. All ISPs in the list are included in the data collection.
- In countries where the broadband market is very fragmented and the number of ISP needed for the above list is too high, the five ISP with the highest market share are selected. These ISP are all included in the data collection.
- Incumbent telecom operators are always included in the data collection, regardless of their market share.

National Regulatory Authorities (NRA) were given the opportunity to verify the sample drawn for their Member State.

3.2.3 Sample of mobile broadband operators

At least the two largest mobile network operators were covered for each country. If the combined market share of the two largest operators was less than 70%, the third largest operator was also included¹³.

The largest operators in a country were identified based on the number of mobile broadband subscriptions, or, if that was not available, based on the total number of mobile subscriptions. The number of subscriptions per MNO was taken directly from the NRAs, where available.

A list of MNOs following these rules was drawn up and the NRAs were given the opportunity to verify the entries for their Member State.

For each of the MNOs selected, data on all relevant mobile broadband products offered to residential consumers was collected. Relevant products are those meeting the (modified) OECD inclusion criteria included both standalone broadband and offers also permitting mobile voice telephony and mobile messaging.

¹³ The OECD also set the market coverage limit at 70%, except for handset-based baskets. For handset-based baskets the coverage limit was set by the OECD at 50%, in order to correspond to the mobile baskets defined in 2009/2010. 70% have been observed in this study.

3.3 Data collection and product inclusion

3.3.1 Inclusion by source and target customer

Product inclusion

In line with BEREC (2018 - Annex II), for each of the ISPs/MNO selected, products offered to residential consumers were identified which consist of or contain fixed and/or mobile broadband internet access, whether standalone or combined with any type of value-adding service or feature. Both prepaid and post-paid tariffs were included.

Offers which conform to the inclusion rules in this section were identified and compiled in country databases of retail broadband offers. Those offers were disregarded which are clearly more expensive for all representative usage baskets than offers already in the database. After application of price normalisation, the lowest priced offers for each basket were identified from this database.

In line with previous studies, data was collected only from the websites of the mobile broadband operators and the fixed (and converged) broadband operators. The requirement that the offer be on the operator website is in line with OECD methodology. The OECD requires that any discount brands offered by network operators are only included when clearly linked with the network operator's website and brand.

Only offers which were purchasable on the website of the respective operator, were included in the database of offers. This requirement disposes of a previous OECD requirement that only prices clearly presented on the operator web pages as currently available for new customers are to be considered. Since current prices are essential in a purchase, this criterion has now lost relevance.

These rules are fully in line with BEREC (2018) Annex II, which stipulates that all offer data is to be collected from online sources hosted by the ISP/MNO offering the service concerned and only offers advertised on and purchasable on the website of the respective provider are to be included in the sample. Any discount brands offered by MNOs are only to be included when the MNO's website contains a clear link to the discount brand.

Residential and business

Business packages were not included, as in previous years. This is in line with OECD and BEREC guidelines, except in the case of individual mobile handheld baskets, where the OECD have requested inclusion of business offers in order to be consistent with the OECD mobile basket methodology. This extension has not been practiced in previous EU price monitoring studies and will also not be practised in the study in future unless and until otherwise agreed with the Commission.

3.3.2 Inclusion by technology and service bundle

Technology

Clear criteria were set for the inclusion of offers on the market, which relate to the technology provided for customer access. The study complied with the BEREC requirement that fixed broadband services should be supplied to homes via xDSL, cable modem, FTTx, satellite or fixed wireless systems. It should be noted that previous studies excluded fixed wireless access. From now on, offers of services supplied via "LTE at home" were collected as fixed broadband offers.

As in earlier studies, neither wireless access for fixed use (e.g. LTE at home) nor Wi-Fi hotspot access were considered mobile broadband. Mobile offers had to be at least 3G, which confirms previous

practice and may therefore currently be 3G, 4G, or 5G.¹⁴ As advised by BEREC, access technology was not in focus in reporting even though operators may use this in advertising.

Mobile service offers from MNOs

Data on offers providing mobile broadband, with or without mobile voice telephony, were sampled from the selected MNOs. When scanning providers of mobile services, data on offers were collected for modem/tablet and for handset use. For price normalisation in mobile telephony, mobile offers must include data on call pricing.

Fixed services from ISPs

For each of the fixed access service providers (ISP) selected, all the products offered to residential consumers were identified which consist of or contain fixed broadband internet access, whether standalone or combined with any type of value-adding service or feature.

Service bundles defined in representative households or other usage baskets (see above) were sampled in their own right to obtain the lowest price in the market. BEREC requires that the value-adding provision of fixed voice telephony and/or television should be singled out for full sampling and analysis.

Data was collected on fixed broadband internet access provided:

- alone (Single Play),
- combined with fixed voice telephony (Double Play - Telephony),
- combined with both fixed telephony and television (Triple Play),
- combined with fixed telephony, television and mobile (Convergent /4P)

Mobile services from ISPs

When scanning offers of fixed broadband, data on mobile services were also included when offered with fixed broadband, making up a "converged" offer. These mobile service offers were collected for modem/tablet and for handset use. For price normalisation in mobile telephony, mobile offers must include data on call pricing.

It is possible that the usage profile of a converged (fixed + mobile) basket may be met by such converged (fixed + mobile) offers. However, this must not be the most advantageous offer for all usage baskets. Therefore, in all markets, not only where converged offers are not available, mobile packages and fixed packages were included in the offer database, where these formed a synthetic offer, i.e. together provide all the services bundled in a converged usage basket.

3.3.3 Inclusion by price and quality

Only unrestricted services

In line with BEREC, TV service is only taken into consideration if the use of television is not restricted in time or in volume and when the offer includes more than five free channels. Also, packages which degrade or stop internet access when the usage allowance is exceeded were included only in baskets whose average user requires a volume/time covered by the allowance. Packages which allow extension with a new price or overage charge were included for baskets whose average user requirements exceeded the allowance.

¹⁴ See BEREC Guidelines 2018 Section 3.2 (g)

An offer of broadband (internet) access must provide IP/HTTP access to the greater Internet via HTTP. Offers were therefore excluded which were a "walled garden", provided email-only services or where access to websites, content and applications was limited to those "offered directly by the MNO and customised for that operator's network and devices".

Following BEREC (2018) guidelines, no offers were included, which limited time of use in any way: "The methodology excludes those offers with time-based limitations, for example by the number of monthly hours of use, or daily or weekly offers. Only those offers where the allowance can be freely used over a whole month have been considered. Therefore, the number of hours or days of use per month are not parameters in the methodology."

Cheaper offer only

Applying price normalisation in analysis, the least expensive offers per basket and operator were calculated and recorded for all the baskets in the agreed basket set.

BEREC allowed that where the same product - a product in the same selected service bundle and providing the same download speed/volume - was offered in different variants and where it was clear which of the variants was the least expensive - usually that with the least value-adding features - then only the least expensive variant was included in the database or sample of offers.

In past studies, this inclusion rule meant that offers including mobile voice telephony or mobile broadband access were included only where the respective provider does not offer an equivalent product without the mobile service in question. For this study, such converged offers were sampled in their own right, however, similar restrictions continued to apply when expensive content (pay TV etc.) was bundled in a service, which then became uncompetitive for the respective usage basket.

Add-on packages

An issue of transparency is raised by complex sets of add-on packages for pre-paid plans. Consumers cannot be expected to want or be able to compare a large number of add-on packages to select the perfect combination for their requirements. In recording add-on packages, a sensible limit was put on the number of add-on packages which were taken into account to meet the volume requirement of a given customer/household type (usage basket). The last study applied a limit of two add-on packages, which was also used in this study and will be used in future work.

3.3.4 Excluding bundled devices

Bundled notebooks, handsets

BEREC, in line with the OECD, stipulate that

- Offers are not to be recorded which include provision of a laptop, netbook, notebook or tablet device;
- Packages are to be taken into account in which the price for the service includes an upfront or integrated charge for a modem, e.g. as stick or dongle, provided the customer cannot receive the same service without the device;
- Individual mobile handheld offers are to be taken to be such permitting voice telephony, regardless of whether a smartphone or other device was bundled into the offer or only a SIM card provided.

These inclusions and exclusions were applied, as in previous years, through operation of the lowest price mechanism. An offer which included expensive devices bundled with the service defined in a

basket is very unlikely to represent the lowest price for that basket. If, exceptionally, it did represent the lowest price for a basket, it was believed that including the offer in the database would not compromise the comparison across markets in any way.

Multiple SIM cards

In previous studies, offers with multiple SIM cards were to be included only if no extra charge was made for the second or subsequent SIM card. In line with this, BEREC specified that, for all packages, tariffs included should be exclusively single user offers excluding mobile offers with more than one SIM-Card. Annex II specifies that: „Offers with multiple SIM cards shall be included only if no extra charge was made for the additional SIM cards“.

Though this rule is in line with previous methodology, it might be seen as inappropriate when recording the lowest price offers in a market for one of the 2-SIM baskets. This rule was therefore relaxed in order to include competitive bundled offers and to be able to properly analyse the market for two and more person households interested in converged (fixed + mobile) offers.

3.3.5 List of parameters per offer

The following parameters served as a minimum data collection for each selected offer and each ISP operator:

- Meta data: Country, region, national currency, VAT rate, ISP's / MNO's name, status (e.g. incumbent or new entrant and for what market — fixed or mobile), geographic coverage (national, regional).
- Name of the offer
- Geographic availability
- Technology (xDSL, cable modem, FTTx, Ethernet, LTE, plug and play, satellite, other)
- Category of the service (broadband standalone, bundle)
- Services included (internet access, fixed telephony, TV, mobile voice and broadband access).
- Speeds (upload and download). Offers with download speeds below 2 Mbps were not considered
- If offer was metered or unlimited
- Download limit, expressed in number of GB per month (metered offers only)
- Price per GB above limit (metered offers only)
- Online time limit, expressed in number of hours per month (metered offers only)
- Non-recurring charges, e.g. installation costs plus any fixed initial costs (e.g. antennae, modem, software driver)
- Monthly charges (or monthly equivalent if charged over a different time period), including monthly rental charges for necessary components such as xDSL, cable modem or other technology and any other charges necessary for / exclusively linked to the service, rental of equipment if an inseparable part of the offer and any other charges made by the ISP which were not included in the tariff but necessary to make use of the offer as defined in any household consumption basket. For metered offers, the additional cost per hour and/or GB was recorded for use in price normalisation. Recurring charges were clearly separated from non-recurring charges. Normalised monthly charges excluded the monthly cost of the telephone line rental or the cable TV monthly fee.
- Monthly cost of telephone line rental

- Monthly cost of cable TV monthly subscription fee
- Contract duration and penalties for early withdrawal
- Discounts, commercial advantages and extra charges
- Additional technical parameters such as webspace and level of protection and other parameters seen as adding significant value
- 5G network
- Intra-EU calls included / roam like at home / restrictions

Notes on offer details

Recurring charges included phone line rental and cable TV fees and any other charge which the customer necessarily incurs to receive the offered service. The recorded recurring charge was a monthly charge. Regular charges for periods other than a month were converted proportionately to a recurring charge for one month. Irregular charges were treated as a mixture of recurring charge and non-recurring charge.

Where prices differed by payment method, the most easily and publicly accessible price was recorded, regardless of the payment or billing method specified.

Discounts were recorded when they applied to all customers and applied on the first day of the Price Reference Period.

The country data set comprised: Country symbol; EU, non-EU; currency; (integer) Euro exchange rate; VAT rate (integer) percent

The TV data set comprised: number of channels (categories of); download content or other value add, no value adds.

The internet data set comprised: (integer) Mbps down/upload speed;

The telephony service data set comprised: geographic coverage of international calls; (integer) minutes time allowance to mobile; (integer) local currency cost of additional minute to mobile; (integer) minutes time allowance to fixed; (integer) local currency cost of additional minute to fixed.

Value-adding features were recorded only if no additional charge was made for their provision.

Electronic copies of the web pages (screenshots) and documents from which tariff information was collected is kept and used in quality assurance processes during data capture.

3.4 Price normalization

3.4.1 Overall approach

For valid price comparisons across markets, normalisation of advertised prices is necessary to provide comparability across offers which have different price components and/or usage rules with relevance to the cost incurred by a typical user (as defined in the agreed baskets).

The rules applied to achieve normalisation were drawn from BEREC Guidelines, OECD recommendations and previous works.

Normalisation results in a standard monthly price for an offer in respect of a basket, which is determined by considering the one-time, recurring and usage charges as well as the applicable discounts. The price was determined for each of the different consumption baskets which the offer could meet.

Analysis was done both for broadband standalone products and for each of the different combinations of fixed broadband and other services following the categorisation of BEREC guidelines and the criteria set in the work on basket definitions.

Broadband products were distributed according to the advertised download speed, regardless of whether offers were capped or not. Capped and uncapped offers were compared by applying a normalisation procedure similar to the one used in the previous studies.

Normalisation made use of the agreed set of baskets in which typical user and household profiles were defined in terms of typical download volumes and call minutes.

On completion of the data collection, the dataset was analysed and prices normalised to generate a comparable, standard monthly price for each relevant usage basket (representative household). The standardised monthly price calculated for each offer and basket had three main components:¹⁵

- depreciation over one month of one-off (non-recurring) charges and discounts;
- monthly recurring charges;
- recurring discounts and extra charges normalised as necessary to a monthly amount.

The following sections give more detailed information proposals for normalisation of a range of tariff plan conditions:

- normalisation of broadband services for metering and capping by volume and time;
- normalisation of prices for telephony services, applying OECD and additional techniques to compensate for billing increments greater than 1 second, for long minimum call duration for mobile telephony, with similar simpler provisions for fixed telephony;
- normalisation for bundled or additionally required equipment from laptops and receivers to handsets;
- normalisation for discounts, contract period variation and up-front costs.

3.4.2 Normalisation of broadband services

Metering and capping by volume and time

In the case of most mobile broadband offers, charges did not vary by usage, provided the customer does not exceed a given volume of downloaded data. In the case of fixed broadband, most offers were "unmetered" without a volume or time limit to use.

Details of normalisation in the case of mobile broadband and fixed broadband are provided below.

Mobile broadband - volume capping / fair use

Operators providing a flat rate with a data allowance ceiling define different responses to exceeding the flat rate. Excess usage beyond the data allowance of an offer may result in disconnection, throttling of speed and/or overage charges. The OECD methodology considers excess usage, i.e. beyond data allowances included in the offer, in one of two ways:

- "If throttling is used the tariff is excluded from the results if the basket volume exceeds the allowance. This was also applied if both throttling and overage charges are applied to a given

¹⁵ Normalised price = All Monthly Recurring Charges + (One-Off Charges – One-Off discount – (monthly discount*validity in months))/24)

offer. In this regard, throttling practices specified by acceptable use policies (AUPs) were also considered.

- If excess usage results in overage charges the additional cost is added to the total as a usage element to pick the level of usage specified in a basket."

Packages which degraded or stopped internet access when the usage allowance was exceeded were included only in baskets whose average user required a volume/time covered by the allowance.

Packages which allowed extension with a new price or overage charge were included for baskets whose average user requirements exceeded the allowance, with normalisation.

Where an offer provided the option of extending use at the original speed with an overage charge, overage charges were added to the price, to properly reflect the cost of using the basket data volume under the tariff rules of the offer.

Packages which degraded or stopped internet access when the usage allowance was exceeded and the average user of a basket required a download volume which was not covered by the allowance and allowed extension with a new price or overage charge, prices were normalised to reflect the total cost to an average user of the package. Normalisation was calculated based on the additional charges made to meet the full download volume requirements of the average user of the basket in question.

At the same time, it was recorded whether it was possible to purchase additional volume after a limit had been reached at no reduction in speed.

Fixed broadband - time and volume capping

In line with BEREC guidelines, time – limited offers have not been included in the monitoring.

Normalisation was applied where the volume limit of an offer was below the user profile (basket) value and where exceeding the limit did not lead to service degradation but to additional charges. In such cases the cost of the profile volume was adjusted based on prices advertised for exceeding the volume threshold, whether or not the charges were applied automatically or only on request.

For metered offers, the baskets of usage volume linked to speed basket was applicable. A monthly usage time of 20 hours of internet connection was a constant basket feature.

Offers which imposed volume limits but without the customer being able to request (and pay for) continued provision at the same quality, were only included if the ISP continued to offer access, at reduced speed and the reduced speed (prominently displayed) exceeded 0.144 Mbps. For profiles which breached the volume limit, the offer was reclassified in the speed basket appropriate to the speed after limit breach.

3.4.3 Normalisation of telephony and TV services

Normalisation of prices for telephony services (OECD 2017)

The following sections deal with normalisation of the prices for baskets including mobile voice telephony usage. In previous EU price monitoring studies these were referred to as "handset-based" baskets, but here in line with BEREC Guidelines as "individual mobile handheld" baskets.

Normalisation is required due to variations in plans providing telephony:

- with minute interval billing e.g. a call of 110 seconds cost the same as 115 seconds but 125 seconds costs more;

- with a longer first billing interval imposing a minimum call duration / charge;
- offering one or two user-selected numbers which are cheap or free “family and friends”, three user-selected numbers “selective discounts”;
- charge differently at different times of day or week;
- charge differently to those which are on the provider’s own network - on-net / off-net;
- charge differently for calls to a voice box compared to on-net charges.

Following BEREC guidance, normalisation is no longer required for plans which charge for the SMS sent or restrict the number of SMS in a flat rate.

The OECD provide data per user profile / representative household basket to include and weight each of these various charges to arrive consistently at the monthly charge a consumer faces whose usage conforms to a particular individual mobile handheld basket.

Normalisation of mobile telephony charges

The calculation of a normalised offer price in mobile telephony baskets, as defined in OECD (2010), proceeded by deducting the value of call allowances included in the package from the usage element of the basket, up to the value of actual usage.

Allowances were deducted in the following order:

- selective discounts
- most restricted minute allowances
- least restricted minute allowance
- message allowance
- value allowance.

Finally, specific volume discounts were deducted from the total cost.

Based on BEREC advice, selective discounts were not calculated, unlike in previous years.

Off-net mobile-to-mobile charges were weighted according to subscriber numbers for each country, where relevant for the pricing of calls.

Compensation for billing unit duration used the duration of $D + (\text{Unit (seconds)} - 1) / 2$, based on basket call duration D , converted to seconds and average per second charges, as further described in the section on longer billing increments, below.

A related normalisation rule related to long first billing units, e.g. all short calls were charged as if they lasted three minutes, even if subsequent billing units were one second in length. The application of a statistical model is described in the section on minimum call duration, below.

The data required to normalise offers provided in the following tables comprise:

- Voice call destination distribution, percentage per destination. This distribution was equalised across all baskets and made independent of number of calls per month in the 2017 update (OECD 2017).
- Voice call distribution by time of day. This distribution was equalised across all baskets and made independent of number of calls per month in the 2017 update (OECD 2017).
- Voice call duration by destination distribution. This distribution varies between frequent users and low users, i.e. according to the number of calls per month in the usage basket concerned

Data on SMS distributions provided by the OECD are no longer applied.

Figure 13 – Voice call destination distribution

Basket No.	Calls / month	Fixed	On-net	Off-net
(all)	(any)	15%	55%	30%

Figure 14 – Voice call time-of-day distribution

Basket No.	Day	Evening	Weekend
(all)	46%	27%	27%

Figure 15 – Voice call duration by destination network / service in minutes per call

Calls/Month	Fixed	On-net	Off-net
30	2.0	1.6	1.7
100	2.1	1.9	1.8
300	2.0	2.0	1.8

The following description of such compensation is provided for completeness and may be relevant when considering the validity of trend analysis.

In the OECD paper on the 2009 revision of methodologies for comparable retail prices of telecommunication services (OECD 2010), a new method was introduced to account for the impact of selective discount plans on consumer costs.

Selective discounts allow users to specify a certain number of destination telephone numbers to which calls and/or messages will be free or discounted. There are many brand names for the plans the OECD refers to as selective discounts, such as "Friends and Family" or simply "Preferred numbers".

The OECD, working with operators, developed an empirical function for estimating the impact of selective discount plans, based on data on the distribution of calls between numbers in selected populations of consumers.

Selective discounts can be expected to skew the call distribution in favour of the preferred numbers. However, without OECD guidance on this, the increase in traffic that selective discounts trigger was not taken into account in basket calculations.

The empirical function applied is presented here in two parts. The first provides a proportion, A, "that resembles the amount of calls going to nominated numbers in the data received from operators" in the 2009 OECD basket review and the second delivers V₂, the number of minutes going to the nominated numbers, that is, the amount that is deducted because of the selective discount:

$$A = \text{Log}(10 \times N^{1.5}) / \text{Log}(10 \times V)$$

$$V_2 = V_1 \times A \times D$$

Where

V is the total number of minutes for all calls in the basket

N is the number of target telephone numbers the discount applies to

D (0...100%) is the discount D in percent applying to a call to a discounted target number with D=100% being a free call

V_1 is the total number of minutes defined by the basket

Mapping information is used to indicate which call types are affected by the discount, V_2 is used to calculate the number of minutes to be deducted from the basket minutes according to the call type mapping. V_2 is distributed to the specific call types according to the selective discount mapping, so that each call type will have between zero and V_2 minutes to be deducted. The cost of remaining minutes is then calculated as usual. The selective discount is taken before any minute, message and value allowances included in the package.

Correcting for longer billing increments

In the OECD paper on the 2009 revision of methodologies for comparable retail prices of telecommunication services (2010), a new method of accounting was introduced for different call billing durations (e.g. per second, per minute) applicable both to fixed and mobile network telephone calls.

Previous to the 2009 revision, calls of various durations were simply rounded up to the next billing increment. An average call duration of 75 seconds was costed at 2 units (120 seconds) for tariffs with per-minute billing and as 75 units (75 seconds) only for tariffs with per-second billing.

This approach introduced distortions in comparisons. A basket defined with an average call duration just over the billing increment of a tariff would incur a larger rounding up to reach the next increment, while a call just under the billing increment of a particular tariff would attract a correspondingly small addition to call cost.

As the OECD authors note, "the effect was somewhat arbitrary".

The improved accounting introduced in 2009 provided a method to calculate the average overcharge over all customers with the same average duration. The approach, though a considerable improvement, requires the assumption of a flat distribution of call durations. Though it is acknowledged that the real distribution diverges from this simple picture, the results certainly come closer to what groups of consumers are actually charged.

In the new method, a price per second is the basis of the calculation in all cases, regardless of the billing increments (billing unit duration). For a tariff with 60 second billing increments the price per second is simply the price per unit divided by 60. Given a flat distribution of call duration, the average overrun is half the billing increment less one second, that is for a 1-minute increment, $(60-1)/2$ seconds.

This means that an average call duration of 75 seconds in a tariff with 60 second billing is costed at $75 + (60-1)/2$ seconds times the fictitious per-second price (unit price/60).

The general rule for costing a call basket is:

$(\text{average basket call duration} + (\text{billing increment} - 1) / 2) * \text{unit price} / \text{billing increment}$

Call duration and billing increment (N in OECD notation) are measured in seconds. The unit price is the price for exceeding the next billing increment.

An additional rule applied in normalisation is that if the "adjusted" call duration is shorter than the billing unit, the full price of one billing unit has been considered as the cost of the call.

Any call set up charge is added to the cost per call.

This method has remained unchanged in the 2017 OECD revision and appears to be fully in line with BEREC Guidelines.

Correcting for minimum call duration

A correction for minimum call duration is called for in the BEREC Guidelines and the method described here has been applied in data analysis going forward.

The normalisation technique to be used was developed by empirica for the now-common pricing practice of setting a long first billing unit or minimum call length, typically one minute. These tariffs have a cost impact on bundles of calls, as some of these will be shorter than the minimum length charged.

The method applies an exponential distribution of call lengths. For a minimum billed call length of 1 minute, followed by one-second increments, the proportionate increase in billed duration compared to per-second billing is given by

$$\frac{1}{\mu} - (1 - e^{-\frac{1}{\mu}})$$

where μ is the average duration of calls in a basket.

Normalisation of fixed voice telephony pricing

Prices for services including fixed telephony have been normalised by applying a single user profile or basket defined by the OECD. This comprises 14 and 6 calls to fixed and mobile lines respectively, with calls of 5 minutes average duration.

Normalisation of varying TV offers for fixed access

Offers in which use of television was restricted in time or in volume or where less than 5 free channels were offered as television was treated as no television service. No normalisation has been applied as any other service is treated equivalently. Offers with high price TV components have been automatically excluded from comparison as content value is intentionally not part of the EU price monitoring approach.

3.4.4 Normalisation of fixed charges and discounts with SCD

Standard contract duration SCD

In line with rules drawn up by the OECD, customers face non-recurring or one-off charges when accepting an offer, e.g. charges for installation, software or equipment purchase, were converted into a monthly charge. Standard net present value and discounting techniques were applied to achieve this. The same procedure was applied to one-off discounts and subsidies.

This approach required the application of an appropriate discounting period and a discount rate.

Agreement on a zero percent discount rate was unlikely to be controversial. Given the economic climate and following previous practice, a discount rate of zero was proposed. This is in line with BEREC Guidelines and the OECD distribution rule, which is implicitly zero percent discounting - distributing fixed costs proportionately over the SCD.

The appropriate standard contract duration SCD was less clear. In previous studies, the SCD was used as discounting period. Non-recurring charges were converted to a "spread charge", a constant monthly amount over the standard contract duration, such that the net present value of the spread charge equalled the total of non-recurring charges incurred at the beginning of the contract.

The standard contract duration used in previous studies was the 36 months recommended by the OECD. A number of operators and NRAs have responded to previous normalisation practice pointing out that 36 months is longer than the contract durations common on the market today. 2018 data from our price monitoring for the Commission show that there were only very few offers with a 36-month contract duration. No contracts had longer durations.

BEREC noted this discrepancy and BEREC Guidelines now recommend the application of a standard contract duration (SCD) of 24 months instead of the 36 months used in previous pricing studies.

Treatment of discounts

Targeted discounts applicable only to certain types of customers such as students or disabled people and discounts for grouped subscriptions, were not taken into account.

Generally available discounts - typically one-off up-front or a reduced monthly charge for a limited period - were taken fully into account, creating a (negative) component of the monthly price, using depreciation techniques where necessary.

The method of taking discounts into account which were valid for all customers on the first day of the price reference period ensured proper reflection of the cost of the service to an average customer, purchasing then and retaining the service for the standard contract duration. Discounts for ordering online were applied in full. A recurring discount provided for a limited period was discounted to a net present value and spread over the standard contract duration.

Discounts were given on up-front (non-recurring) charges, e.g. equipment, activation and/or installation charges and / or on the recurring charges, monthly fee or other time-based charge. Both were taken into account.

The principle to be followed in EU price monitoring is as has been applied since 2016. The way discounts and charges are taken into account is as close as possible result in the total cost of a service faced by the average consumer during the price reference period. The current rules are as follows:

For promotional discounts, that is, those valid for a limited period, whether or not judged likely to be repeated, the full value of a discount was applied.

Discounts for ordering online were applied in full, as all customers purchasing from an operator website have access to this discount.

Discounts and extra charges may be incurred for billing and payment method (e-invoicing, electronic payment, direct debit, paper billing, cash, credit card, cheque, etc.). In respect of discounts which depend on matters such as mode of payment or billing, the most easily publicly accessible price for the service, regardless of which payment or billing method was linked to this price.

Selective discounts - friends and family etc.

Previous mobile broadband pricing studies have taken the impact of selective discount plans into account. Selective discounts allow users to specify a certain number of recipients to which calls are free or discounted.

These tariffs have been losing importance in most countries due to the elimination of an-net / off-net tariffs. The study followed the BEREC proposal to disregard selective discounts.

3.4.5 Bundled and added equipment

Treatment of mobile handsets

The authors of the EU price monitoring studies in 2015 and previously - BIAC studies - decided that the total monthly cost of all handset-based offers should take into account the price of a smartphone device, whether or not the offer bundled such a device with provision of SIM-based access. Furthermore, normalisation differed between baskets, in that a basic smartphone was assumed for the three lower volume baskets and an "advanced" smartphone for the top two categories. This was questionable in that one of these top data baskets contains only as many calls as the second to lowest basket. To "normalise" the price of SIM-only offers, an artificial price was calculated by subtracting the estimated price of a handset from the bundled offer, often regardless of the fact that a customer could save nothing by refusing the handset.

The approach followed from 2016 onward was to allow basic and advanced handset with any basket. However, given that the handset device is not reflected as a requirement in any of the baskets, empirica agreed with the Commission, from 2020 onwards, to only consider the price of a smartphone device when the offer is not available without such a device. Where possible, the offer prices are captured for both a basic handset and a high-price handset. For this purpose, a list of manufacturers' models assigned to the basic and high-price handset categories is generated in advance of fieldwork. Where the same service is available without a handset ("SIM only"), no handset prices will be collected.

Bundled laptops and other devices

Apart from smartphones, other items of equipment bundled with offers need to be taken into account. The authors of studies prior to 2016 considered for laptops that "if an equipment (e.g. USB stick, dongle or MiFi'-modem) is required for using a mobile broadband offer on a laptop and if this equipment is directly provided by the operator, its cost is also considered". Equipment was at that time not considered an issue for tablets because "for tablets, it is assumed that the SIM card can be inserted in the device, so no equipment cost is added". In proposing a change in 2016, it was noted that a SIM card can be inserted into an existing telephone and into many notebook computers so that this clear distinction was increasingly in question.

From 2016 on, instead of assessing if equipment is required or directly provided, it was agreed with the Commission that any such equipment be treated as a component in a bundle of products and services and that the cheapest bundle from an operator matching basket-defined consumer requirements is sought.

This means that, for a given operator in a country, the cheapest offer fitting a basket requirement was recorded. If this required an up-front charge for any equipment, this charge was included in price normalisation and depreciated as with other up-front charges.

Normalisation of non-recurring charges was carried out by depreciating of the SCD - 24 months, previously 36 months - assuming consumers have no significant remainder value at the end of that period. Non-recurring (one-off) charges include all charges made at the beginning of a contract, such as activation, packaging and postal costs, buying or renting of material (modem, handset, software), etc.

The stipulation of a standard contract duration enables the consistent translation of one-off costs into monthly amounts and vice versa.

The OECD basket building rules (OECD 2012) require the depreciation of non-recurring price elements over the standard contract period, which was then three years.

3.4.6 Rental, maximum charge and contract duration

Buy or rent

Where options were given to either buy or rent required equipment, both offer variants were included, unless it was clear on data entry which one resulted in a lower normalised standard monthly price to consumers.

Maximum charge

In some cases, a maximal charge was advertised for additional time or download volume, or the total invoice was limited to some maximum. If this maximum charge was lower than the normalised charge, the maximum charge was taken.

Compensating for contract duration

Normalisation was required for contracts longer and shorter than SCD. Any charges for renewing a shorter contract or overrun of a contract (series of contracts) of fixed duration were taken into account as non-recurring charges at a particular time. Discounting techniques were applied to determine the contribution to the standard monthly price. Normalisation results vary with whether the contract duration was shorter or longer than SCD.

Short contracts: For offers with a shorter contract duration than the SCD, normalisation was carried out based on the customer renewing the contract to maintain the service for at least the SCD. The normalised price for contracts of duration shorter than the SCD was calculated in the same way in principle as for a contract of exactly SCD duration. Additionally, any non-recurring charges made on extension of a short contract were discounted back to the beginning of the first contract before being added to the non-recurring charges and spread over the SCD period.

Long contracts: The charges for the period after the SCD elapsed were discounted back to the start of the contract period.

3.5 Data collected and cheapest offer

The cheapest offer per price basket and country was determined based on the normalised price for each offer in all the baskets for which it was eligible.

The least expensive offer recorded for a price basket in a country was allowed to be an offer providing a greater data volume, call number than that specified in the basket, if such an offer was cheaper than all offers providing only the basket amounts.

3.6 Quality assurance

In order to obtain solid results, the gathered data was thoroughly checked and subsequently prepared for the statistical analysis, beginning with normalisation procedures.

The following table summarises techniques applied to ensure high quality of all statistical data:

Figure 16 – Summary of automated and manual checks on statistical data

Real time / parallel	Across data sets (EU-wide)	Within one data set (Member State)
Real time during entry	<ul style="list-style-type: none"> • Model / extreme value analysis highlights cases where captured values differ significantly from expected values generated from a multivariate model. 	<ul style="list-style-type: none"> • Checks on plausibility of data within one Member State / country data set, highlighting of <ul style="list-style-type: none"> ○ presence of duplicates ○ presence of non-numeric values ○ unlikely relative prices (within ISP/MNO offer)
Automated after / parallel with entry	<ul style="list-style-type: none"> • Checking data completeness in respect of <ul style="list-style-type: none"> ○ Member States and other selected countries ○ Selected MNOs & ISPs ○ Defined baskets Coverage of market share 	<ul style="list-style-type: none"> • Cross check of collected products with data from last collection, usually the previous year <ul style="list-style-type: none"> ○ for each Member State ○ for each MNO/ISP

4. Key findings

4.1 Fixed prices at a glance

4.1.1 2020 prices across the EU for fixed broadband offers

Figure 17 shows the average across the EU of the lowest prices found in each country for each of the three service bundles and for the four speed baskets above 12 Mbps. These EU average figures provide a reference point for international comparison and for comparison of markets within the EU. Compared to 2019, EU27 average of 200+ Mbps internet standalone offers and combined service bundles fell noticeably. The impact on prices of adding value through increased speed is clearly visible, see section 4.1.9 for a discussion of these "speed premiums" - as is the increase in price from bundling television and fixed telephony services with standalone internet - see section 4.1.10 for detail on the "bundle premiums". Please note that 200+ Mbps offers are not available in all EU27 countries.

Figure 17 – EU27 average of lowest national prices for each service bundle across four speed baskets



Figure 18 shows the lowest price found anywhere in the EU for each service bundle and speed basket. As can be seen, standalone fixed internet delivered at more than 12 Mbps can be obtained at a normalised price of only €10.54 per month (PPP)¹⁶ in at least one country. For the Triple Play service bundles among all speed categories, the cheapest price in Europe is €18.29 (PPP)¹⁷.

¹⁶ This offer is available in Romania only.

¹⁷ This offer is available in Romania only.

Figure 18 - EU27 absolute lowest prices for each service bundle across four speed baskets



Figure 19, below, gives a first idea of how variable prices for fixed broadband access are across Europe. For each country, the average was calculated across the lowest prices in twelve offer categories (three service bundles and four speed baskets). Even though these averages include the fastest download speeds and all Triple Play offers, the average lowest price lies under €25 in nine Member States. Consumers in another two countries can benefit from average prices of under €30 from their most competitive large suppliers. The majority of EU national markets exhibit averages under €40, while only seven markets have relatively higher averages. The range of average prices in total is €38.67.

Figure 19 – Country averages across 12 lowest price offers, EU27

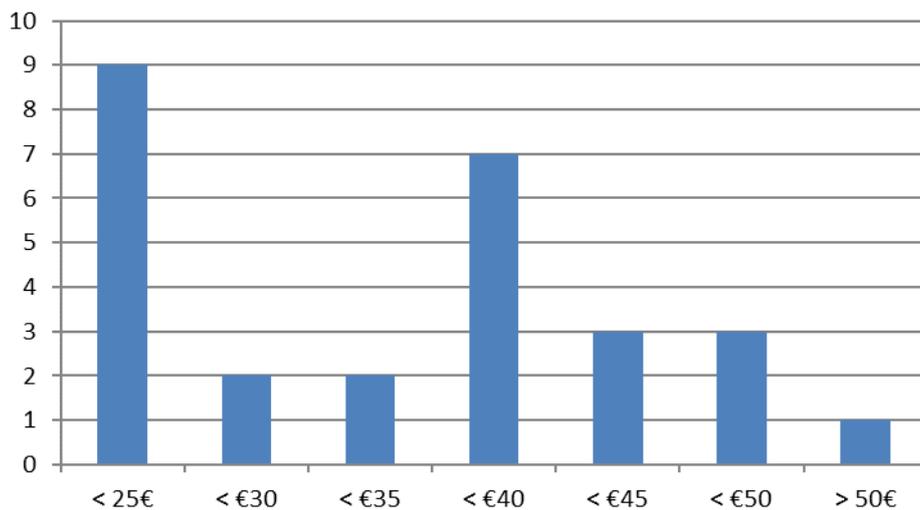
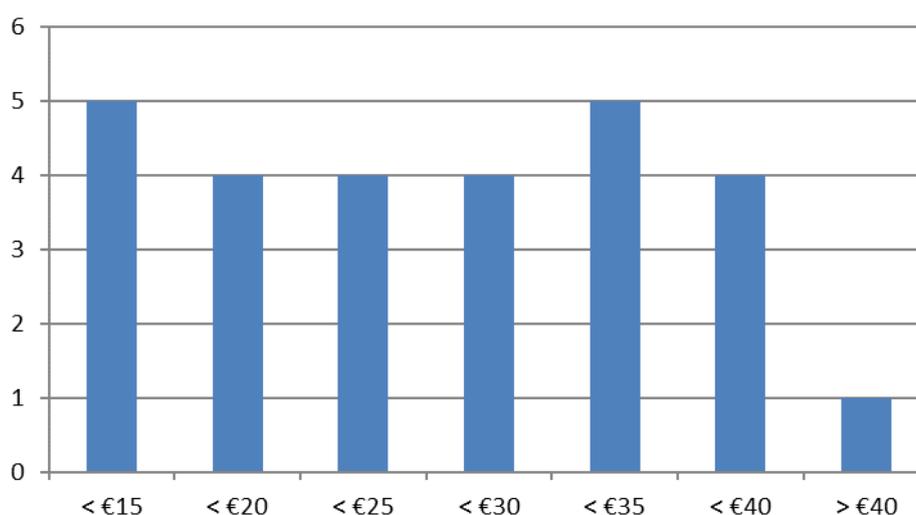


Figure 20, below, shows results for the cheapest prices found for standalone internet providing speeds greater than 12 Mbps. The lowest price in Europe for standalone internet is €10.54, found in Romania.

Figure 20 – Distribution of lowest prices for >12 Mbps standalone internet, EU27



To present a fuller picture, but without introducing the distraction of small price differences, four clusters of countries were identified¹⁸ 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.

Figure 21 shows the results. A green symbol (1) in a bundle/basket category stands for countries in the cluster with inexpensive offers for that category, a red symbol (4) for countries in the expensive cluster of offers in a bundle/basket category. Blue (2) symbols indicate clusters of relatively inexpensive, yellow symbols (3) of relatively expensive price levels. A dash signifies that no offer was collected in 2020 in that offer category and country.

¹⁸ 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 21 - Price variation per offer category across the EU, country clusters (fixed broadband)

	< 12 Mbps fixed internet	12-30 Mbps fixed internet	30-100 Mbps fixed internet	100-200 Mbps fixed internet	>200 Mbps fixed internet	12-30 Mbps fixed internet with fixed phone	30-100 Mbps fixed internet with fixed phone	100-200 Mbps fixed internet with fixed phone	>200 Mbps fixed internet with fixed phone	12-30 Mbps fixed internet with fixed phone and TV	30-100 Mbps fixed internet with fixed phone and TV	100-200 Mbps fixed internet with fixed phone and TV	>200 Mbps fixed internet with fixed phone and TV
LT	1	1	1	1	1	1	1	1	1	1	1	1	1
LV	1	1	1	1	1	1	1	1	1	1	1	1	1
RO	1	1	1	1	1	1	1	1	1	1	1	1	1
BG	1	1	1	1	1	1	1	1	1	1	1	1	2
PL	1	2	2	1	1	2	1	1	1	2	1	1	1
HU	1	1	2	1	1	2	2	2	2	1	1	1	1
SK	1	1	1	1	1	2	2	2	1	2	2	1	1
FR	2	2	3	1	1	2	1	1	1	2	1	1	1
CZ	2	2	2	1	1	2	2	2	2	2	1	1	2
FI	1	2	2	1	3								
IT	3	3	3	2	3	2	2	1	1	2	1	1	1
AT	1	1	2	2	3	2	2	3	3	2	1	2	2
DE	2	2	3	2	3	2	2	3	3	2	2	2	2
EE	1	1	1	2	4	3	3	3	3	3	2	2	3
LU	3	4	3	2	3	3	3	2	2	3	3	2	2
MT	3	3	4	2	3	3	3	3	3	3	2	2	2
SE	2	3	3	2	3	3	3	3	3	4	3	2	3
DK	2	3	3	1	3	3	3	2	3	4	4	3	4
ES	4	4	4	2	3	3	3	2	2	3	2	3	3
EL	2	3	4	4		2	3	4		2	2	4	
SI	4	4	4	3	3	3	3	3	3	3	2	2	2
HR	3	4	3	2	4	4	3	3		3	3	2	
NL	2	3	3	3	4	3	4	4	4	3	3	3	4
CY	3	4	4	3	4	3	3	3	4	3	3	3	4
PT	4	4	4	3	4	4	4	3	4	3	3	2	3
BE	3	3	3	3	4	4	4	4	4	4	4	4	4
IE	4	4	4	3	3	4	4	3	4	4	4	3	4

Cluster Centres [EUR]

1	12.09	12.5	11.66	17.29	15.23	17.09	19.03	21.86	22.91	21.74	26.56	28.39	28.09
2	21.8	18.72	16.27	30.81	3.33	24.58	27.24	31.67	33.18	30.91	38.91	46.82	41.87
3	25.93	24.04	24.66	40.7	33.63	33.34	35.16	42.31	39.71	42.91	46.89	58.41	52.44
4	31.01	29.76	31.88	68.09	45.16	44.61	47.45	62.4	55.76	58.52	61.01	68.85	67.71

Number of cases in each cluster

1	10	8	6	11	9	4	6	7	8	5	10	10	8
2	7	5	5	9	0	9	6	6	4	8	7	9	7
3	6	7	9	6	11	9	10	10	7	9	6	5	4
4	4	7	7	1	6	4	4	3	5	4	3	2	5

Green symbol 1 - inexpensive cluster
 Blue 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, Lithuania, Latvia, and Romania have the most attractive prices for broadband internet in the EU. All the offers in these countries belong to the cluster of the least expensive in their respective baskets.
- Bulgaria, Poland, Hungary and Slovakia follow. France, Czechia and Italy have low prices especially for Triple Play offers.
- Austria and Estonia tend to have attractive prices for lower bandwidth offers, but also tend to be in the cluster of more expensive countries for speeds above 100 Mbps.
- Cyprus, Belgium and Ireland have no offers within the two least expensive clusters.

4.1.2 Who is best in class in the EU?

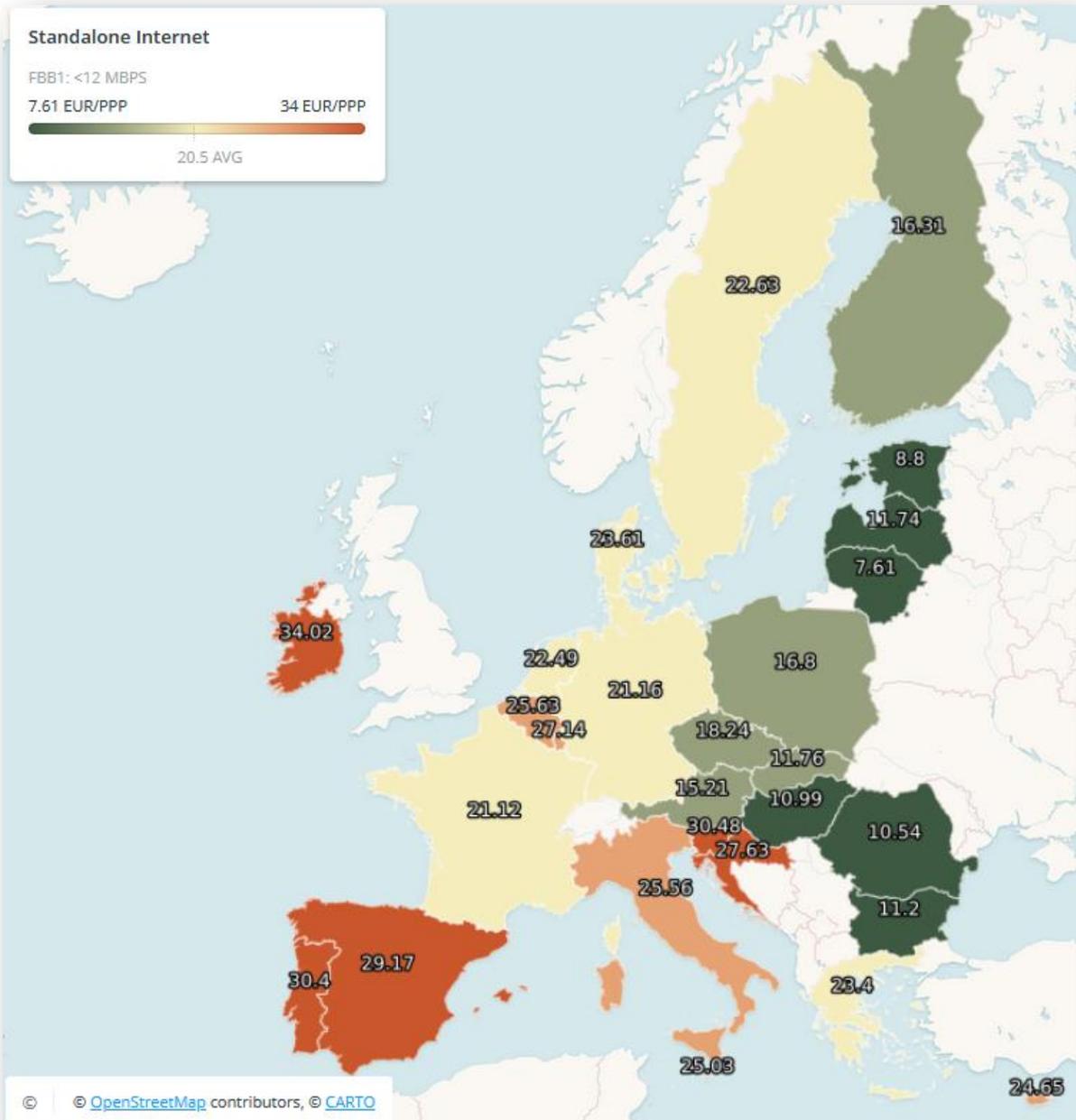
The maps in the following sections show the prices in EU28 countries of the least expensive offer found on the market for each service category - standalone fixed internet, Double Play offer with fixed telephony and Triple Play - and, within a service bundle, for each download speed basket. The ranking of countries by price, in quantiles (four defined intervals), is indicated by a range of colours.¹⁹

¹⁹ A q-quantile divides a set of observations, each located by value on one dimension and ordered by value, into q groups of equal size (or a probability distribution into groups of equal probability). For samples, any value for a q-quantile may be chosen between the lowest value of the higher-ranked group and the highest value of the neighboring lower-ranked group. Applying quantiles to the full sample of 28 Member States, there are five groups of countries.

4.1.3 Single Play (standalone internet) across Europe (FBB1-5)

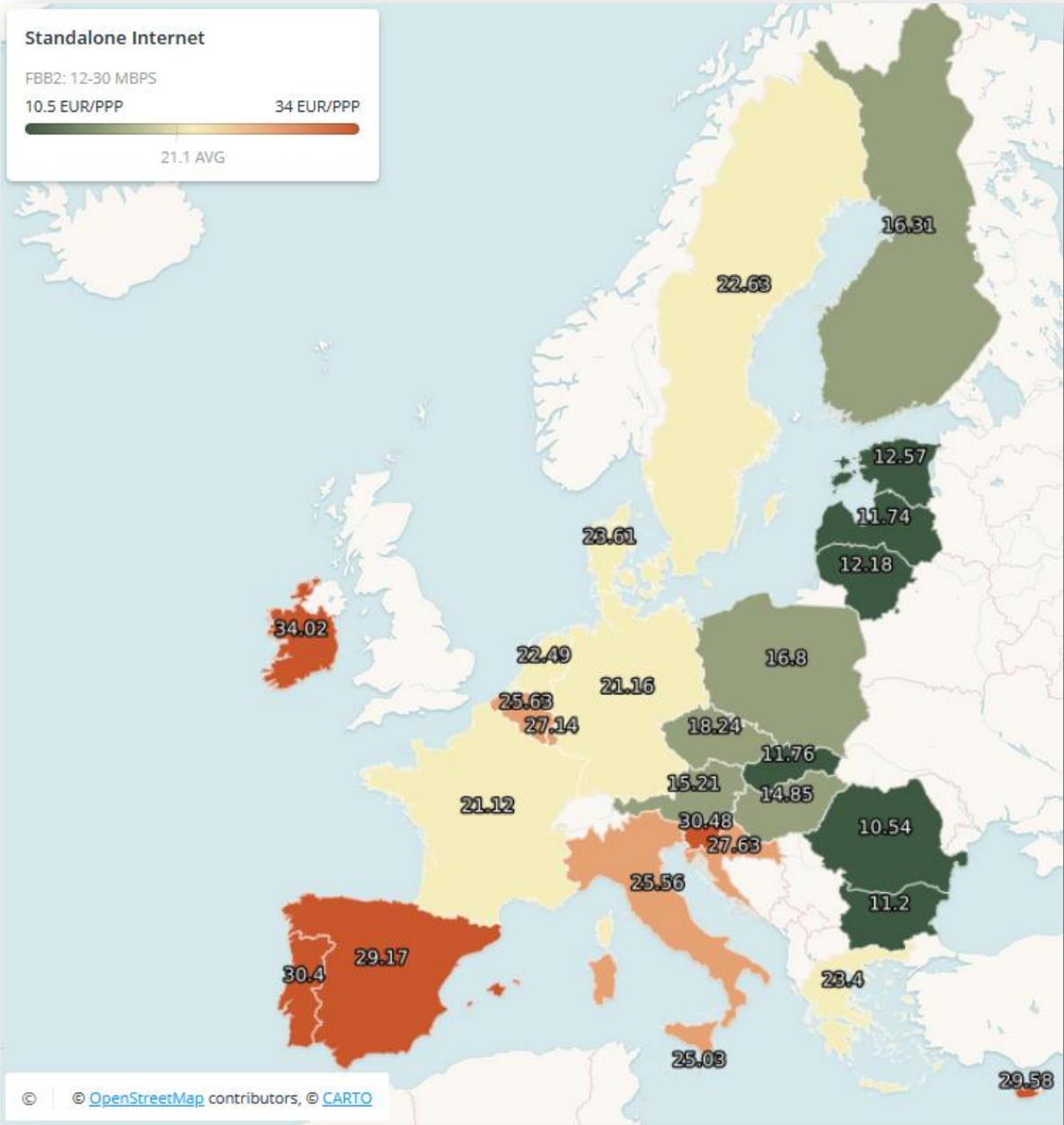
For Single Play (standalone fixed internet), the map indicates that the best in class, with the least expensive offers across the EU27, are Lithuania, Estonia, Romania, Hungary, Bulgaria and Latvia. The lowest price found is €7.61; almost three times less than the EU average (€20.5) and five times less the highest price found.

Map 1 – Standalone, <12 Mbps



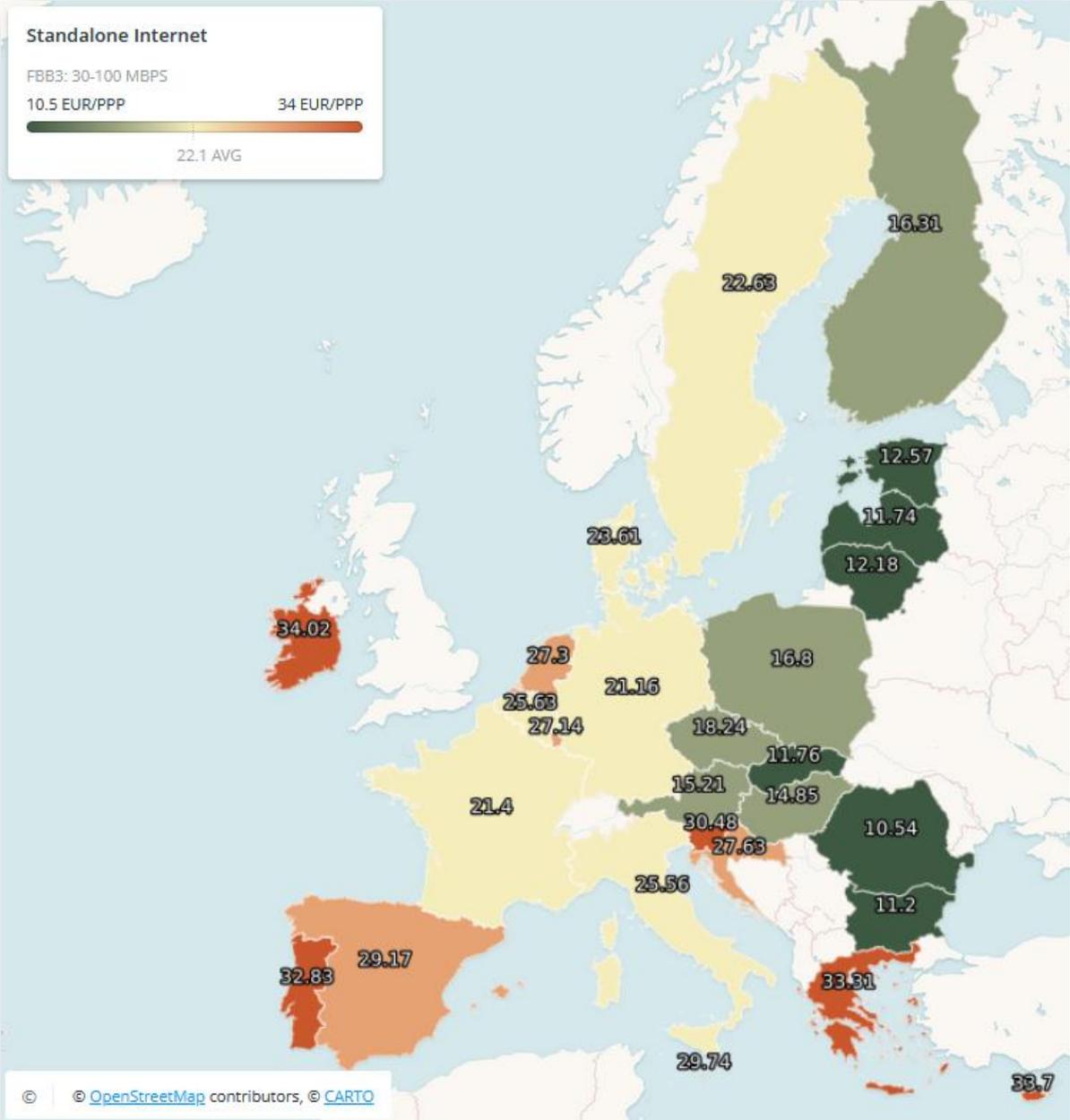
For Single Play offers in 12-30 Mbps speed basket, the map indicates that the best in class, with the least expensive offers across the EU27, are Romania, Bulgaria, Latvia, Slovakia, Lithuania and Estonia. The lowest price found is €10.53; half the EU average (€21.1) and less than one third the top price.

Map 2 – Standalone, 12-30 Mbps



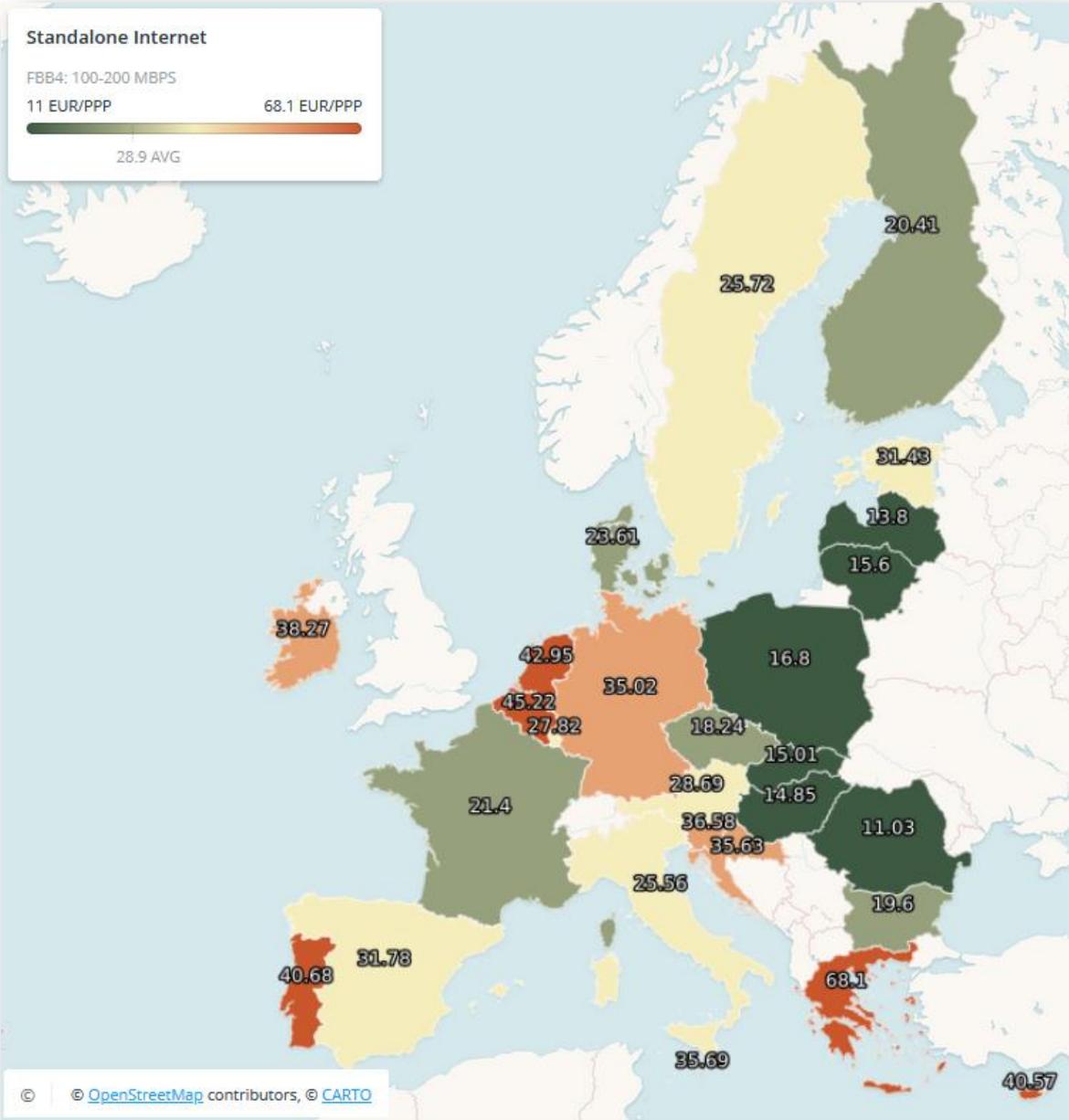
Single Play offers in the 30-100 Mbps speed basket show a similar pattern to the next lower download speed basket. The best in class group of countries are Romania, Bulgaria, Latvia, Slovakia, Lithuania and Estonia.

Map 3 – Standalone, 30-100 Mbps



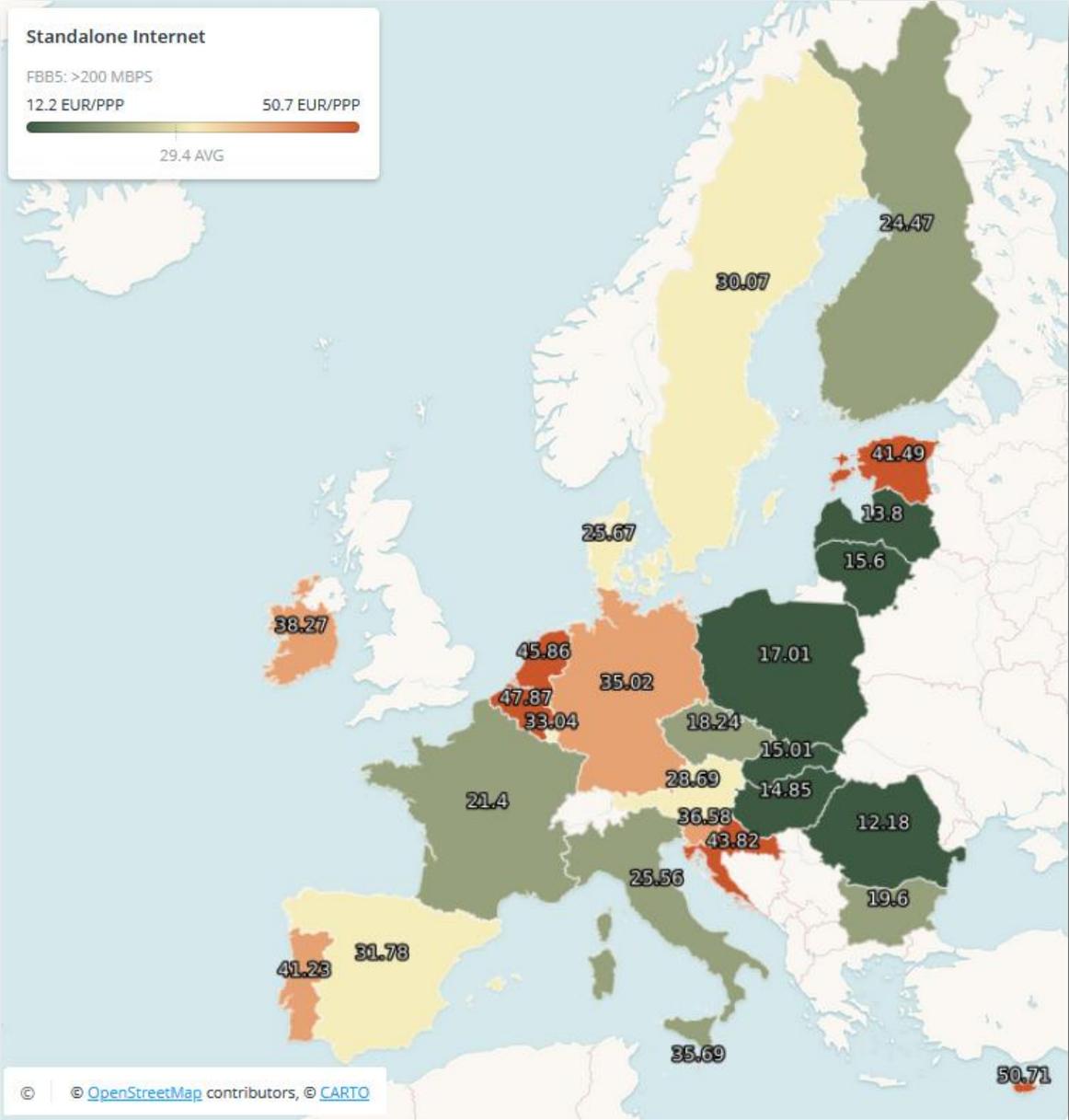
The picture for Single Play standalone internet in the 100-200 Mbps speed basket shows some changes in pattern. Here, the best in class are Romania, Latvia, Hungary, Slovakia, Lithuania and Poland.

Map 4 – Standalone, 100-200 Mbps



Similar to the 100-200 Mbps speed basket, the best in class, with the least expensive offers across the EU27 for the top speed basket are Romania, Latvia, Hungary, Slovakia, Lithuania and Poland. The lowest price found is €12.18, while the highest price is €50.71, more than four times as high.

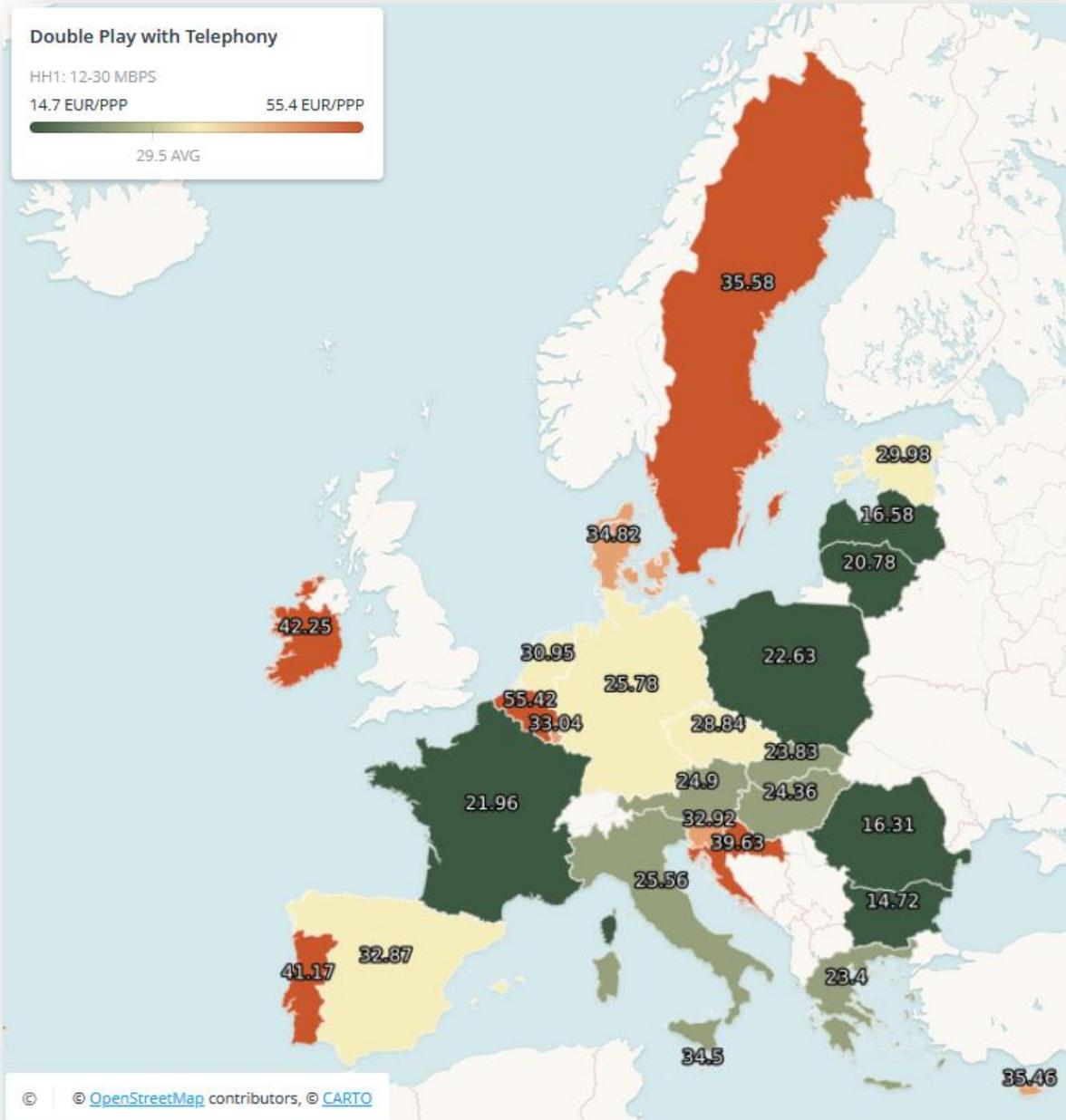
Map 5 – Standalone, 200+ Mbps



4.1.4 Double Play with fixed telephony across Europe

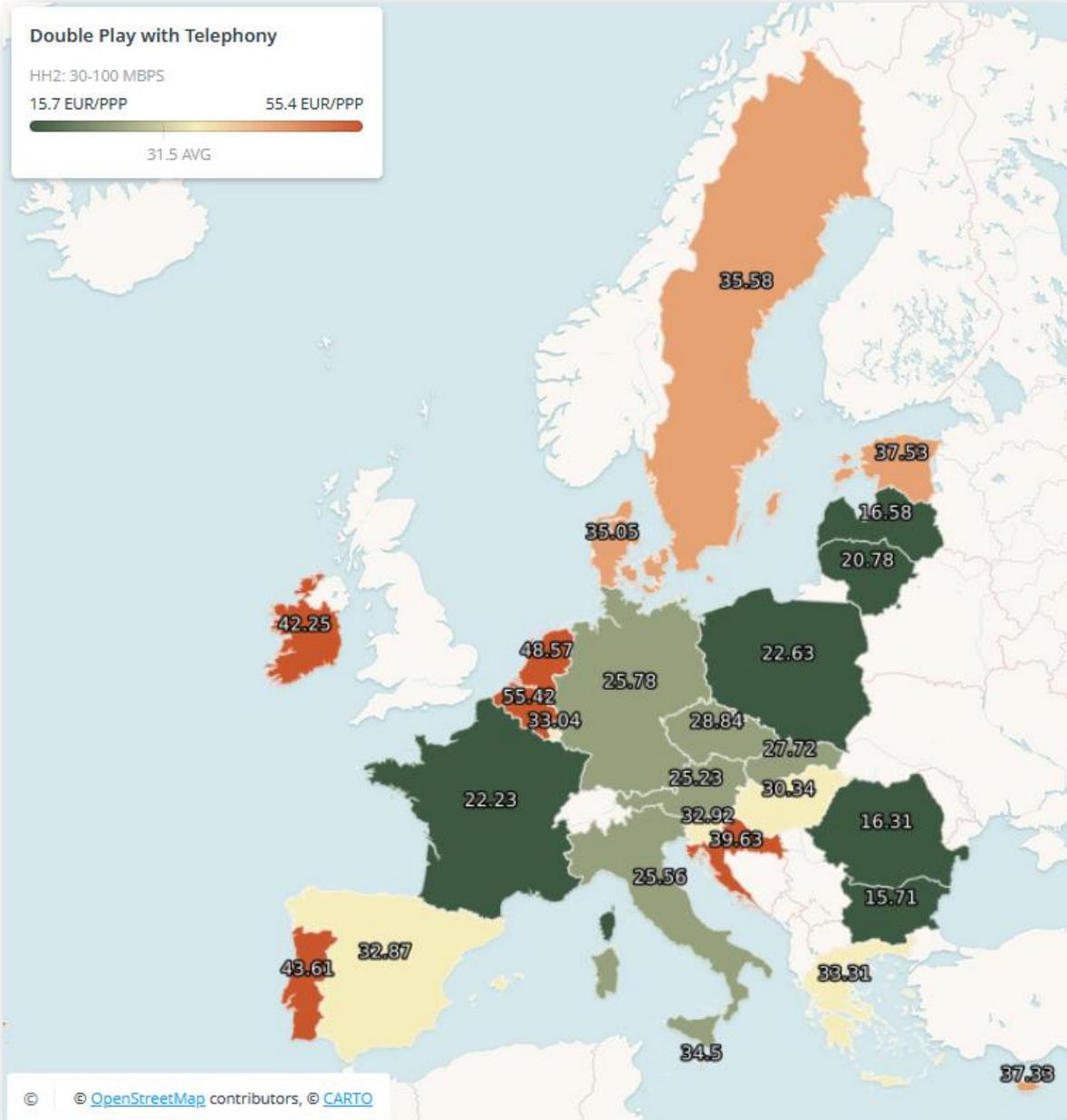
Best in class for Double Play offers with fixed telephony in the 12-30 Mbps speed category are Bulgaria, Romania, Latvia, Lithuania, France and Poland. The least expensive offer in the EU27 for this offer category is €14.72, less than half the EU27 average (€29.5).

Map 6 – Double Play with fixed telephony, 12-30 Mbps



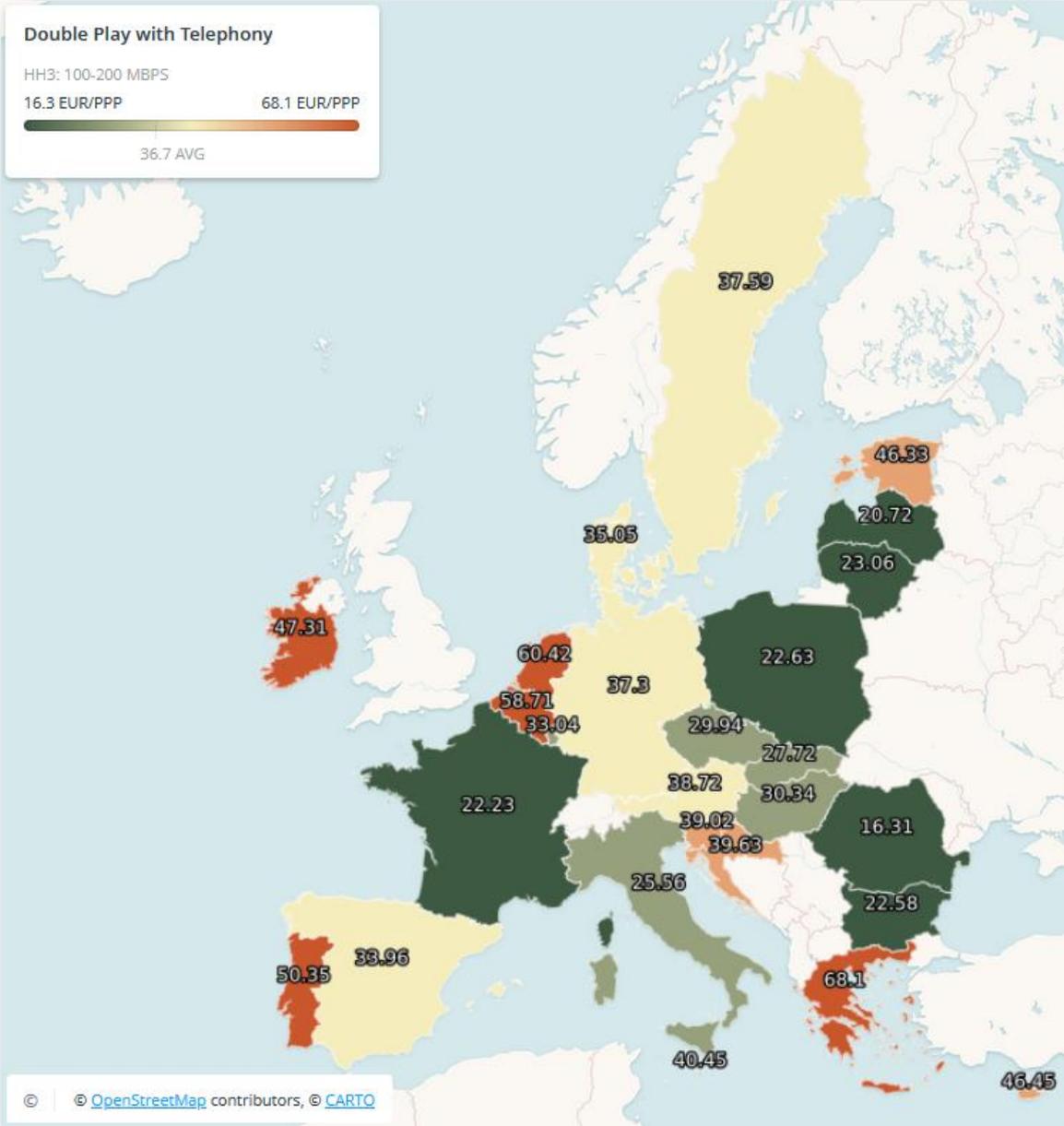
The EU27 average of lowest prices per country for Double Play with fixed telephony in the 30-100 Mbps download speed range is €31.6. The best in class in this bundle/basket offer category are Bulgaria, Romania, Latvia, Lithuania, France and Poland.

Map 7 – Double Play with fixed telephony, 30-100 Mbps



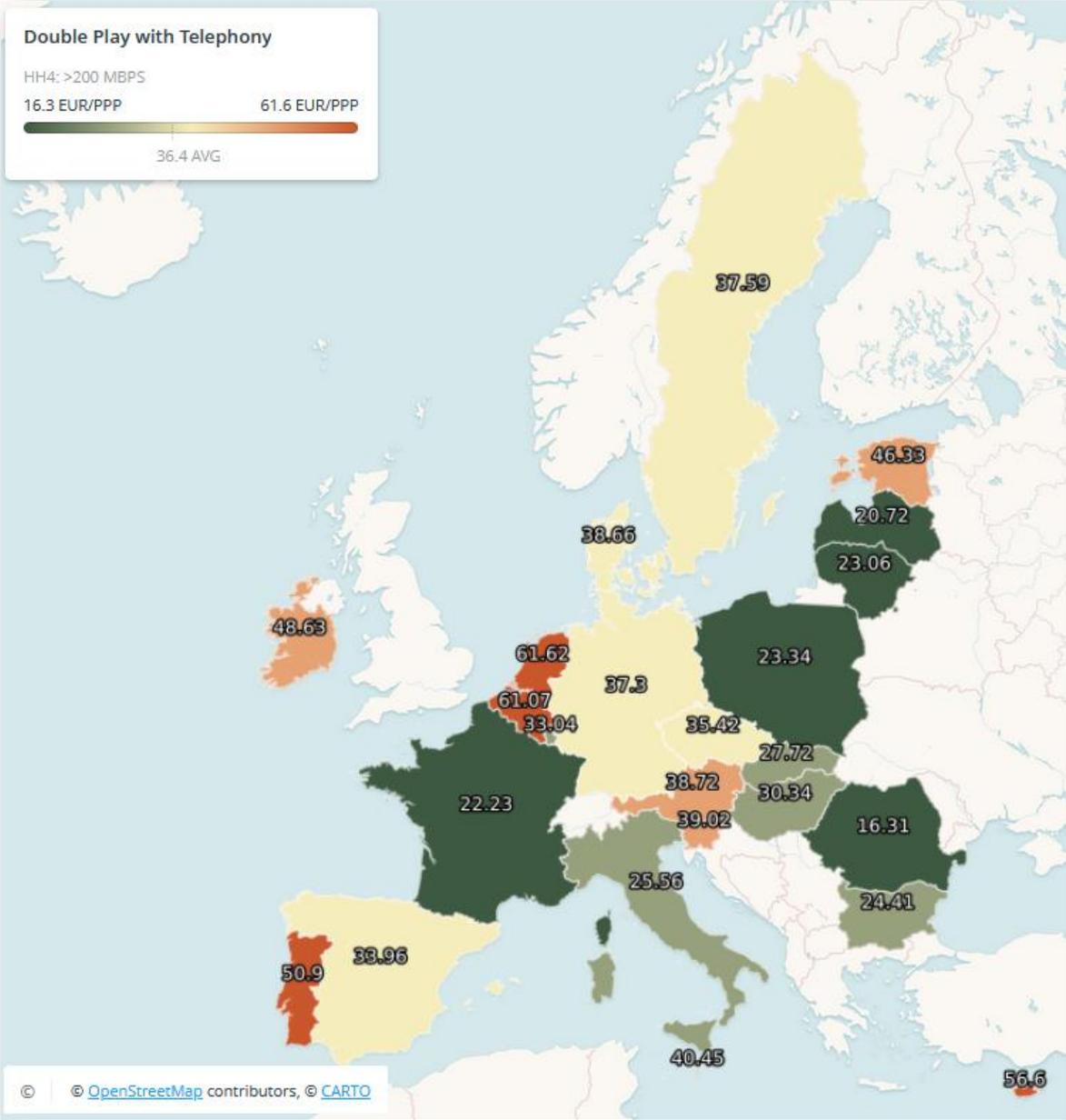
For the download speed category 100-200 Mbps, Double Play with fixed telephony, the range in European lowest prices is from €16.31 to €68.09. The best in class are Romania, Latvia, France, Bulgaria, Poland and Lithuania.

Map 8 – Double Play with fixed telephony, 100-200 Mbps



Best in class for the top download speed category, Double Play with fixed telephony, are Romania, Latvia, France, Lithuania and Poland. The least expensive offer in the EU27 for this household basket is €16.31, less than half the EU27 average (€36.4).

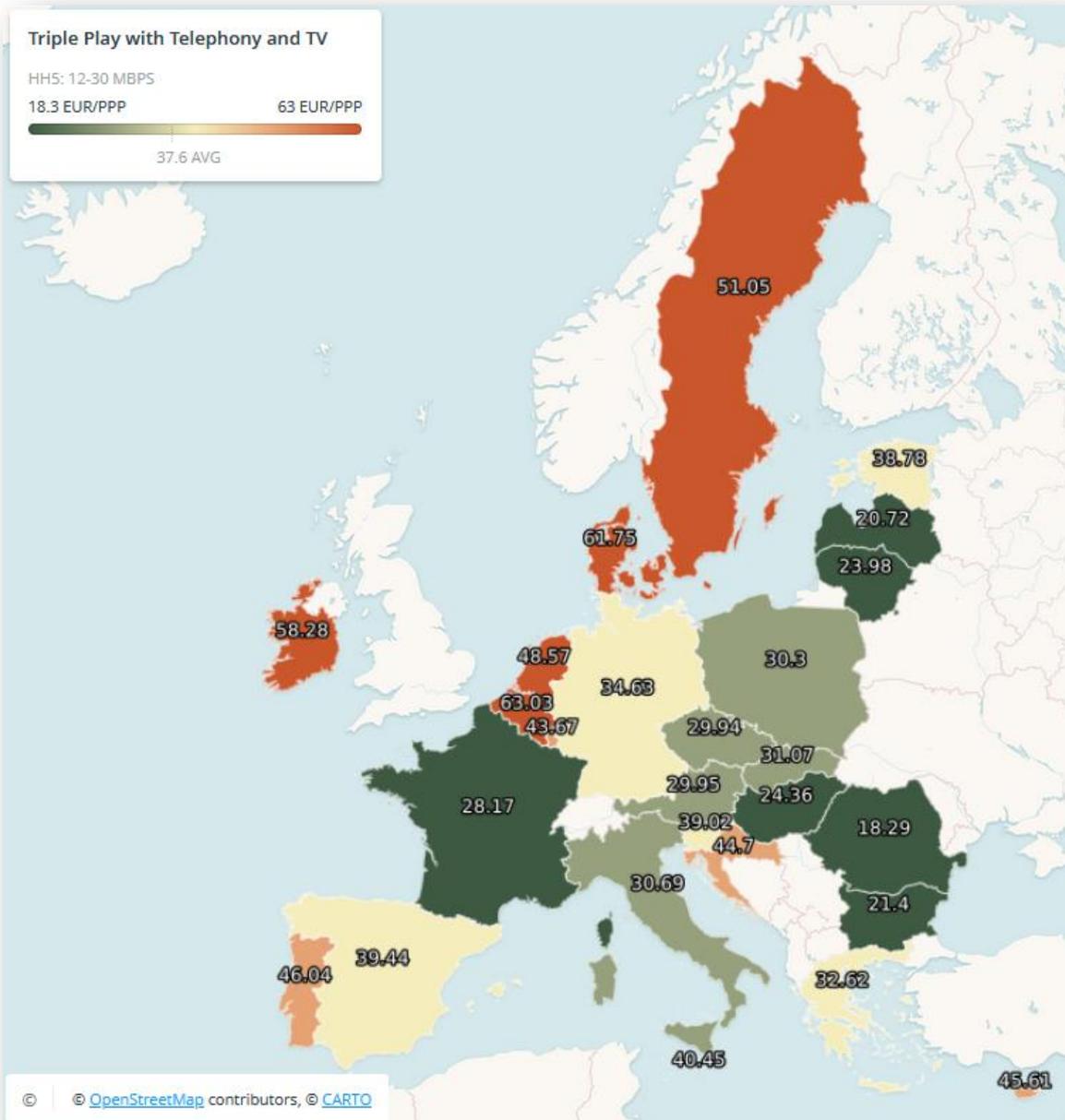
Map 9 – Double Play with fixed telephony, 200+Mbps



4.1.5 Triple Play across Europe (HH5-8)

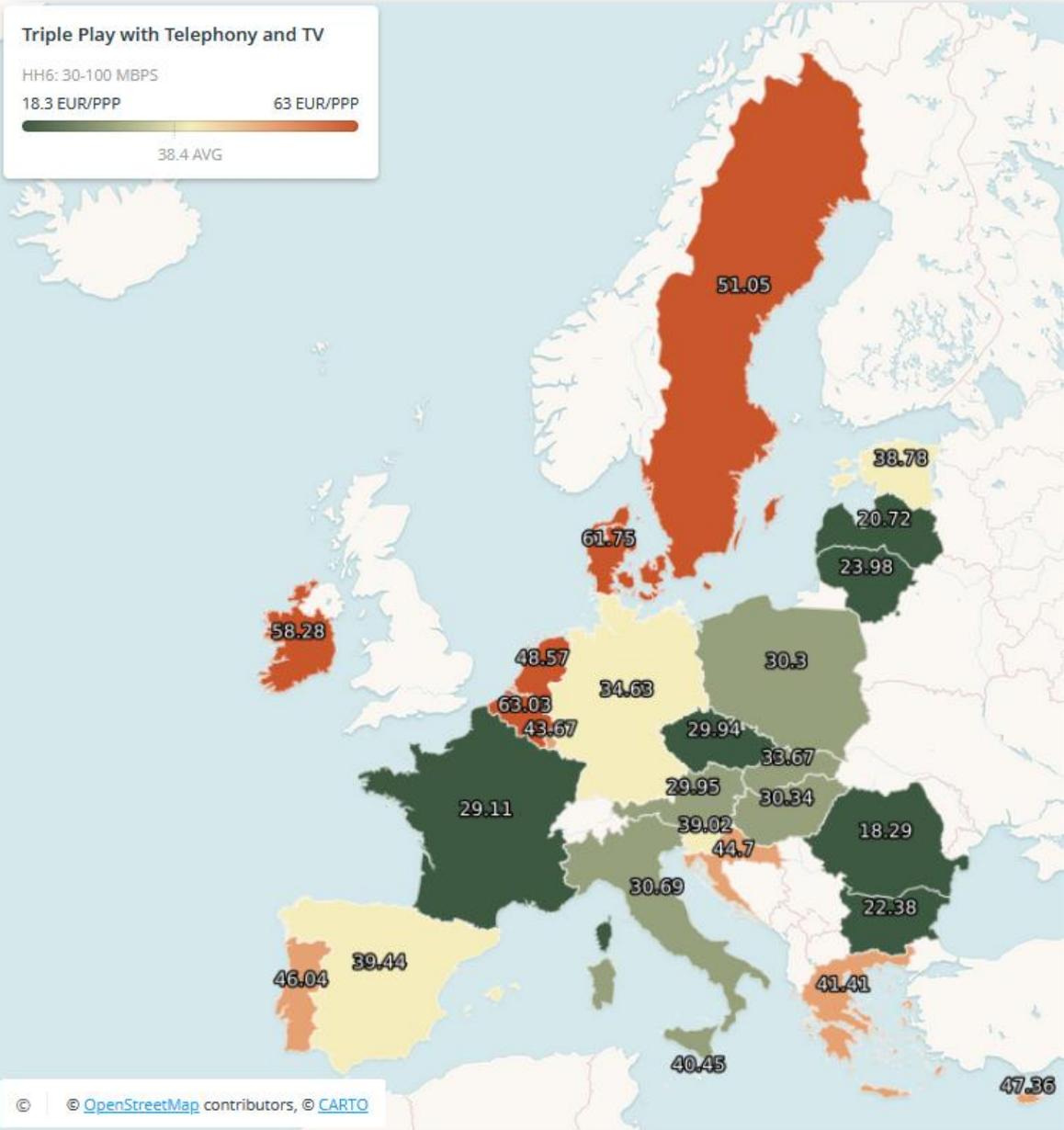
In the least expensive price cluster for Triple Play at an advertised download speed in the 12-30 Mbps, Romania is accompanied by Latvia, Bulgaria, Lithuania, Hungary and France.

Map 10 – Triple Play, 12-30 Mbps



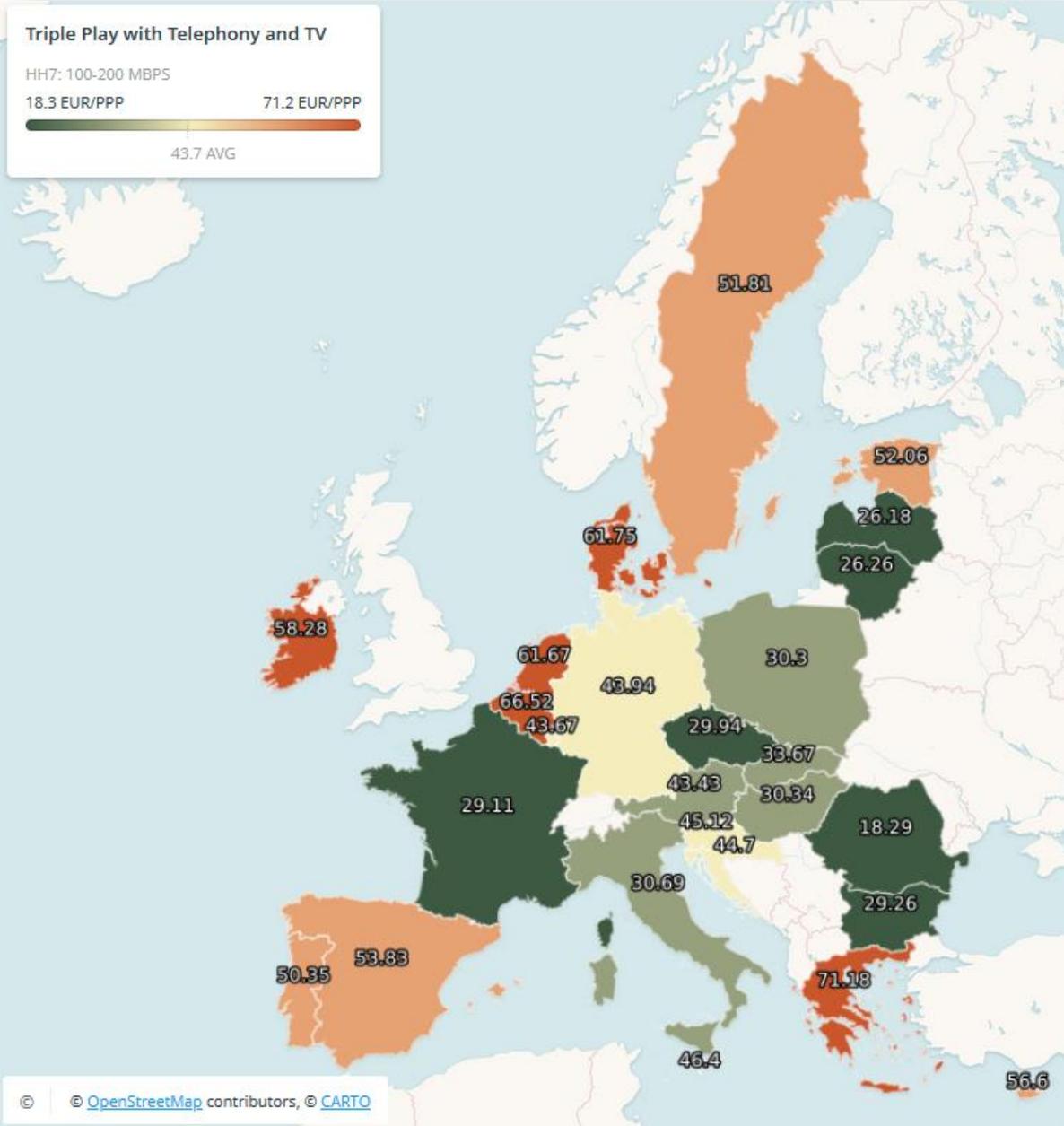
The best in class for Triple Play 30-100 Mbps are Romania, Latvia. Bulgaria. Lithuania. France and Czechia.

Map 11 – Triple Play, 30-100 Mbps



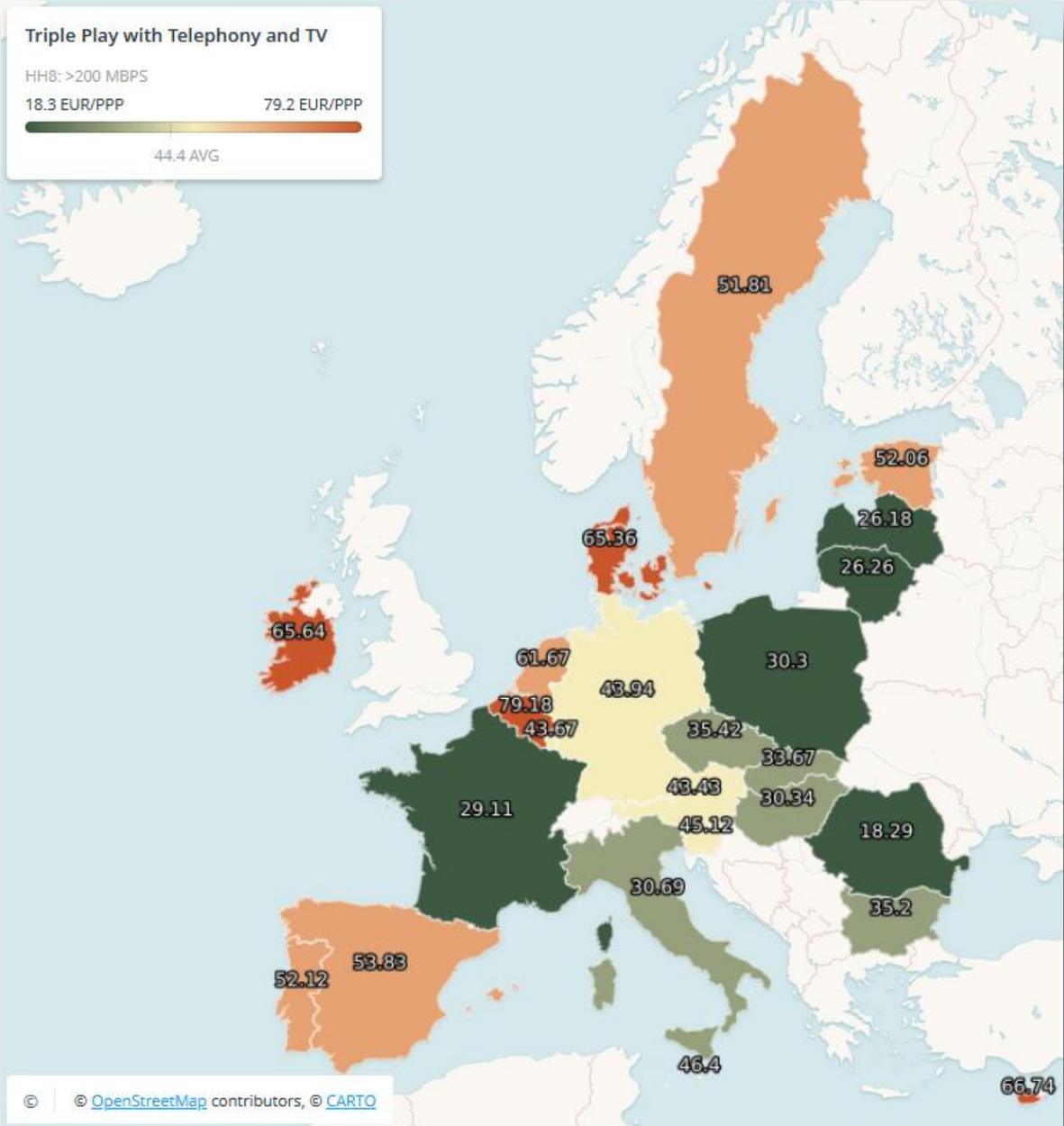
The best in class for the speed category 100-200 Mbps and the Triple Play service bundle are Romania, Latvia, Lithuania. France. Bulgaria and Czechia. The range in European lowest prices is from €18.29 to €71.18.

Map 12 – Triple Play, 100-200 Mbps



The best in class in the top speed category 200+ Mbps and the Triple Play service bundle are Romania, Latvia, Lithuania, France and Poland. The range in European lowest prices is from €18.29 to €79.18 and is the first biggest range among all baskets.

Map 13 – Triple Play, 200+ Mbps



4.1.6 Findings from the map visualization

Looking at all least expensive offers for every service bundle and speed basket offer category, a few countries offer the cheapest prices across all offer categories. These are **Bulgaria, Latvia, Romania and Lithuania**.

From the map visualisation, a tendency for prices in the European fixed broadband market to fall towards Eastern Central European States is visible; however, there are exceptions. A few other observations can be made from the analyses above:

- Consumers in Bulgaria, Latvia, Romania, Lithuania, Slovakia and Hungary enjoy the lowest price offers for Single Play (standalone internet) across all speed baskets.
- France and Italy, despite their offers for standalone internet being around average for the EU, provide consumers with attractively priced Double Play bundles for the top speed baskets 100-200 Mbps and 200+ Mbps and Triple Play in all speed baskets.

4.1.7 Price trends

Has fixed broadband got cheaper since last year?

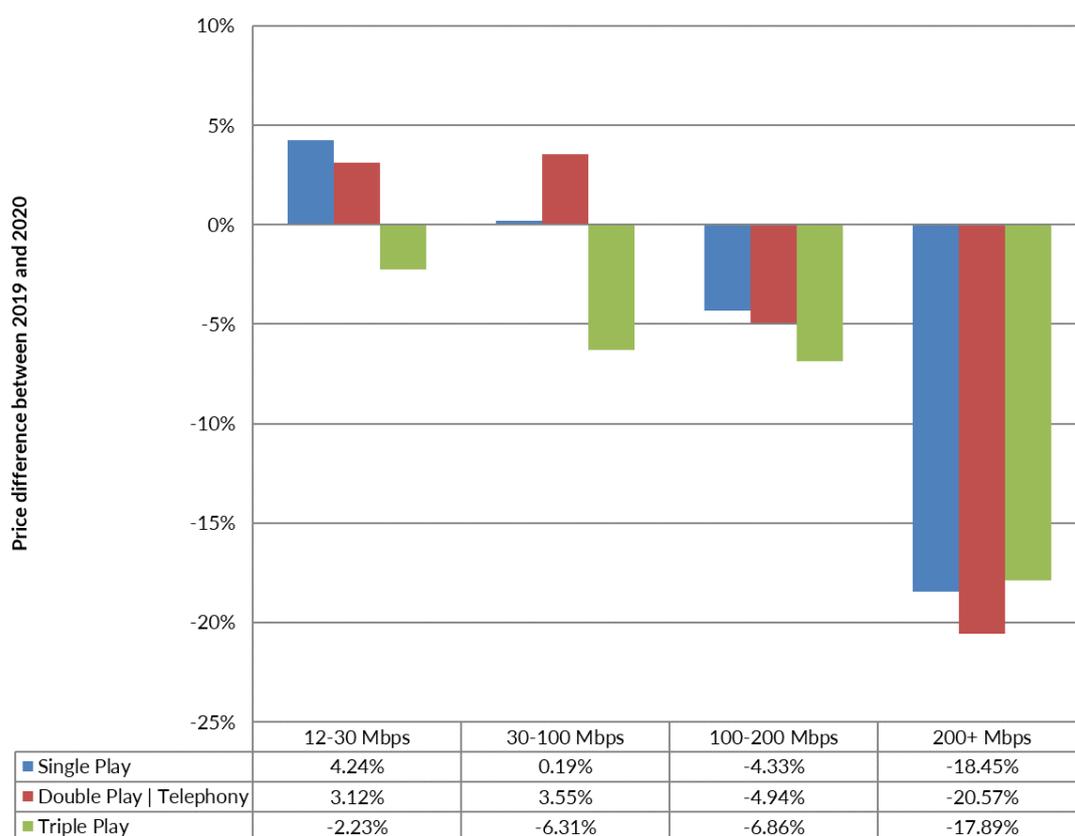
Broadband with more than 100 Mbps is cheaper than last year.

A closer look at broadband prices reveals mixed trends in 2020. Figure 22 shows that prices for Single Play (12-30 Mbps) and Double Play with telephony (12-30 Mbps and 30-100 Mbps) increased by around 4%. Prices for Triple Play offers decreased throughout all speed baskets, ranging from -2.2% (12-30 Mbps) to -17.9% (200+ Mbps).

The most significant changes are seen in the 200+ Mbps speed basket, where prices for all bundles are almost a fifth lower compared to 2019 prices.

A similar pattern can be observed in the 100-200 Mbps basket, although the price decline is less pronounced at -4% and -7%.

Figure 22 – Price changes in least expensive broadband prices, EU level (2019-2020)



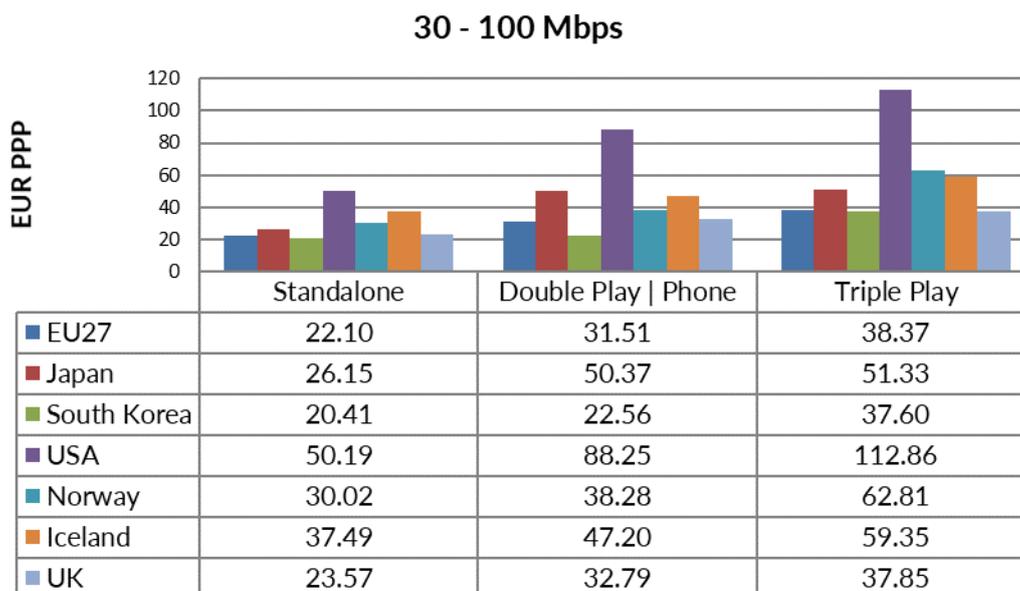
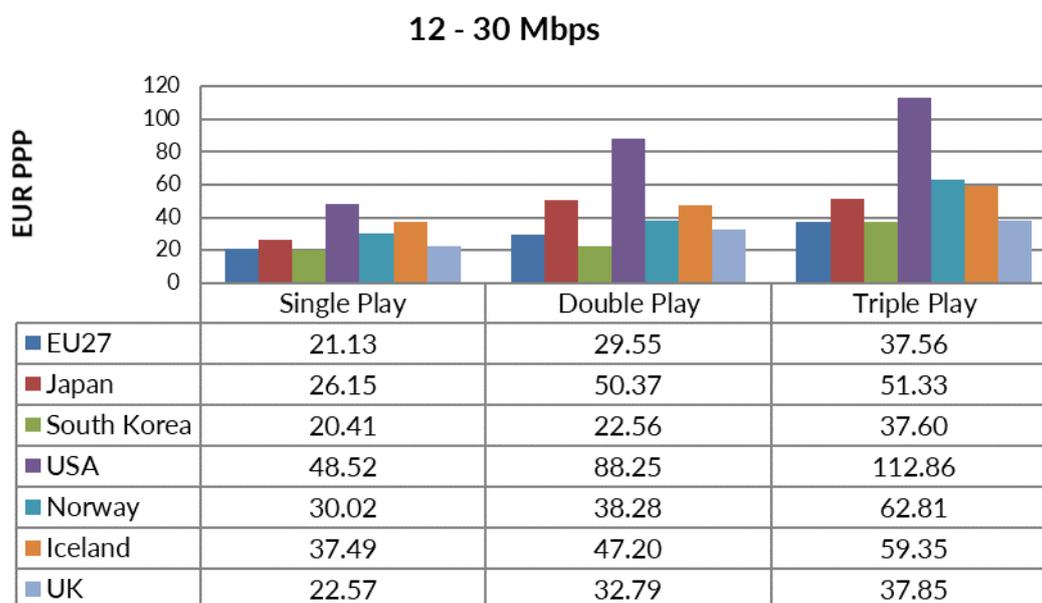
4.1.8 The bigger picture: the EU in the world

Comparing the EU with the rest of the world in 2020

To give an indication of how prices in the EU compare with the rest of the world, a full set of data on fixed broadband internet offers was collected for each of six non-European countries, two Asian (Japan and South Korea), the USA, Norway, Iceland and the UK. For the USA, three representative states were selected: New York State (Middle-Atlantic Division), Colorado (Mountain Division) and California (Pacific Division).

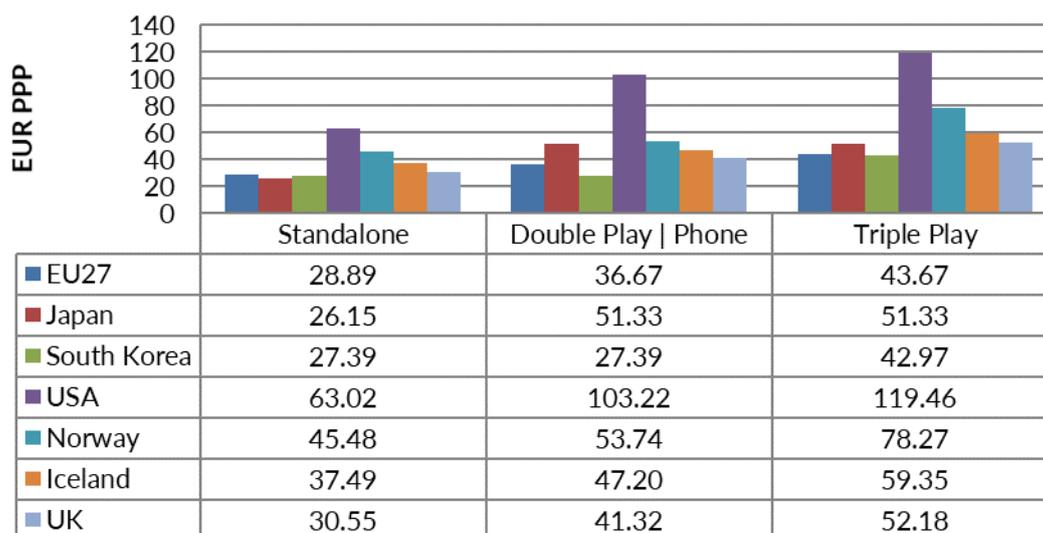
Figure 23 below shows how mean prices in the EU27 relate to those in the selected non-European countries.

Figure 23 - EU27 least expensive prices compared to other countries in the world (expressed in EUR/PPP, VAT included)²⁰

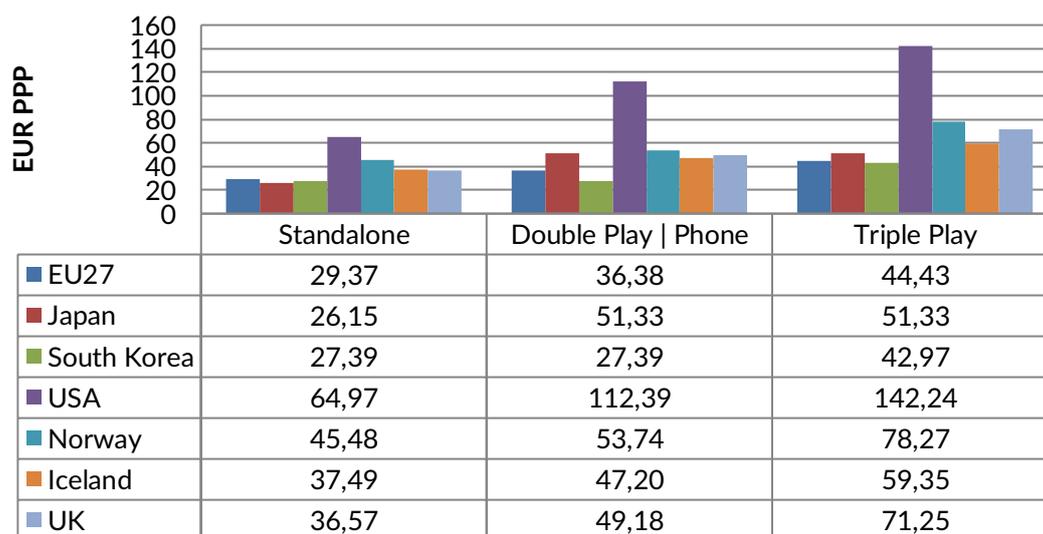


²⁰ Prices given for the USA are calculated as the average of the least expensive offers found in each of the states California, Colorado and New York.

100-200 Mbps



200+ Mbps



Comparing the EU27 with other countries in the world, there is a similar pattern in all download speed baskets. South Korea shows the least expensive offers for Double Play with Telephony. The EU27 shows slightly lower prices for Double Play with Telephony and Triple Play offers compared with Japan, the USA, Norway and Iceland. Japan and South Korea in turn, show lower prices for Standalone internet in the top speed baskets 100-200 Mbps and 200+ Mbps. Prices for bundles in all speed baskets are lower in the EU28 than in the USA, Norway, Iceland and (with the exception of Triple Play 30-100 Mbps) the UK.

4.1.9 Speed premiums

Given the greater expense of infrastructure to carry higher data speeds, prices for the provision of higher (advertised) download speeds can be expected to be higher than for offers with lower speeds.

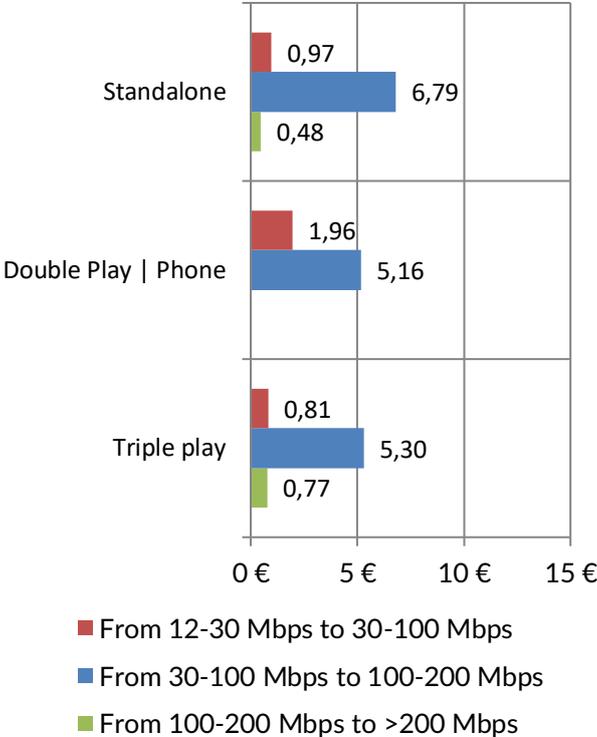
A *speed premium*²¹ was calculated for 2020 for each country as the price difference between offers in neighbouring speed baskets. The prices applied for a speed basket is that of the least expensive offer for the respective basket/bundle combination in the country. A speed premium is the amount a consumer has to pay when, for example, upgrading a Double Play bundle with telephony services in the 12-30 Mbps range to a similar service in the 30-100 Mbps basket.

The average speed premiums across the EU for each service bundle are shown in Figure 24.

Figure 25, Figure 26 and Figure 27 show the speed premiums per country²² and per service bundle for the basket transition (upgrade) from 12 – 30Mbps to 30 - 100 Mbps, 30 - 100 to 100 - 200 Mbps and from 100 – 200 Mbps to the top speed basket >200 Mbps.

Compared with data from 2019 the speed premiums are significantly lower, especially when upgrading from 100-200 Mbps to 200+ Mbps.

Figure 24 – EU27 average speed premiums by service bundle and speed transition



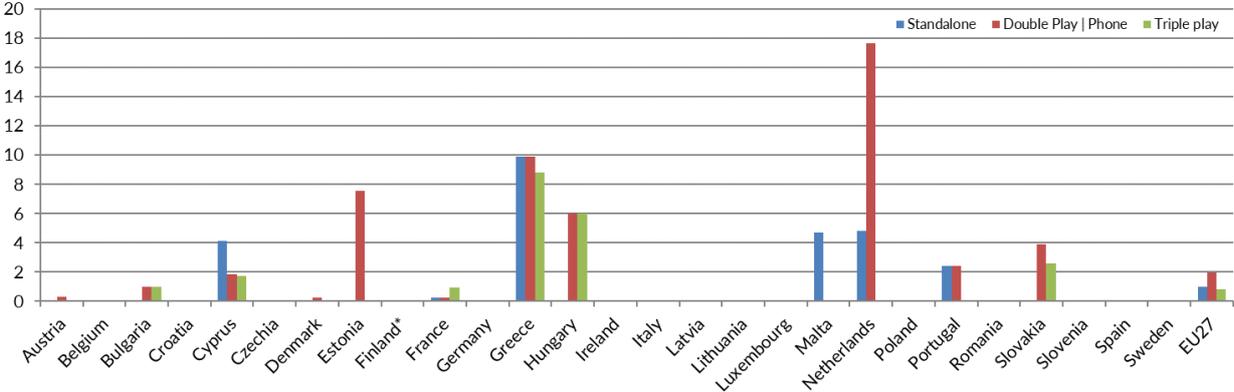
For several service bundles in various countries, offers in a lower download speed basket were found to be more expensive than the cheapest offer in the next higher speed basket. In such cases the same

²¹ Similarly calculated price differences have been referred to previously as "high speed premiums". Using this term confuses the idea of a high (download) speed with the price comparison at hand. The comparison of prices for the speed premium is of two speed baskets, one *higher* than the other, but in many cases, *both* properly referred to as *high speed*. (High) speed premiums do not represent the price for high-speed internet but the additional price for (more) speed.

²² An asterisk indicates that no offer was found on the market in the particular bundle/basket offer category in the respective country.

offer is the cheapest for consumers looking for a service in either speed basket. When the same offer is the cheapest in both speed baskets, the speed premium is considered to be zero²³.

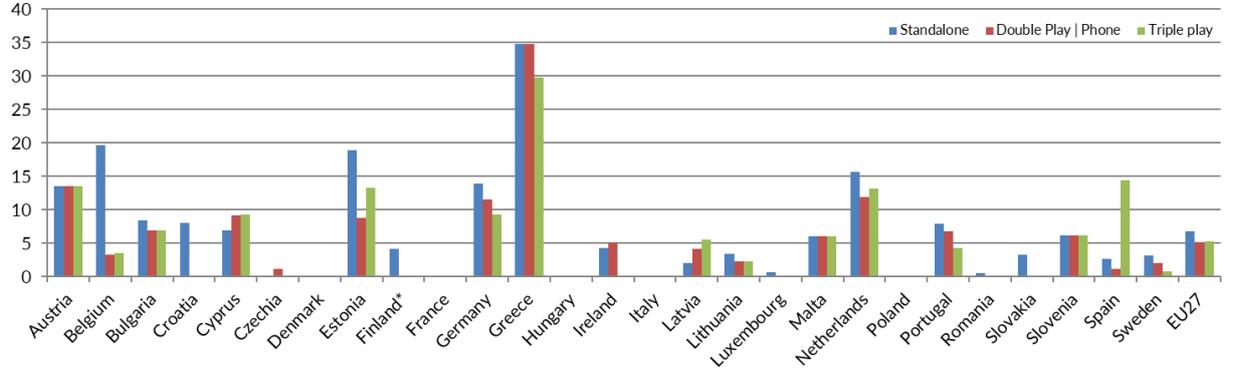
Figure 25 - Speed premiums from 12-30 to 30-100 Mbps by country



In the EU on average, customers pay less than €2 extra for a 30-100 Mbps broadband offer compared to a 12-30 Mbps offer, regardless of the bundle type. The high-speed premium ranges from €0.81 for a Triple Play to €1.96 for Double Play with Phone.

The EU average includes many cases of zero premiums, including fourteen countries with all service bundles at zero premiums. It is therefore unsurprising that, where a premium must be paid, these are often significantly higher than the average. In Greece and the Netherlands, the market exhibits particularly high premiums, in one case almost nine times the European average.

Figure 26 – Speed premiums from 30-100 Mbps to 100-200 Mbps by country



Speed premiums shown in Figure 26 for upgrading from 30-100 Mbps to 100-200 Mbps differ significantly from those for the lower speed transition (between 12-30 and 30-100 Mbps, Figure 25). The EU average for this basket transition varies depending on the service bundles: a consumer would pay around €6.79 extra for Standalone internet and only €5.16 extra for Double Play offers including telephony to upgrade from 30-100 Mbps to 100-200 Mbps.

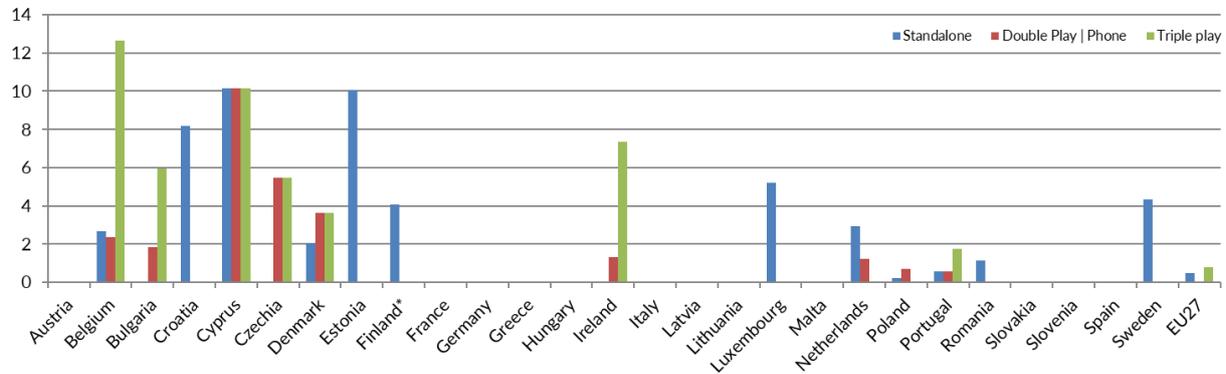
There are fewer cases of zero premiums overall in this basket transition than in the lower speed transition. Only Denmark, France, Hungary, Italy and Poland have zero premiums across all service

²³ This is represented by an empty column in the figure, e.g., for all service bundles in Croatia.

bundles. Usually, the least expensive 12-30 Mbps offer is an offer with an advertised download speed belonging to the 100-200 Mbps basket²⁴.

Consumers in Greece, Estonia, the Netherlands and Austria face high speed premiums for this transition, with consumers having to pay significantly above the European average.

Figure 27 – Speed premiums from 100-200 Mbps to 200+ Mbps by country



The EU average premiums for the transition to the top speed basket are the lowest observed overall, ranging from no premium for Double Play with telephony to €0.77 for Triple Play services. As depicted in Figure 27, the EU average includes many cases of zero premiums, including twelve countries with all service bundles at zero premiums. Contrary to this, consumers in Cyprus seem to face high speed premiums, much higher than the EU average.

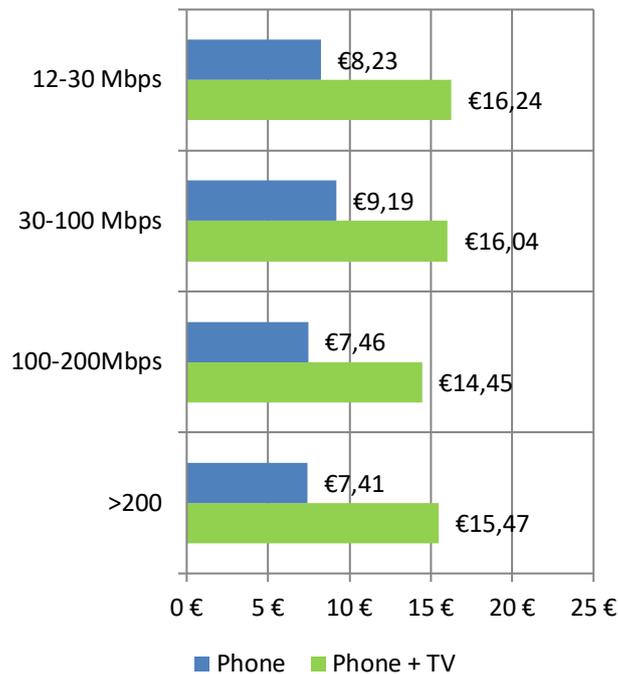
4.1.10 Bundle premiums

The bundle premiums calculated and reported here represent the increase in price that consumers face for upgrading a standalone internet, Single Play offer to one including fixed telephony and TV services, without a change in the download speed basket of the overall service. For example, the bundle premium for Double Play with fixed telephony represents how much extra a consumer must pay for adding fixed telephony to a standalone fixed broadband offer as well as by selecting the best offer on the market (from the largest providers).

To give a first overview, EU averages for all the bundle premiums are shown in Figure 28.

24 The offer promises the fastest download speed possible technically available at the customer’s premises.

Figure 28 – EU28 average bundle premiums by speed basket and added service(s)



Adding telephony services costs about € 8.07 on average among all speed baskets, adding both services costs on average around €15.55. Both premiums are lower than in 2019. Like in 2019, however, there is no clear trend that adding services is cheaper in the higher speed baskets.

Adding services in the 12-30 Mbps basket

Figure 29 shows the bundle premium for adding services in the 12-30 Mbps basket.

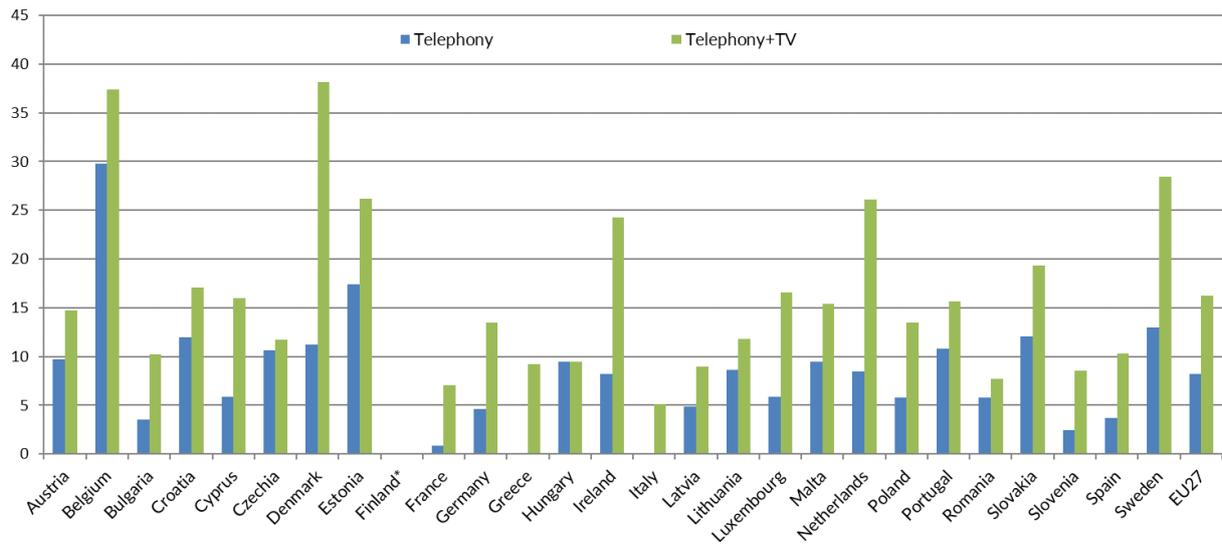
- **Telephony**

The prices for adding telephony vary considerably between the EU27 countries. In Greece and Italy, the least expensive standalone offer already includes telephony services. The premium in the other countries varies between €0.83 in France and almost €29.8 in Belgium. The EU27 on average is at €8.23, a slight increase from the previous year (€7.93). No offer including telephony was found in Finland.

- **Telephony and TV**

The premiums lie between €5.13 in Italy and €38.14 in Denmark. The EU27 on average is at €16.25€, almost 2€ below the previous year (€18.13). No offer including telephony services was found in Finland.

Figure 29 - Bundle premiums 12-30 Mbps by country [in EUR PPP]



Adding services in the 30–100 Mbps basket

Figure 30 shows the bundle premium for adding services in the 30-100 Mbps basket.

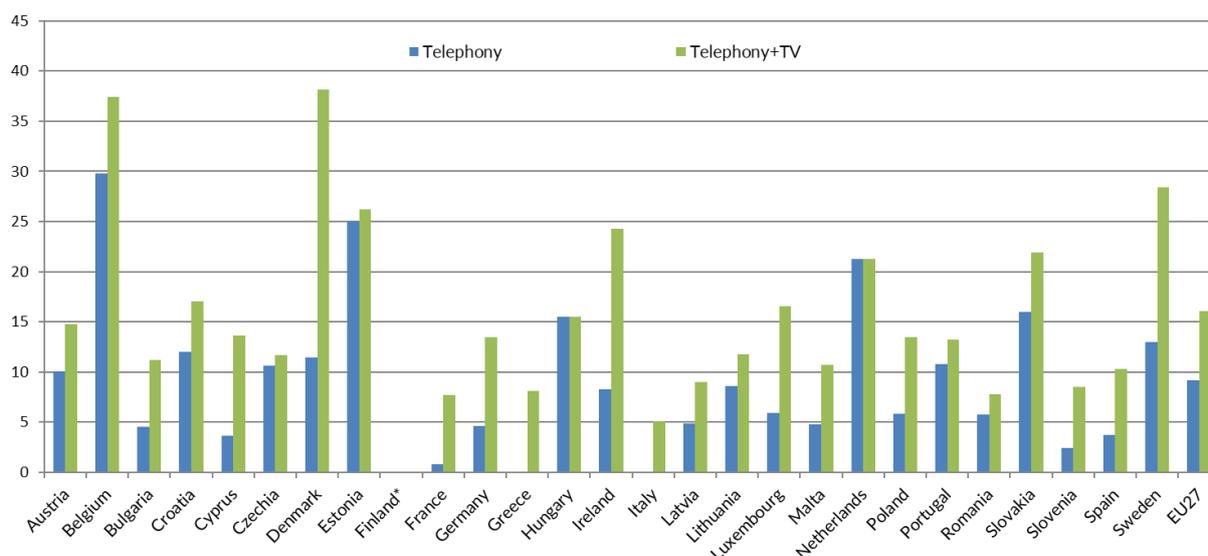
- **Telephony**

In Greece and Italy, the least expensive standalone offer already includes telephony services. For the other countries, the premium is between €0.83 in France and €29.78 in Belgium. The EU27 on average is at €9.19, which is significantly higher than in the previous year (€7.85). No offer including telephony was found in Finland.

- **Telephony and TV**

The premiums lie between €5.13 in Italy and €38.14 in Denmark. The EU27 on average is at €16.04, which is a significant decrease compared to 2019 (€18.69). No offer including telephony services was found in Finland.

Figure 30 – Bundle premiums 30-100 Mbps by country [in EUR PPP]



Adding services in the 100-200 Mbps basket

Figure 31 shows bundle premiums for adding services in the 100-200 Mbps basket.

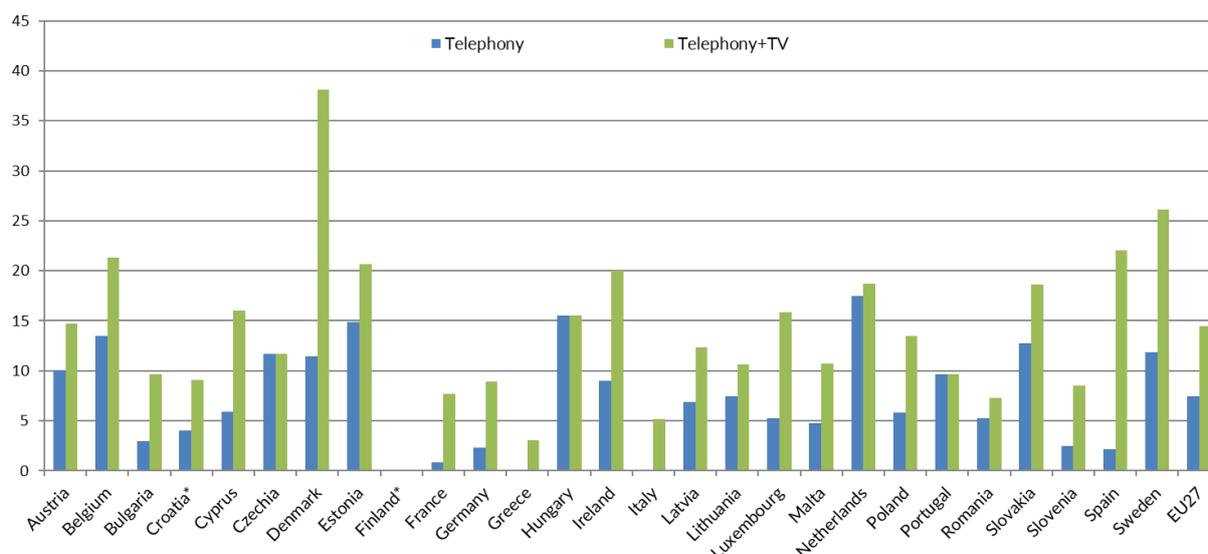
- **Telephony**

In Greece and Italy, the least expensive standalone offer already includes telephony services. For the other countries, the premium is between €0.83 in France and almost €17.47 in the Netherlands. The EU27 on average is at €7.45, a decrease from the premium in 2019 at €8.11. No offers in this basket including telephony were found in Finland.

- **Telephony and TV**

The premiums lie between €3.08 in Greece and €38.14 in Denmark. The EU27 on average is at €14.45, which is a significant decrease compared to 2019 with a premium of €16.68. No offers in this basket including telephony were found in Finland.

Figure 31 – Bundle premiums 100-200 Mbps by country [in EUR PPP]



Adding services in the 200+ Mbps basket

Figure 32 shows bundle premiums for adding services in the 200+ Mbps basket.

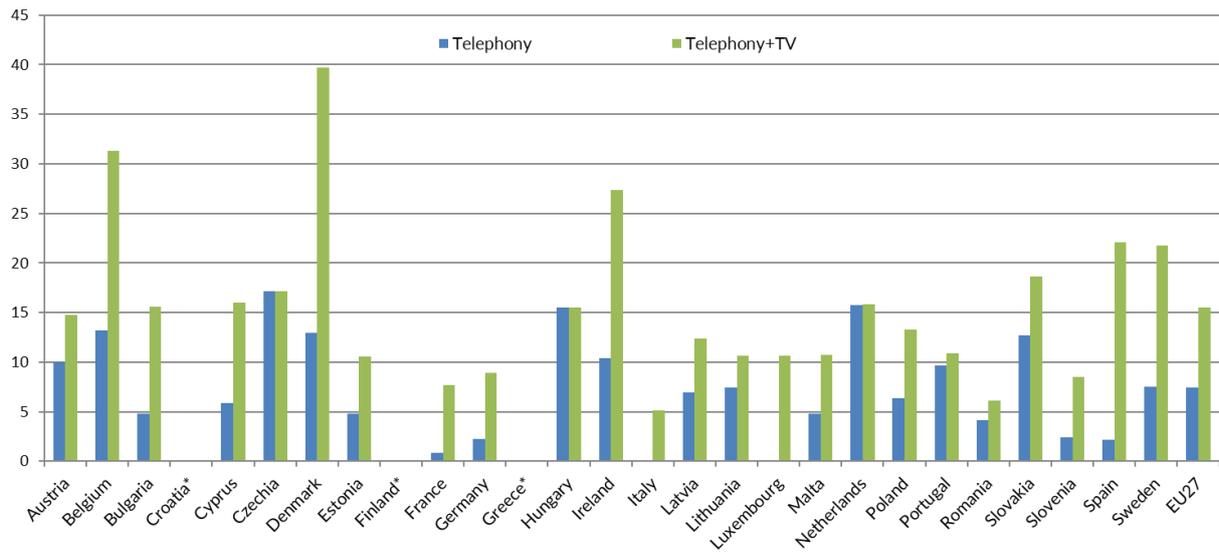
- **Telephony**

In Italy and Luxembourg, the least expensive standalone offer in this speed basket already includes telephony services. For the other countries, the premium is between €0.83 in France and almost €17.18 in Czechia. The EU27 on average is at €7.40, a slight increase from the premium in 2019 at €7.27. No offers in this basket including telephony were found in Finland. No Double Play offers in this speed basket were found in Croatia and Greece.

- **Telephony and TV**

The premiums lie between €5.13 in Italy and €39.69 in Denmark. The EU27 on average is at €15.47, which is a significant decrease from 2019 at €19.87. No offers in this basket including telephony were found in Finland. No Triple Play offers in this speed basket were found in Croatia and Greece.

Figure 32 – Bundle premiums 200+ Mbps by country [in EUR PPP]



4.2 Converged household baskets

4.2.1 2020 prices across the EU for converged (fixed & mobile) offers

The fixed – mobile (converged) bundles reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle that together represent the lowest price in the market for that representative household. In cases where a basket required both mobile broadband and fixed broadband for the same household and there was no offer corresponding to a converged basket, combinations of offers (synthetic offers) were identified that together met the customer needs for the respective basket. Therefore, the reported offer is not necessarily from the same provider, but the least expensive offer in the country.

Figure 33 below, gives a first idea of how variable prices for converged offers are across Europe. For each country, the average was calculated across the lowest prices in nine offer categories (five Triple Play offers and four Quadruple Play offers). The average lowest price lies under €40 in three Member States. Consumers in another nine countries are looking at average prices of under €50 from their most competitive large suppliers. Though most EU national markets exhibit averages under €60, ten markets have relatively higher averages and the range of average prices in total is at €56.82.

Figure 33 – Country averages across 12 lowest price offers, EU27

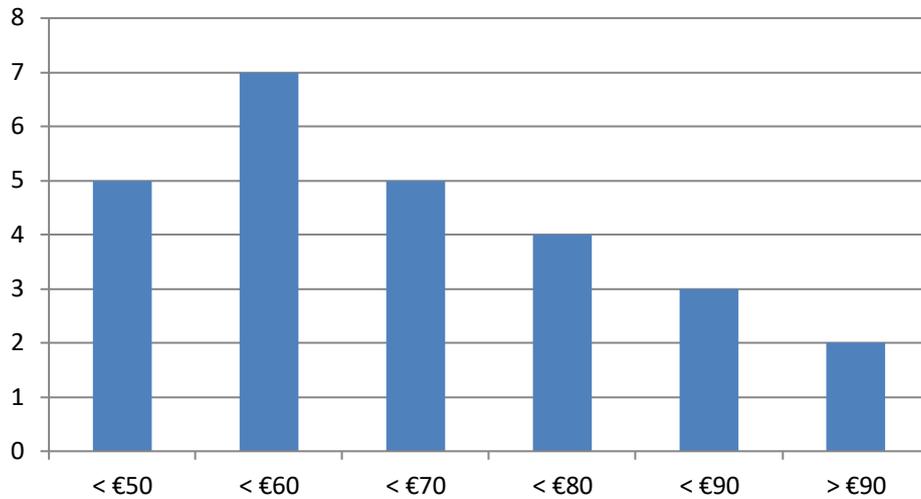


The study monitored in 2019 for the first time Quadruple Play offers, which comprise combinations of fixed broadband (FBB), television, fixed telephony and mobile services within a service bundle. Figure 34, below, shows the distribution of the cheapest prices found for Quadruple Play offers²⁵, which shows equally populated price categories.

Five member states exhibit the lowest prices (<€50), while two of them show significantly more expensive tariffs (>€90). Though most of the EU national markets exhibit averages under €70 (17 countries), nine markets have (much) higher averages, and the range of average prices in total is at €72.74.

²⁵ The average price among four Quadruple Play offers considered in the study: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls and 2 GB mobile; 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile; 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile; >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 050 mobile

Figure 34 – Distribution of lowest prices for Quadruple Play offers EU27



To present a fuller picture, but without introducing the distraction of small price differences, four clusters of countries were identified²⁶ 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.

Figure 35 shows the results. A green symbol (1) in a bundle/basket category stands for countries in the cluster with inexpensive offers for that category, a red symbol (4) for countries in the expensive cluster of offers in a bundle/basket category. Blue (2) symbols indicate clusters of relatively inexpensive, yellow symbols (3) of relatively expensive price levels. A dash signifies that no offer was collected in 2019 in that offer category and country.

²⁶ 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 35 - Price variation per offer category across the EU, country clusters (converged offers)

	12-30 Mbps fixed internet with fixed phone plus 1 SIM, 30 calls, 1GB mobile data	30-100 Mbps fixed internet with fixed phone plus 1 SIM, 30 calls, 1GB mobile data	30-100 Mbps fixed internet with fixed phone plus 2 SIM, 100 calls, 2GB mobile data	30-100 Mbps fixed internet with fixed phone and TV plus 1 SIM, 100 calls, 2GB mobile data	100-200 Mbps fixed internet with fixed phone plus 1 SIM, 100 calls, 2GB mobile data	100-200 Mbps fixed internet with fixed phone plus 1 SIM, 300 calls, 5GB mobile data	100-200 Mbps fixed internet with fixed phone and TV plus 1 SIM, 300 calls, 5GB mobile data	100-200 Mbps fixed internet with fixed phone and TV plus 2 SIM, 300 calls, 5GB mobile data	>200 Mbps fixed internet with fixed phone and TV plus 1 SIM, 300 calls, 5GB mobile data
PL	1	1	1	1	1	1	1	1	1
RO	1	1	1	1	1	1	1	1	1
FR	2	1	2	1	1	1	1	1	1
LV	2	1	2	1	1	2	1	1	2
BG	1	1	1	1	1	3	2	2	2
LT	2	1	2	2	1	2	1	1	2
AT	2	1	1	1	2	3	2	1	2
DE	1	1	1	2	2	3	2	1	2
IT	2	2	2	2	1	2	1	1	2
ES	2	2	1	2	2	2	2	1	2
SK	1	1	2	2	1	3	2	2	2
LU	2	2	2	3	1	2	2	1	2
SI	3	2	2	2	2	3	2	1	2
EE	2	2	2	2	2	3	2	2	3
SE	3	2	2	3	2	3	2	2	3
HR	3	3	3	3	2	3	2	2	3
IE	3	3	2	4	2	3	2	2	3
CZ	3	3	4	3	2	4	2	3	3
DK	3	3	3	4	2	3	3	2	4
MT	3	3	2	3	3	4	3	3	3
NL	2	3	4	2	4	4	3	2	3
HU	2	2	4	3	3	4	3	4	4
EL	2	3	3	3	4	4	4	4	4
PT	4	4	4	3	3	4	3	3	4
BE	4	4	4	4	4	4	3	2	4
CY	3	3	4	4	4	4	4	4	4
FI	-	-	-	-	-	-	-	-	-

Cluster Centres [EUR]

1	27.4	30.39	38.52	34.82	35.3	28.42	39.57	57.22	33.42
2	34.73	40.15	51.7	45.95	49.47	41.68	59.2	83.05	52.99
3	46.66	47.88	65.58	57.5	60.95	51.64	77.6	101.66	70.44
4	60.41	61.63	78.07	70.92	75.92	77.18	97.16	130.98	85.23

Number of cases in each cluster

1	5	9	6	6	9	3	6	11	3
2	11	7	11	8	10	5	12	9	10
3	8	8	3	8	3	10	6	3	6
4	2	2	6	4	4	8	2	3	5

Green symbol 1 - inexpensive cluster
 Blue symbol 2 - relatively inexpensive cluster
 Yellow symbol 3 - relatively expensive cluster
 Red symbol 4 - expensive cluster

In the following, general country groupings can be observed:

- Poland, Romania, France and Latvia have the most attractive prices for converged offers in the EU. The majority of offers in these countries belongs to the cluster of the least expensive in the respective baskets.
- Bulgaria, Lithuania, Austria and Germany follow. Bulgaria and Austria have low prices especially for Quadruple Play offers.
- Portugal and Cyprus have no offers belonging to the two less expensive clusters.
- Poland and Romania have offers in the least expensive cluster only for all the converged baskets.

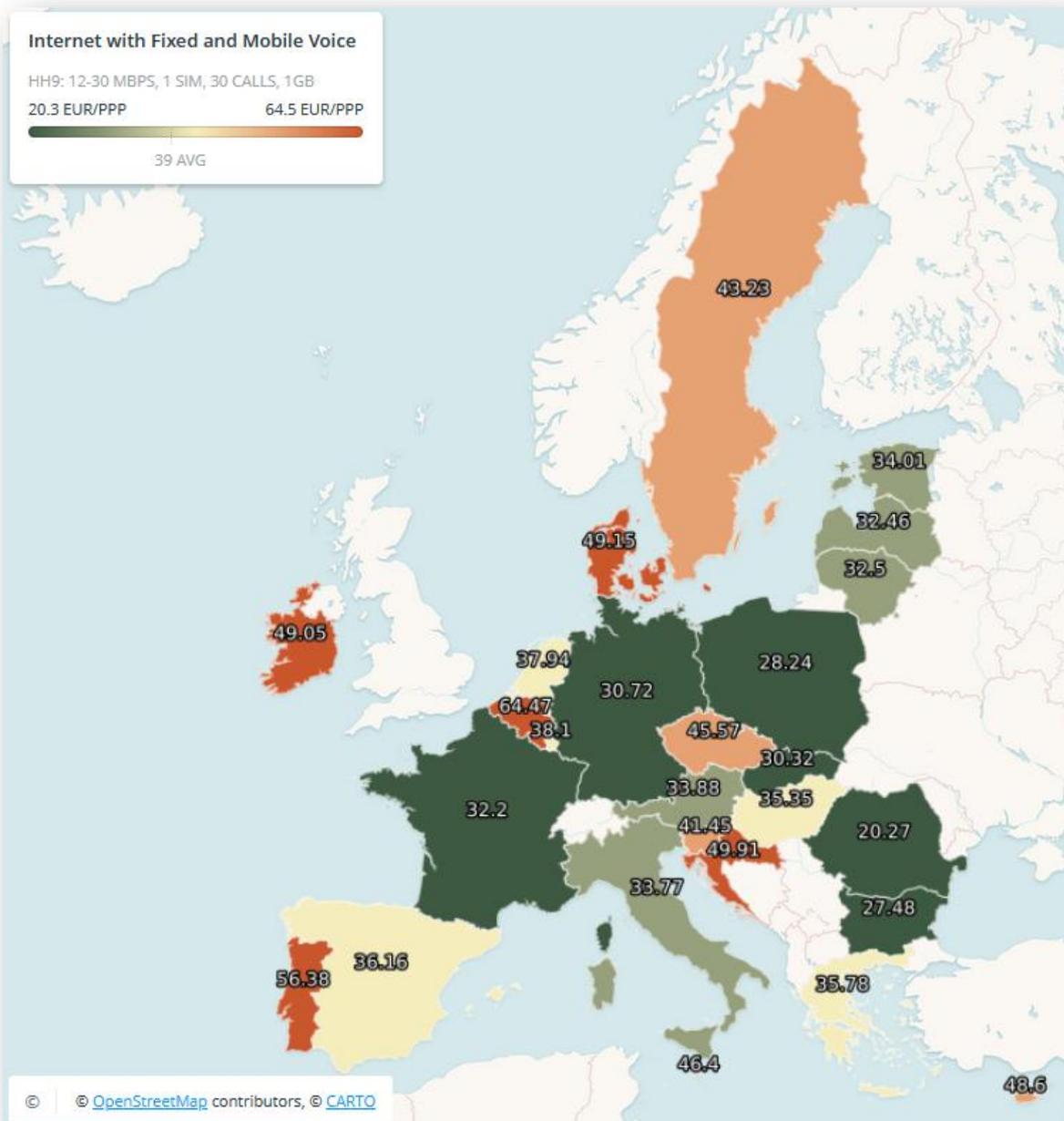
4.2.1.1 Who is best in class in the EU?

The maps in the following sections show the prices in EU28 countries of the least expensive offer found on the market for each converged / synthetic bundle - Triple Play, Quadruple Play. The rank order of countries by price, in quantiles (four defined intervals), is indicated by a range of colours.

4.2.2 Basket HH9 – 12-30 Mbps, fixed voice, 1 SIM, 1 GB, 30 calls

The best in class for this Triple Play service bundle with fixed telephony and mobile component (1 GB & 30 calls) in the 12-30 Mbps speed category are Romania (€20.27), Bulgaria (€27.48), Poland (€28.24), Slovakia (€30.32), Germany (€30.72) and France (€32.20). Eleven more countries (Latvia, Lithuania, Italy, Austria, Estonia, Hungary, Greece, Spain, the Netherlands and Luxembourg) have prices below the EU27 average which is at €38.9. The premium for adding a mobile component with 1 GB mobile data and 30 calls to a Double Play offer in 12-30 Mbps speed category is on average €9,43.

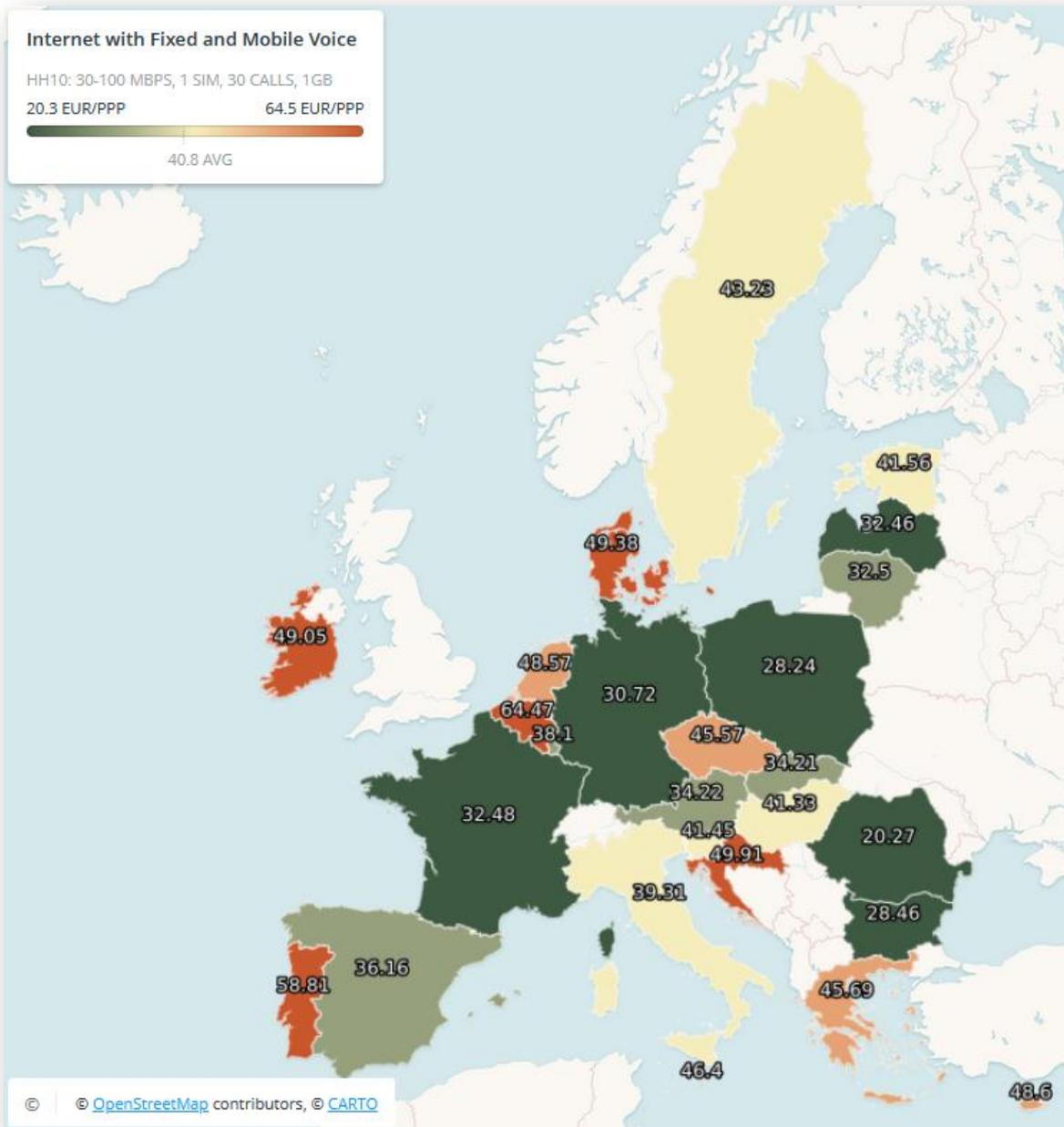
Map 14 - Triple Play with fixed telephony, 1 GB mobile data and 30 calls, 12-30 Mbps



4.2.3 Basket HH10 – 30-100 Mbps, fixed voice, 1 SIM, 1 GB, 30 calls

The pattern in this case is similar to the previous speed basket, with Romania, Poland, Bulgaria, Germany, Latvia and France ranked on the top list of the least expensive offers across the EU27. The premium for upgrading a Triple Play offer from 12 – 30 Mbps to 30 – 100 Mbps broadband speed category is on average €1.84, with Greece and Hungary showing the highest premiums, €8.79 and €5.98 respectively.

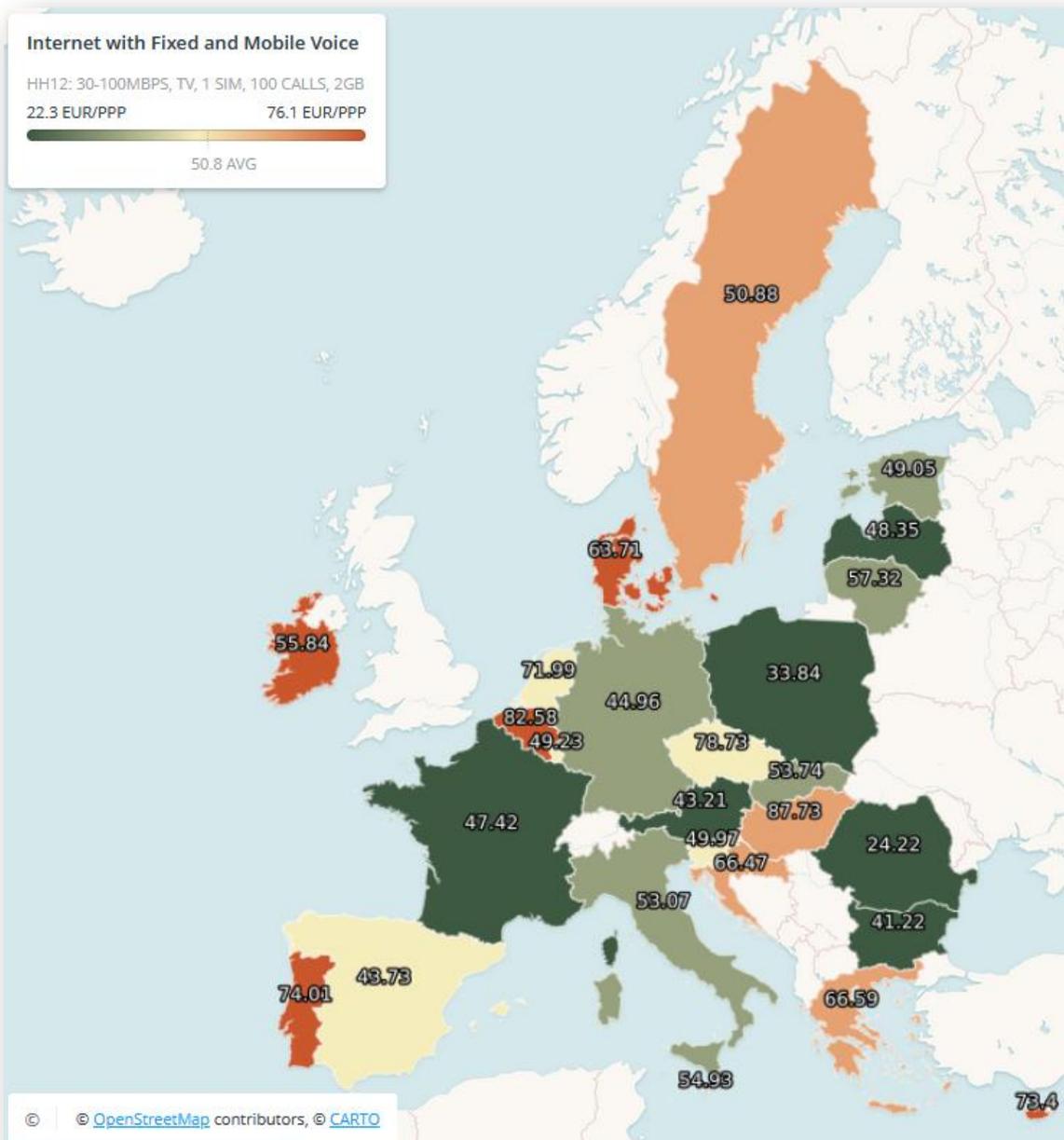
Map 15 - Triple Play with fixed telephony, 1 GB mobile data and 30 calls, 30 - 100 Mbps



4.2.5 Basket HH12 – 30-100 Mbps, fixed voice, 1 SIM, 2 GB, 100 calls, TV

In the least expensive price cluster for Quadruple Play (fixed telephony, TV, 2 GB mobile data and 100 calls - 1 SIM) at an advertised download speed in the 30 - 100 Mbps, Romania (€22.25) is accompanied by Bulgaria (€35.14), Poland (€35.91), France (€37.62), Latvia (€36.61), Austria (€38.94) and France (€40.16). The EU27 average is at €50.8 and the premium for adding a mobile component with 2 GB mobile data and 100 calls to a Triple Play offer in the same speed category is on average €12.42.

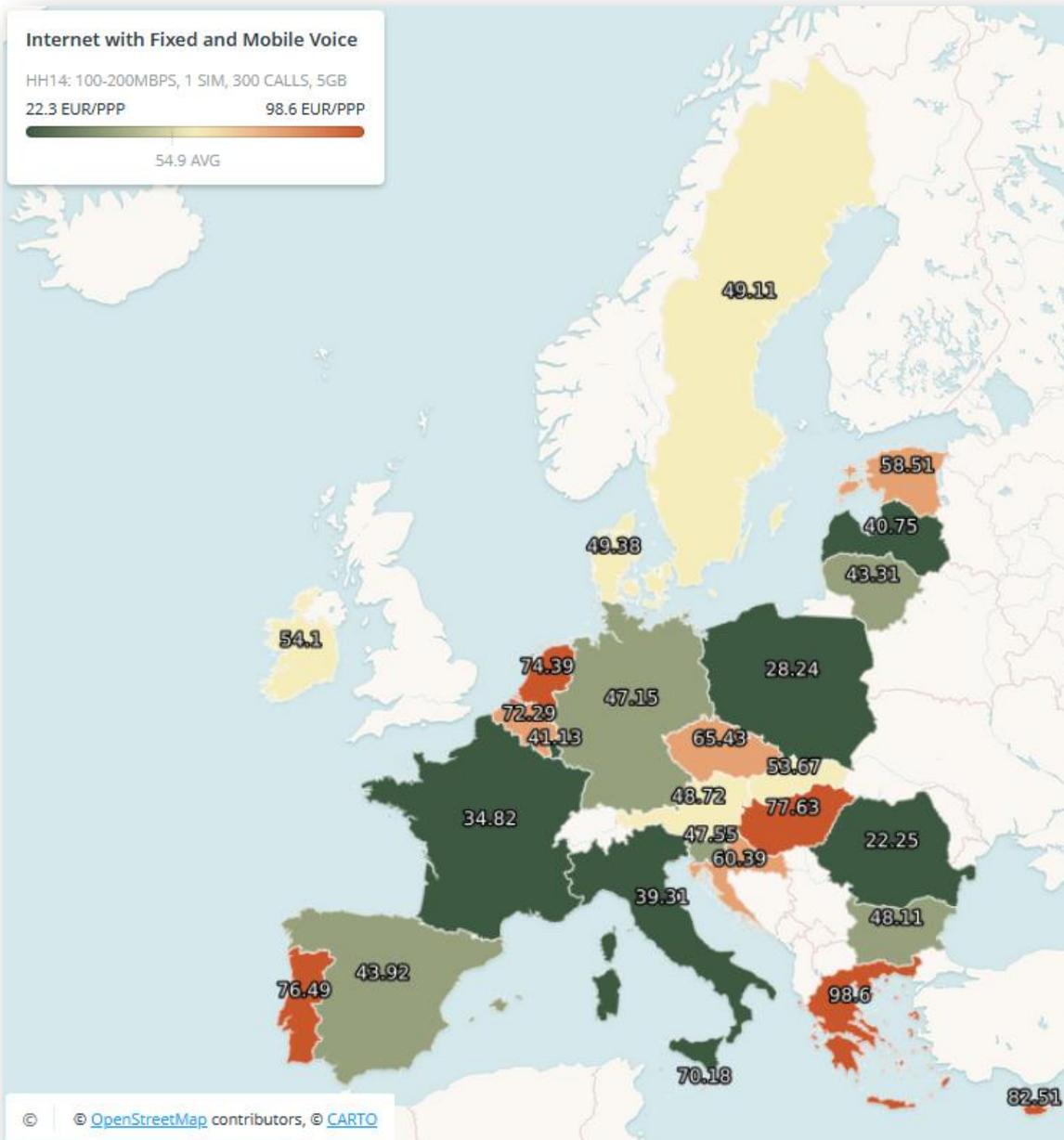
Map 17 - Quadruple Play with fixed telephony, TV, 2 GB mobile data and 100 calls (1 SIM), 30 - 100 Mbps



4.2.7 Basket HH14 – 100-200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls

The pattern in this case is similar the previous Triple Play service bundle, with Romania, Poland, France, Italy, Latvia and Luxembourg ranked on the top list of the least expensive offers across the EU27. The premium for upgrading the mobile component in the Triple Play offer (100 – 200 Mbps) from 2 GB mobile data and 100 calls to 5 GB mobile data and 300 calls is on average €4.95, with Hungary, Greece, Slovakia and Bulgaria showing the highest premiums, €18.60, €13.87, €12.94 and €12.77, respectively.

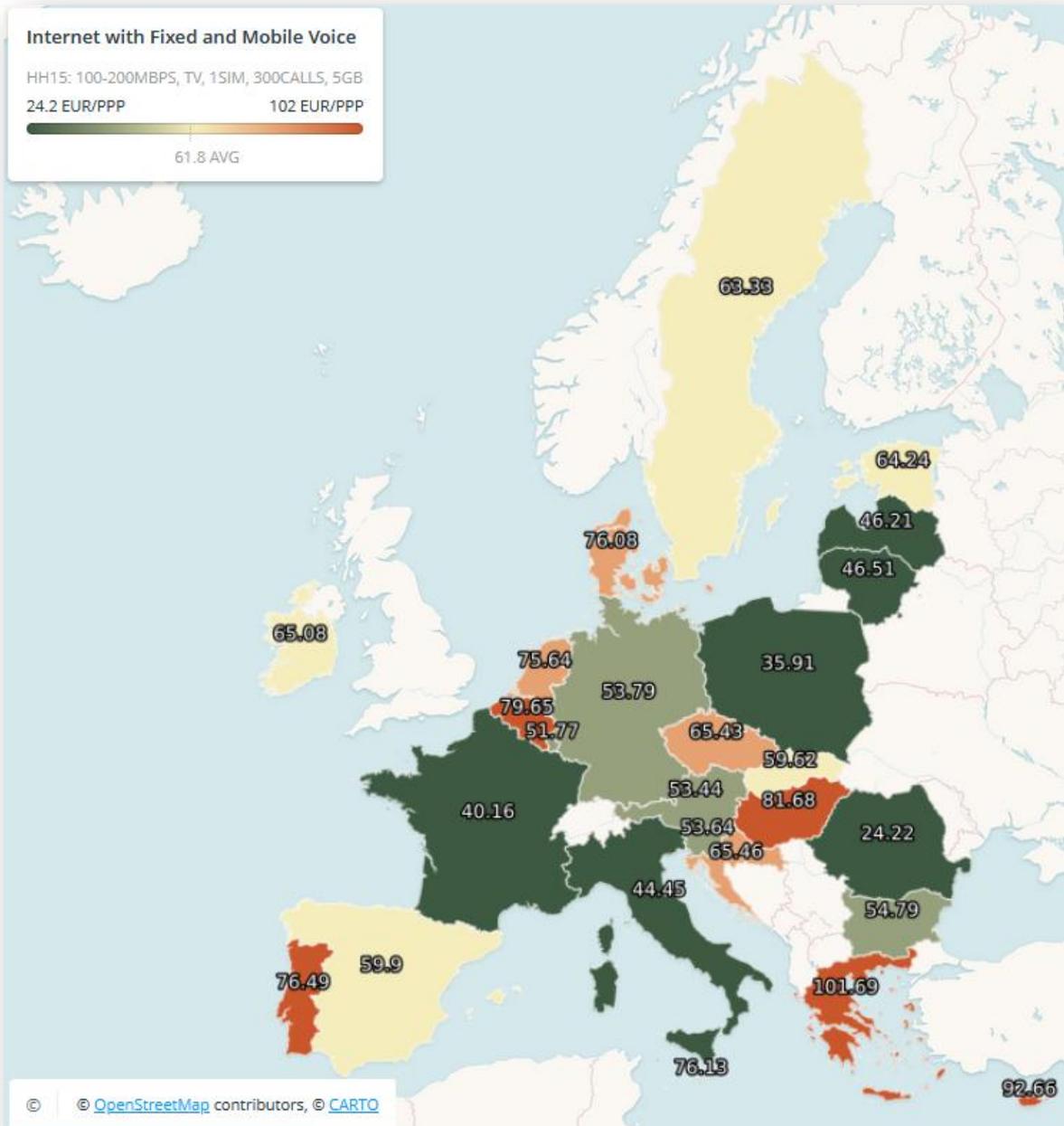
Map 19 - Triple Play with fixed telephony, 5 GB mobile data and 300 calls (1 SIM), 100 – 200 Mbps



4.2.8 Basket HH15 – 100-200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls, TV

Countries showing prices of less than €40 for Quadruple Play service bundle in the 100 – 200 speed basket are Romania (€24.22) and Poland (€35.91). The EU27 average is €61.8, and consumers need to pay an average premium of €6.92 for adding TV to a Triple Play service bundle in the same speed category.

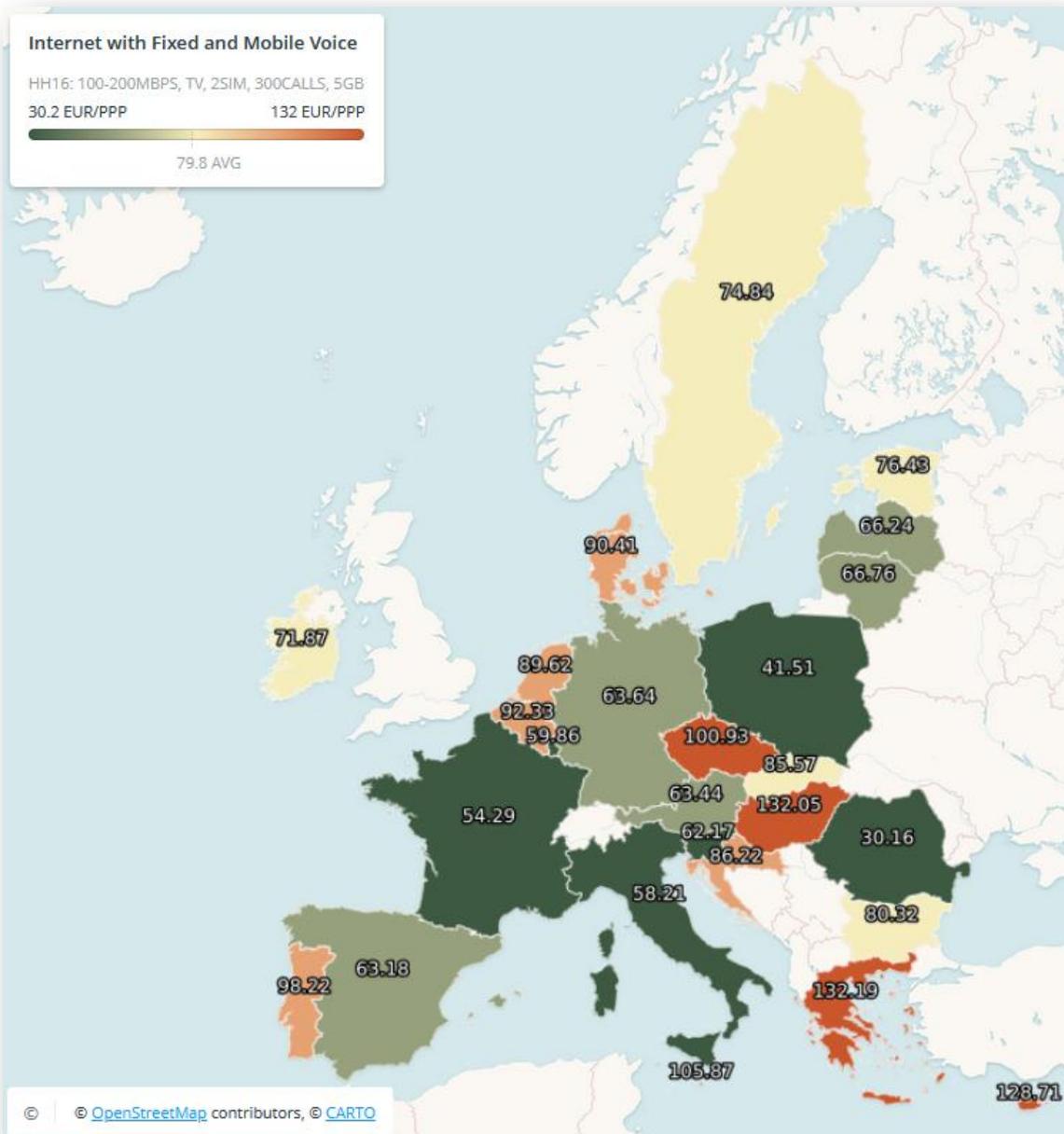
Map 20 - Quadruple Play with fixed telephony, TV, 5 GB mobile data and 300 calls (1 SIM), 100 – 200 Mbps



4.2.9 Basket HH16 – 100-200 Mbps, fixed voice, 2 SIM, 5 GB, 300 calls, TV

The pattern in this case is similar to the previous Quadruple Play service bundle, with Romania, Poland, France, Italy, Luxembourg and Slovenia ranked on the top list of the least expensive offers across the EU27 (€79.8). The premium for adding a second SIM (5 GB mobile data and 300 calls) to a Quadruple Play offer in the 100 - 200 Mbps speed category is on average €17.96. The premium varies significantly among Member States, with consumers in Spain having to pay around €3 for the second SIM and Hungary, Cyprus, Czechia, Greece and Malta showing the highest premiums, ranging from around €30 to above €40.

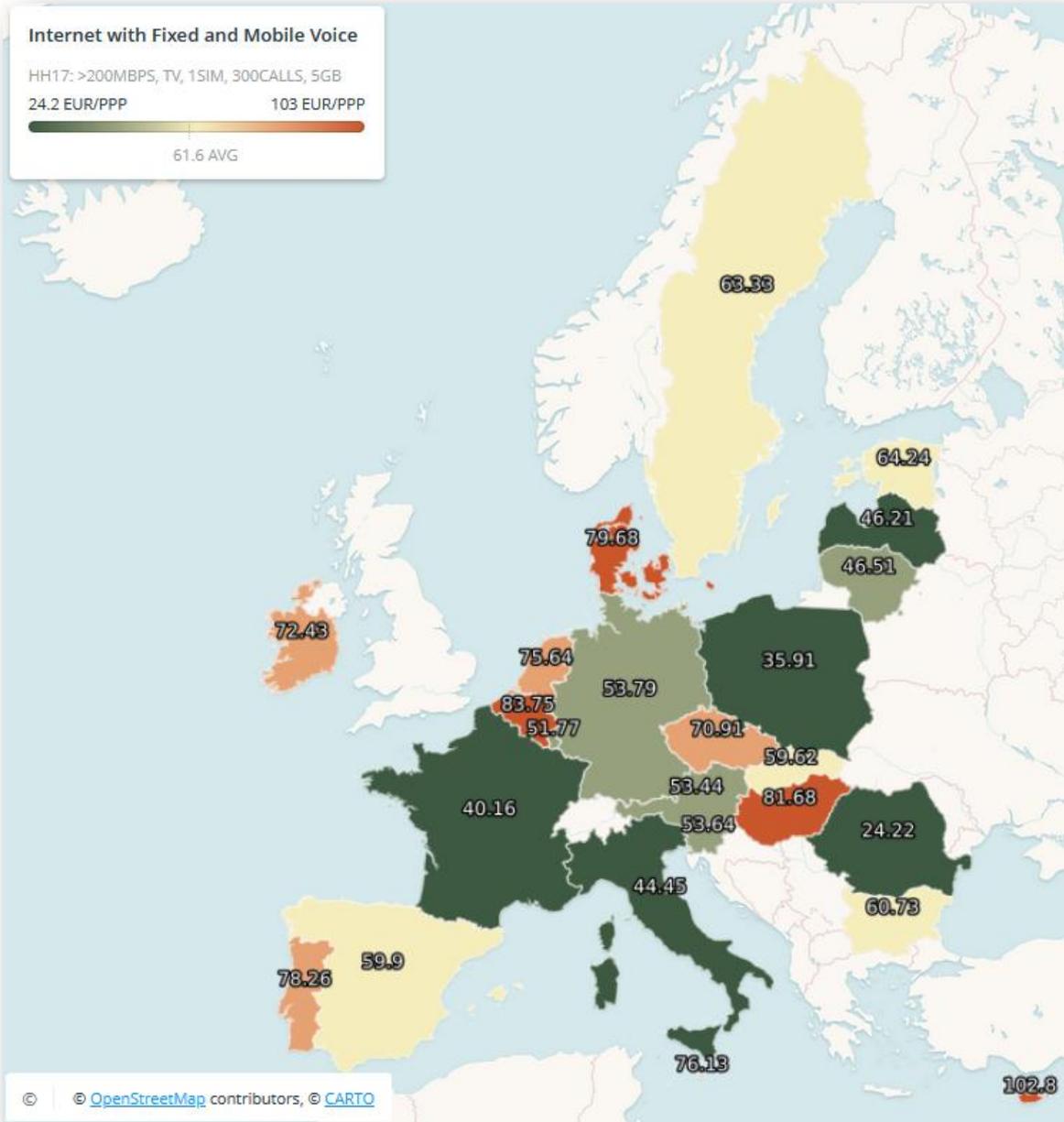
Map 21 - Quadruple Play with fixed telephony, TV, 5 GB mobile data and 300 calls (1 SIM), 100 – 200 Mbps



4.2.10 Basket HH17 – >200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls, TV

For the top speed category >200 Mbps, Quadruple Play with fixed telephony, TV, 5 GB mobile data and 300 calls, the range in European lowest prices is from €24.22 to €102.80. The best in class are Romania (€24.22), Poland (€35.90), France (€40.16), Italy (€44.45) and Latvia (€46.21). Eight more countries show prices less than EU27 average which is at €61.6.

Map 22 - Quadruple Play with fixed telephony, TV, 5 GB mobile data and 300 calls (1 SIM), > 200 Mbps



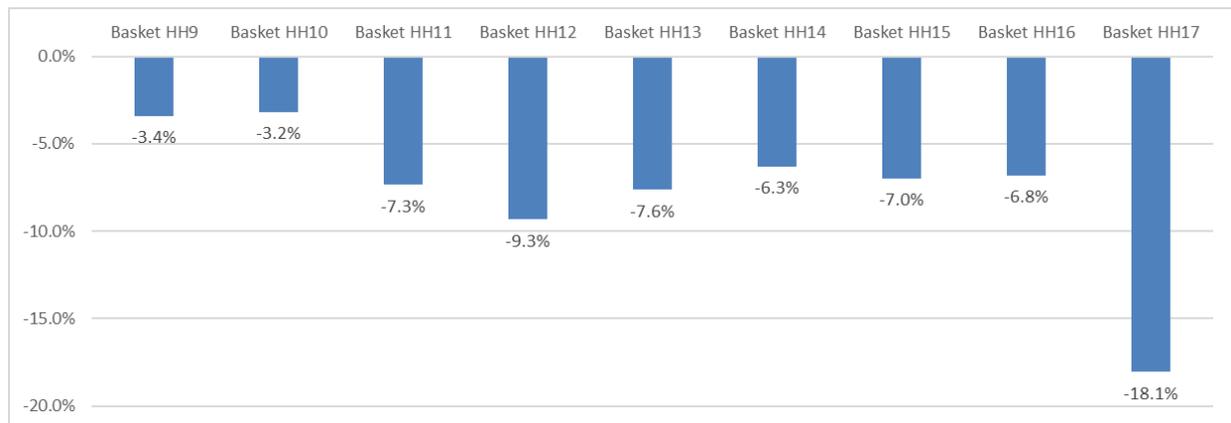
4.2.11 Price trends

Overall, prices for converged offers decreased among all household baskets compared to the previous year.

The most significant changes are seen in basket HH12 (30-100 Mbps, fixed voice, 1 SIM, 2 GB, 100 calls, TV9), where the price fell by 9.3% and in basket HH17 (200 Mbps, fixed voice, 1 SIM, 5 GB, 300 calls, TV), which shows a price almost a fifth lower compared to 2019.

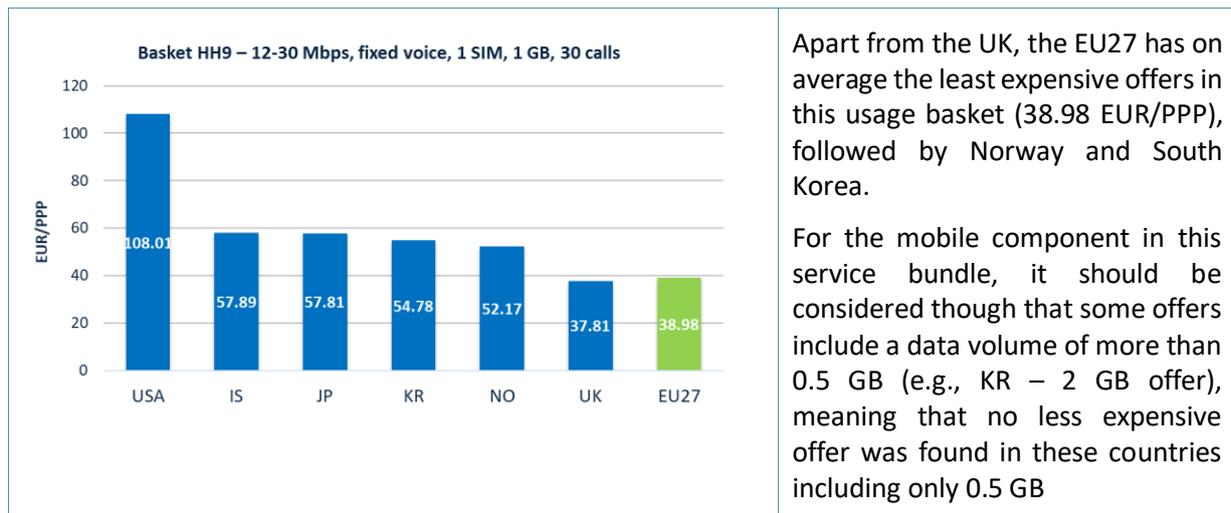
The price decrease for the rest of the household baskets ranges from around 3% (12-30 Mbps and 30-100 Mbps, fixed voice, 1 GB and 30 calls) to around 7% (30-100 Mbps and 100 – 200 Mbps, fixed voice, >1GB, >30 calls).

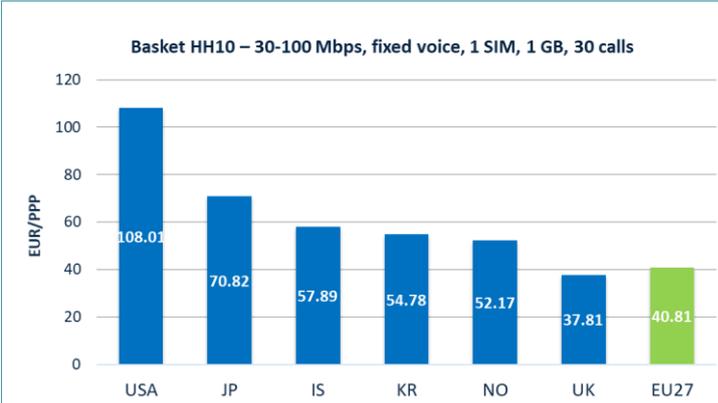
Figure 36 - Price changes in least expensive converged household prices, EU level (2019-2020)



4.2.12 The bigger picture: the EU in the world

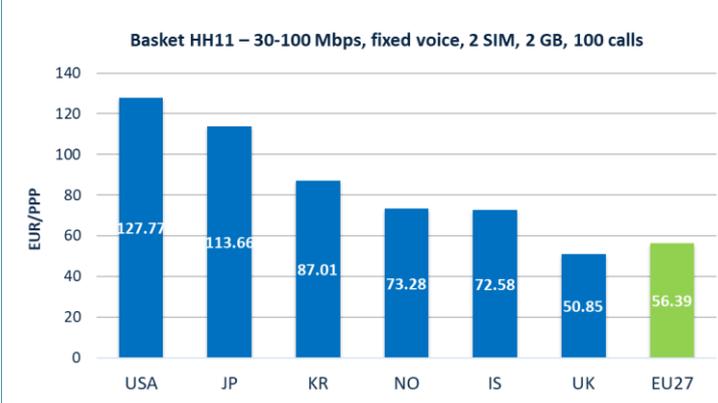
The following charts illustrate how the EU28 compare with South Korea, the United States, Iceland and Norway for given converged / synthetic service bundles.



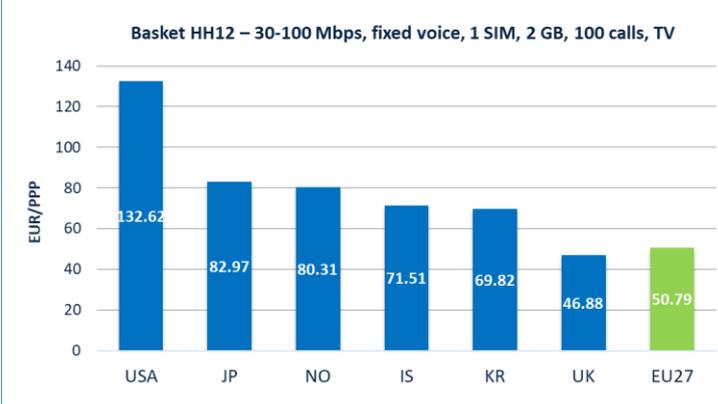


The pattern here is similar to the previous one, with the EU27 (40.81 EUR/PPP) ranked as the second least expensive among other countries taken into consideration. Iceland shows the same prices for both, Triple Play offers in 12 – 30 Mbps and 30 – 100 Mbps speed basket.

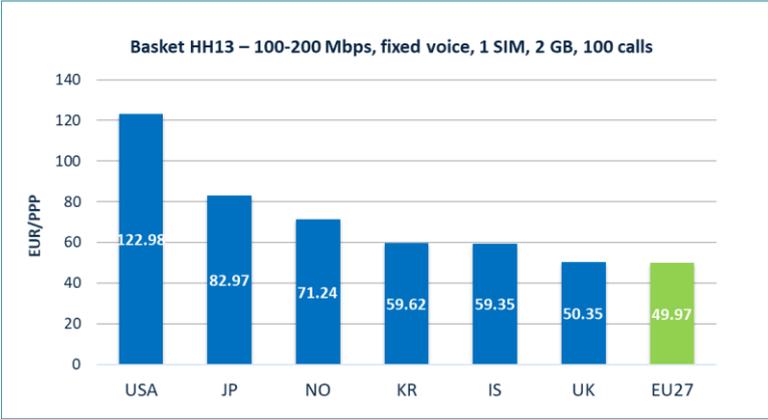
For the mobile component bundled to this service bundle, it should be considered though that some offers include a data volume of more than 1 GB, (e.g., KR – 2 GB) meaning that no less expensive offer was found in these countries including only 1 GB.



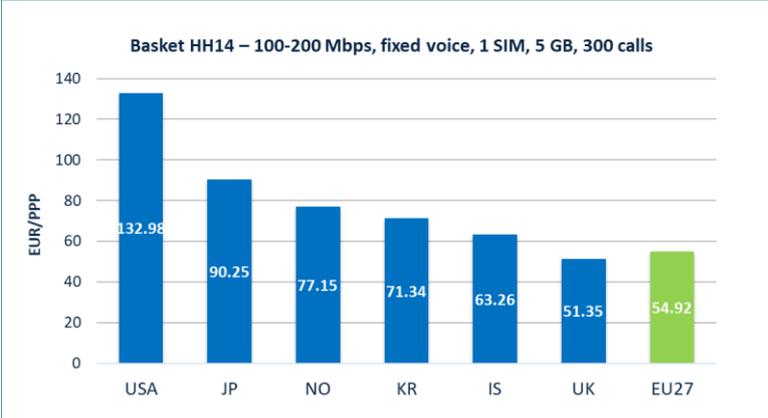
The EU27 average price (56.39 EUR/PPP) for this Triple Play offer is lower than prices found in all countries except the UK. Iceland and Norway show similar prices.



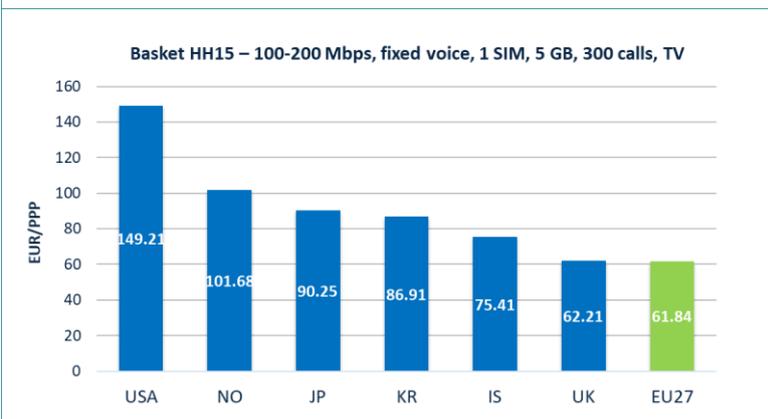
Prices for this Quadruple Play service bundle are nearly on the same level in Iceland and South Korea (around 70 EUR/PPP) and Japan and Norway (slightly above 80 EUR/PPP), while the EU27 exhibits significantly lower prices (50.79 EUR/PPP). The UK shows the least expensive prices overall.



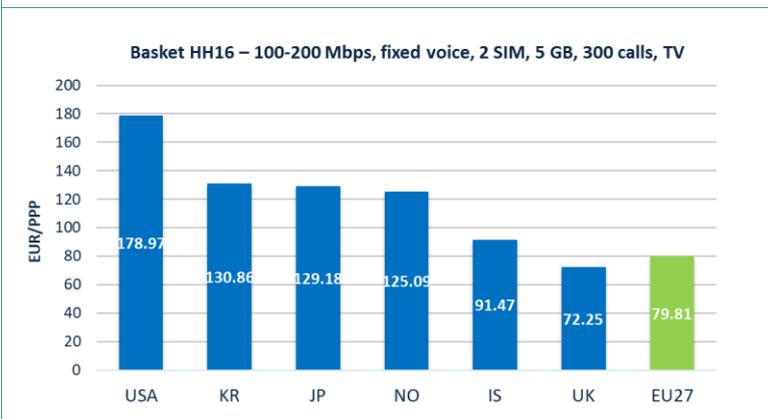
The EU27 average price (49.97 EUR/PPP) is lower than prices for this Triple Play offer in Japan, Norway, South Korea, Iceland and the UK, while the USA show significantly higher prices.



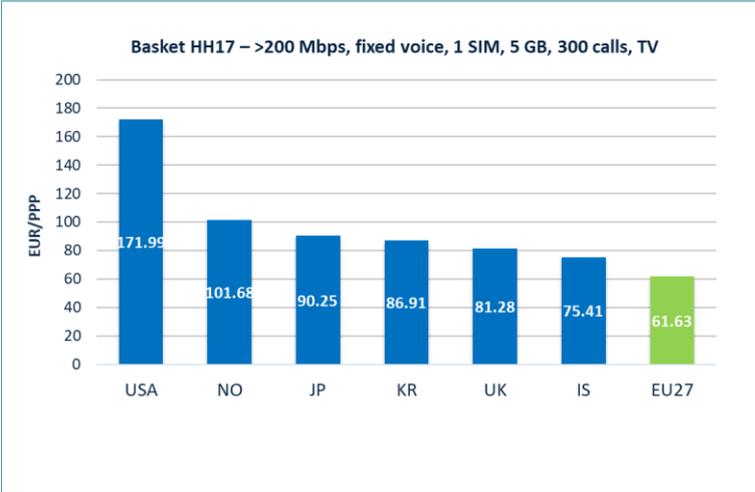
The EU27 average price (54.92 EUR/PPP) is lower than the prices for this service bundle in the rest of the countries except the United Kingdom. The premium for upgrading the mobile component in the Quadruple Play offer from 2 GB mobile data and 100 call, to 5 GB mobile data and 300 calls ranges from €3.81 in Iceland to more than €10 in South Korea and the USA.



Prices for this Quadruple Play offer in a top speed category are lowest in the EU27 (61.84 EUR/PPP) followed by the UK (62.21 EUR/PPP) and Iceland (75.41 EUR/PPP). The USA show the highest prices in this HH basket.



The EU27 exhibits lowest prices in comparison with the rest of the countries except the UK. The premium for adding a second SIM to the Quadruple Play offer with fixed voice, TV, 5 GB mobile data and 300 calls in the 100 – 200 Mbps speed category costs between €16.06 in Iceland and almost €30 in the USA.



The EU27 (61.63 EUR/PPP) and Iceland (75.41 EUR/PPP) show the lowest prices in this HH basket, while the USA are significantly more expensive. The speed premium for the upgrade from 100 – 200 Mbps to the top speed basket >200 Mbps Quadruple Play service bundle ranges on average from €0.56 in the EU28 to €22.78 in the USA. Consumers in South Korea, Norway, Japan and Iceland pay no extra cost for the upgrade.

4.3 Mobile prices at a glance

4.3.1 2020 prices across the EU for mobile broadband offers

In the following table, green symbols indicate the cluster²⁷ of countries with the least expensive offers for the usage basket in question and red the cluster with the most expensive offers. Blue and orange are used for the cluster of countries with relatively inexpensive and relatively expensive offers, respectively.

²⁷ 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 37 - Major clusters of countries by price level in each usage basket (mobile broadband)

	0,5GB mobile data with no calls	1GB mobile data with no calls	2GB mobile data with no calls	5GB mobile data with no calls	20GB mobile data with no calls	0,5GB mobile data with 30 calls	1GB mobile data with 30 calls	2GB mobile data with 100 calls	5GB mobile data with 300 calls	20GB mobile data with 300 calls	5GB mobile data with 30 calls	20GB mobile data with 100 calls
PL	1	1	1	1	1	1	1	1	1	1	1	1
RO	2	2	1	1	1	1	1	1	1	1	1	1
EE	1	1	1	1	2	1	1	1	2	2	1	2
ES	1	1	1	1	2	1	1	2	1	2	1	2
IE	3	3	2	1	1	1	1	1	1	1	1	1
SI	1	1	1	2	1	2	2	2	1	2	1	2
AT	2	2	2	2	2	2	2	2	1	1	2	1
DE	2	2	3	2	2	1	1	2	1	2	2	2
LU	2	2	2	2	3	1	1	2	1	3	1	3
NL	2	3	2	3	2	2	1	2	2	2	2	2
SE	2	2	2	3	2	2	2	2	2	2	2	2
SK	2	2	2	2	3	1	1	3	3	2	2	2
FR	4	3	3	3	2	3	2	3	2	1	2	1
IT	4	3	3	2	1	4	3	3	2	1	2	1
BE	2	2	3	3	3	2	2	3	2	3	2	3
FI	2	3	4	3	2	2	2	3	3	2	3	2
HR	2	2	2	3	3	3	2	3	3	3	3	3
LV	3	2	2	2	1	3	4	3	3	3	3	3
BG	3	3	2	2	3	3	3	3	3	3	3	3
DK	4	4	3	3	2	4	3	3	2	2	2	2
EL	3	3	2	3	2	3	3	3	4	4	3	4
HU	2	2	3	3	4	3	2	4	4	4	3	4
LT	4	4	4	4	3	3	3	3	3	3	3	3
MT	4	4	3	4	4	3	3	3	4	3	3	3
PT	4	4	4	4	3	2	3	3	3	4	4	4
CY	4	4	4	4	4	3	4	4	4	4	4	4
CZ	4	4	4	4	3	4	4	4	4	4	4	4

Cluster Centres [EUR]

1	2.43	2.43	3.12	5.19	7.53	5.53	5.53	5.52	8.09	10.2	6.67	9.87
2	4.15	4.29	7.41	9.05	14.55	8.44	9.2	9.21	13.12	18.75	12.21	19.29
3	6.23	7.75	10.29	12.62	24.74	11.37	13.14	14.87	22.69	33.69	19.9	34.8
4	11.36	13.97	17.45	22.3	42.31	14.93	18.37	27.26	36.62	52.83	29.03	52.83

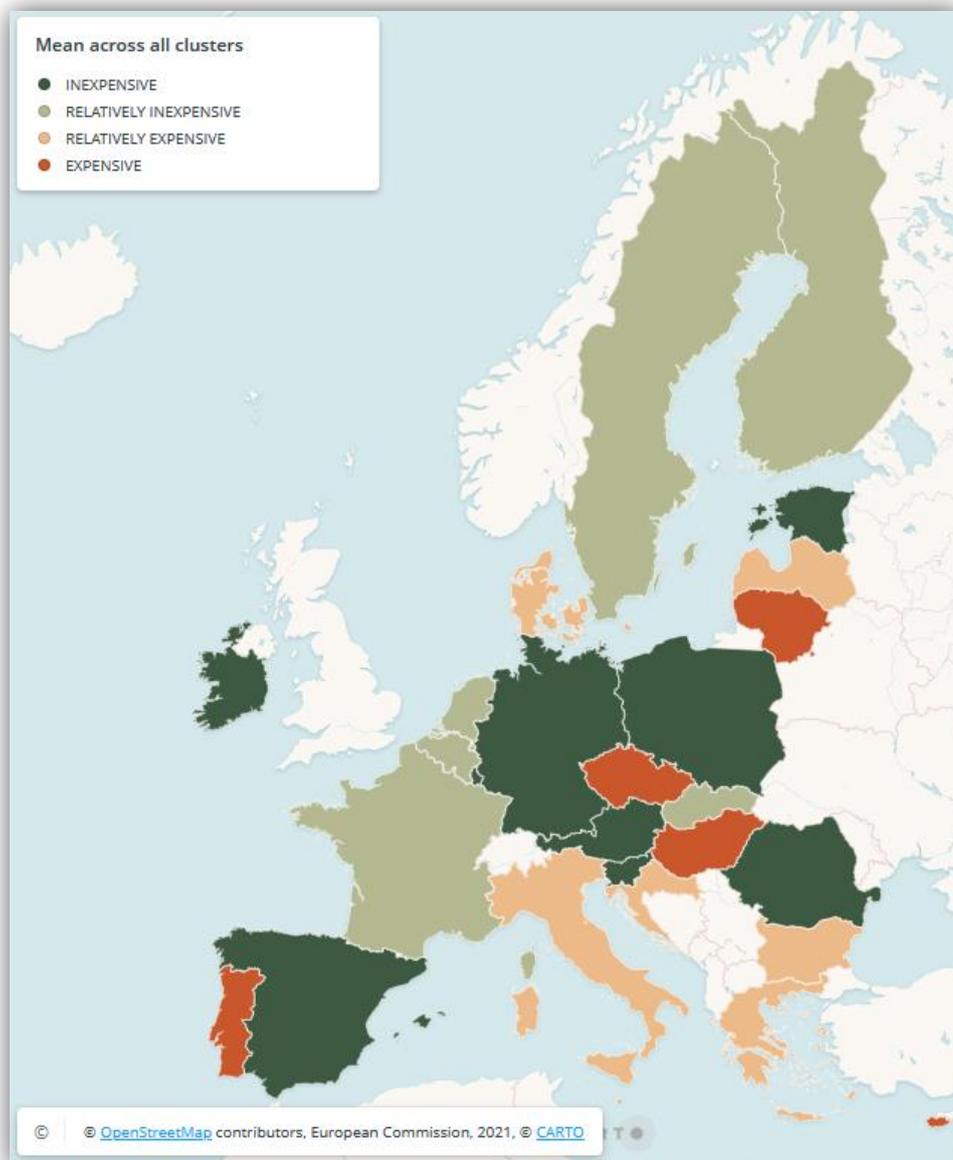
Number of cases in each cluster

1	4	4	5	5	6	8	9	4	8	6	7	6
2	11	10	10	8	10	7	8	7	7	9	9	9
3	4	7	7	9	8	9	7	13	7	7	8	7
4	8	6	5	5	3	3	3	3	5	5	3	5

Green symbol 1 - inexpensive cluster
 Blue symbol 2 - relatively inexpensive cluster
 Yellow symbol 3 - relatively expensive cluster
 Red symbol 4 - expensive cluster

- Poland, Romania, Estonia, Spain, Ireland and Slovenia have the most attractive prices overall, with a cluster ratio of 1.5 or less.
- Austria, Germany, Luxembourg, the Netherlands, Sweden, Slovakia, France and Italy follow with a cluster ratio of 2.5 or less. Austria, Germany and Italy have at least three offers belonging to the cheapest cluster.
- The next group has very heterogeneous members, with a ratio of 3.2 or less. It includes Belgium, Finland, Croatia, Latvia, Bulgaria, Denmark, Greece and Hungary.
- Cyprus and Czechia have no offer belonging to one of the inexpensive clusters.
- Only Poland has offers in the inexpensive cluster for all the usage baskets, Romania for all but two usage baskets.

Figure 38 - Major clusters of countries by price level over all usage baskets



Averaging across all mobile broadband usage baskets and distinguishing the four major clusters reveals the pattern shown in the map (Figure 38) above.

- The **inexpensive countries** are Poland, Romania, Estonia, Spain, Ireland, Slovenia, Austria, Germany and Luxembourg.
- The **relatively inexpensive countries** are the Netherlands, Sweden, Slovakia, Belgium, Finland and France.
- The **relatively expensive** countries are Croatia, Italy, Bulgaria, Latvia, Denmark and Greece.
- The **expensive countries** are Hungary, Lithuania, Malta, Portugal, Cyprus and Czechia.

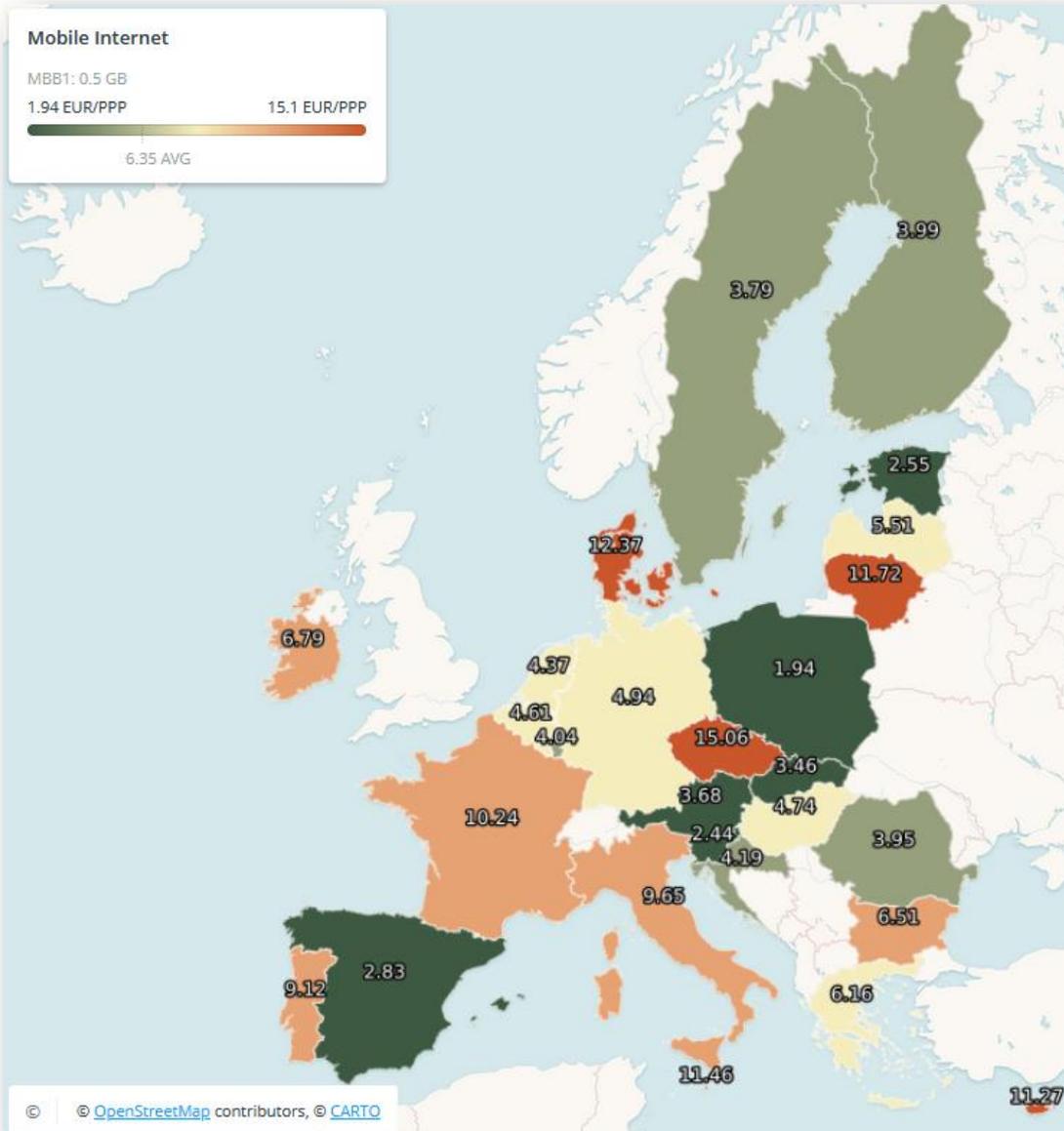
4.3.2 Who is best in class?

The maps in the following sections show the prices for the least expensive offer found on the market for each mobile broadband usage basket in all EU27 countries.

4.3.3 Basket MBB1 – 0.5 GB

In the smallest data-only usage basket, the least expensive offer comes from Poland at €1.94 followed by Slovenia (€2.44), Estonia (€2.55), Spain (€2.83), Slovakia (€3.46) and Austria (€3.68). The EU27 average is €6.35. Cyprus (€11.27), Malta (€11.46), Lithuania (€11.72), Denmark (€12.37) and Czechia (€15.06) are the countries with the most expensive offers in this basket.²⁸ Generally, offers adapted to such small data volumes are not offered by the largest MNOs in certain countries, so that customers with this low usage profile must accept the price of offers providing more data volume.

Map 23 – 0.5 GB mobile data with no calls

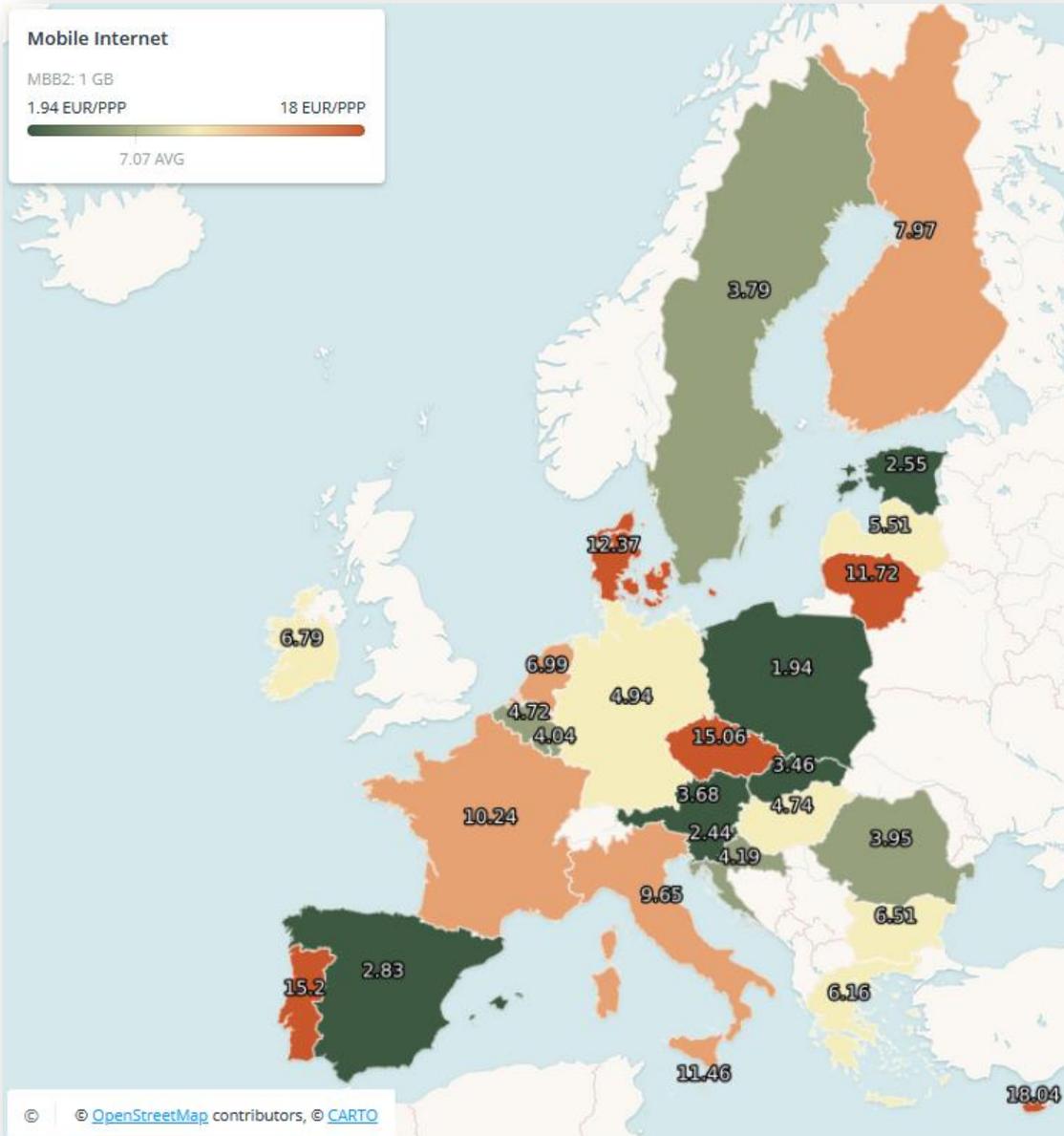


²⁸ The offer selected as least expensive for the given basket in Malta includes 2.5 GB, in Denmark includes 20 GB and in Czechia 4 GB.

4.3.4 Basket MBB2 – 1 GB

Offers in this usage basket show a similar price pattern to the previous one, with Poland (€1.94), Slovenia (€2.44), Estonia (€2.55), Spain (€2.83), Slovakia (€3.46) and Austria (€3.68) listed amongst the best-in-class group of countries. The EU27 average lies at €7.0 EUR.

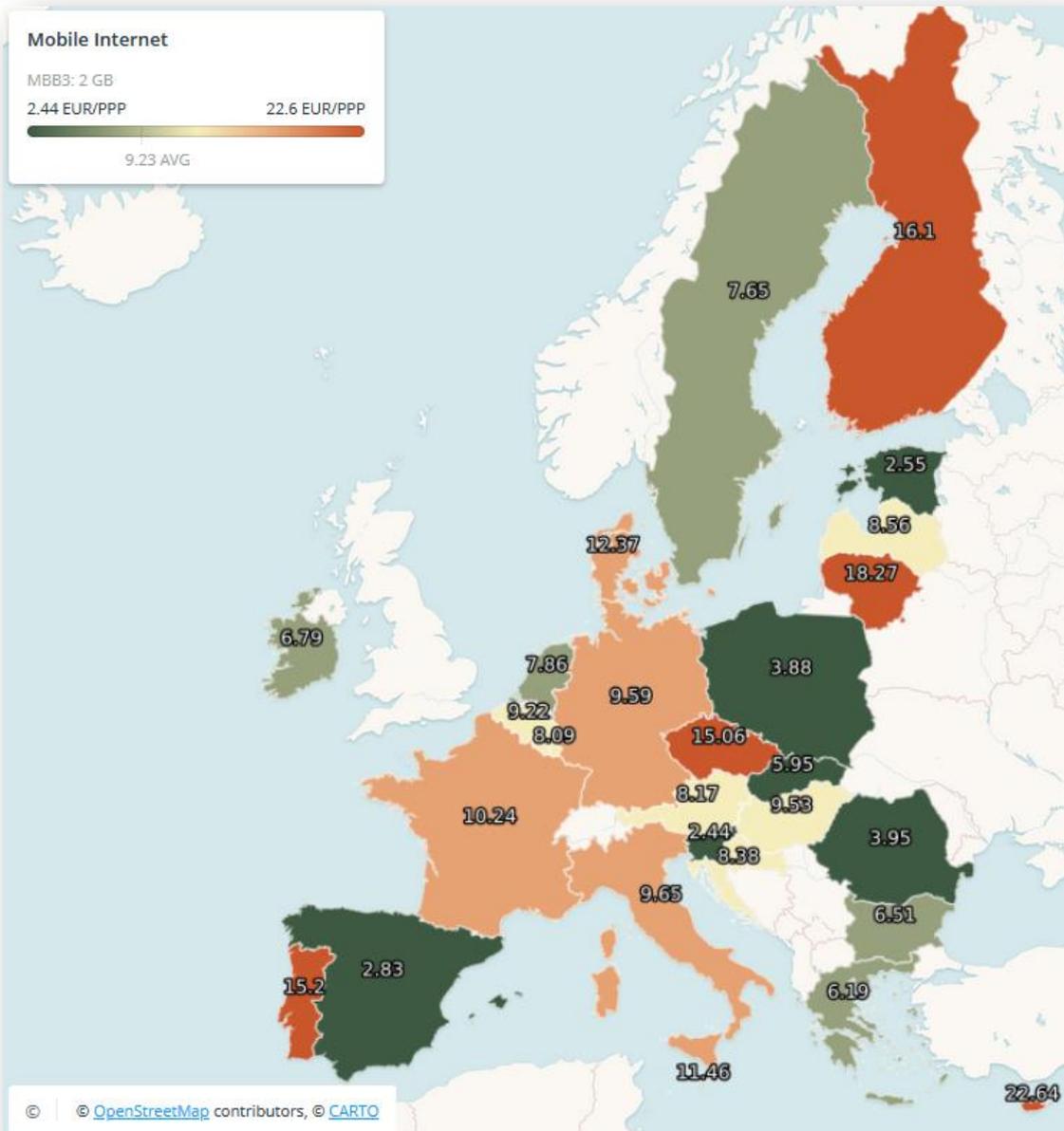
Map 24 – 1 GB mobile data with no calls



4.3.5 Basket MBB3 – 2 GB

Slovenia leads this basket with €2.44, followed by Estonia (€2.55), Spain (€2.83), Poland (€3.88), Romania (€3.95) and Slovakia (€5.95). The next ten countries, including Greece (€6.19), Bulgaria (€6.51), Ireland (€6.79), Sweden (€7.65), the Netherlands (€7.86), Luxembourg (€8.09), Austria (€8.17), Croatia (€8.38) and Latvia (€8.56) exhibit prices below the EU Average (€9.23). The premium for doubling data from 1 GB to 2 GB is on average €2.16.

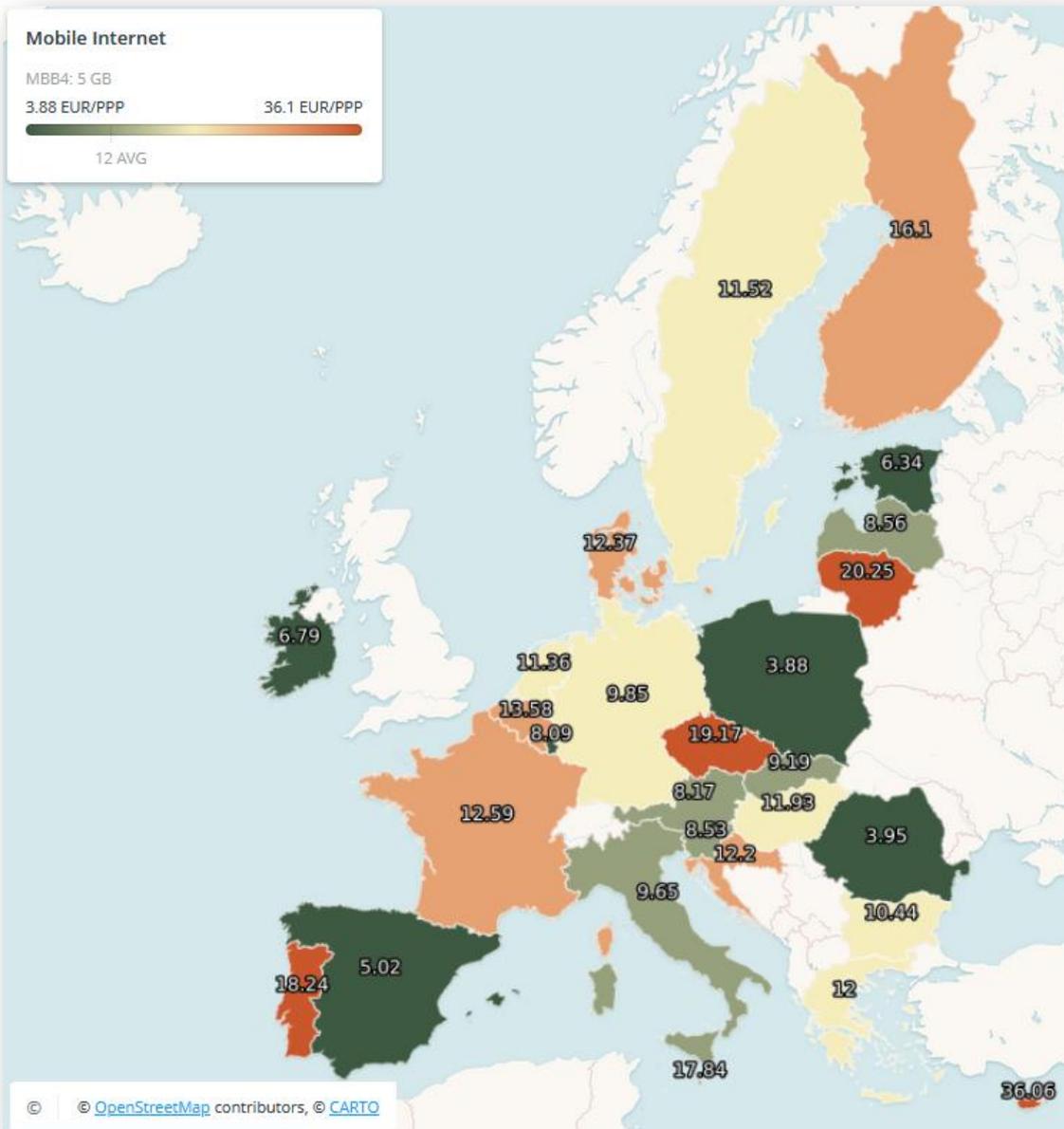
Map 25 – 2 GB mobile data with no calls



4.3.6 Basket MBB4 – 5 GB

The lowest price in this usage basket is found in Poland (€3.88), followed by Romania (€3.95), Spain (€5.02), Estonia (€6.34), Ireland (€6.79) and Luxembourg (€8.09). Six more countries (Austria, Slovenia, Latvia, Slovakia, Italy and Germany) have prices below €10. The EU27 average is €12. All countries, except Lithuania and Cyprus, exhibit prices under €20 and the premium for upgrading from 2 GB to 5 GB usage basket is on average €2.76.

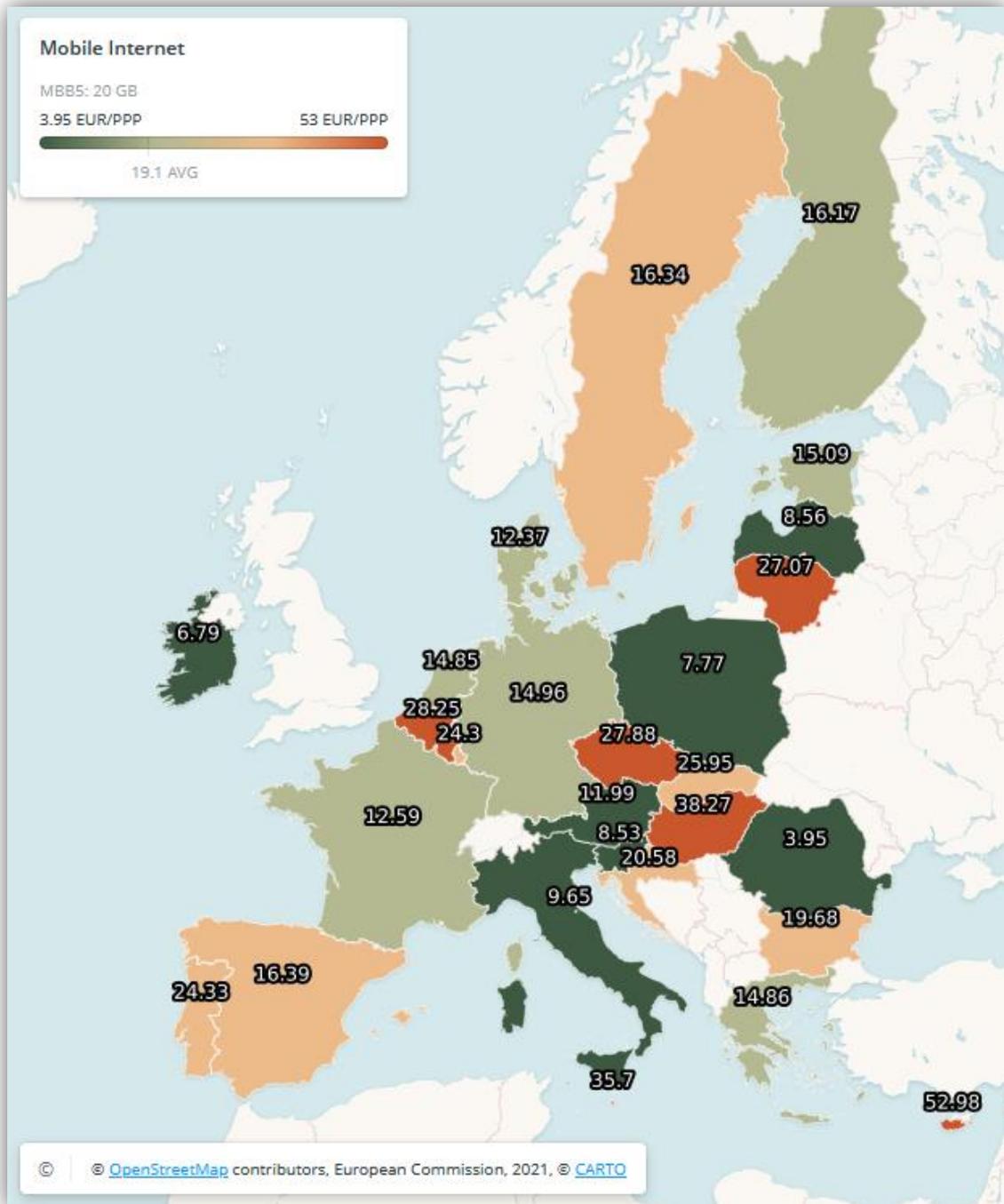
Map 26 5 GB mobile data with no calls



4.3.7 Basket MBB5 – 20 GB

The lowest price also in this usage basket is found in Romania (€3.95), followed by Ireland (€6.79), Poland (€7.77), Slovenia (€8.53), Latvia (€8.56) and Italy (€9.65). Six more countries (Austria, Denmark, France, the Netherlands, Greece and Germany) have prices below €15. The EU27 average is €19.1 and the premium for upgrading from 5 GB data offer to 20 GB is on average €7.12.

Map 27 – 20 GB mobile data with no calls



4.3.8 Basket I1 – 0.5 GB, 30 calls

The lowest price in the usage basket with 0.5 GB data, 30 calls can be found in Romania: €3.95. The most expensive price is in Czechia at €16.72. More than half of the Member States offer options below €10. The EU average in this basket is €9.18 and the premium for adding 30 voice calls to the basket (in comparison to the data only 0.5 GB usage basket) is on average €2.83.

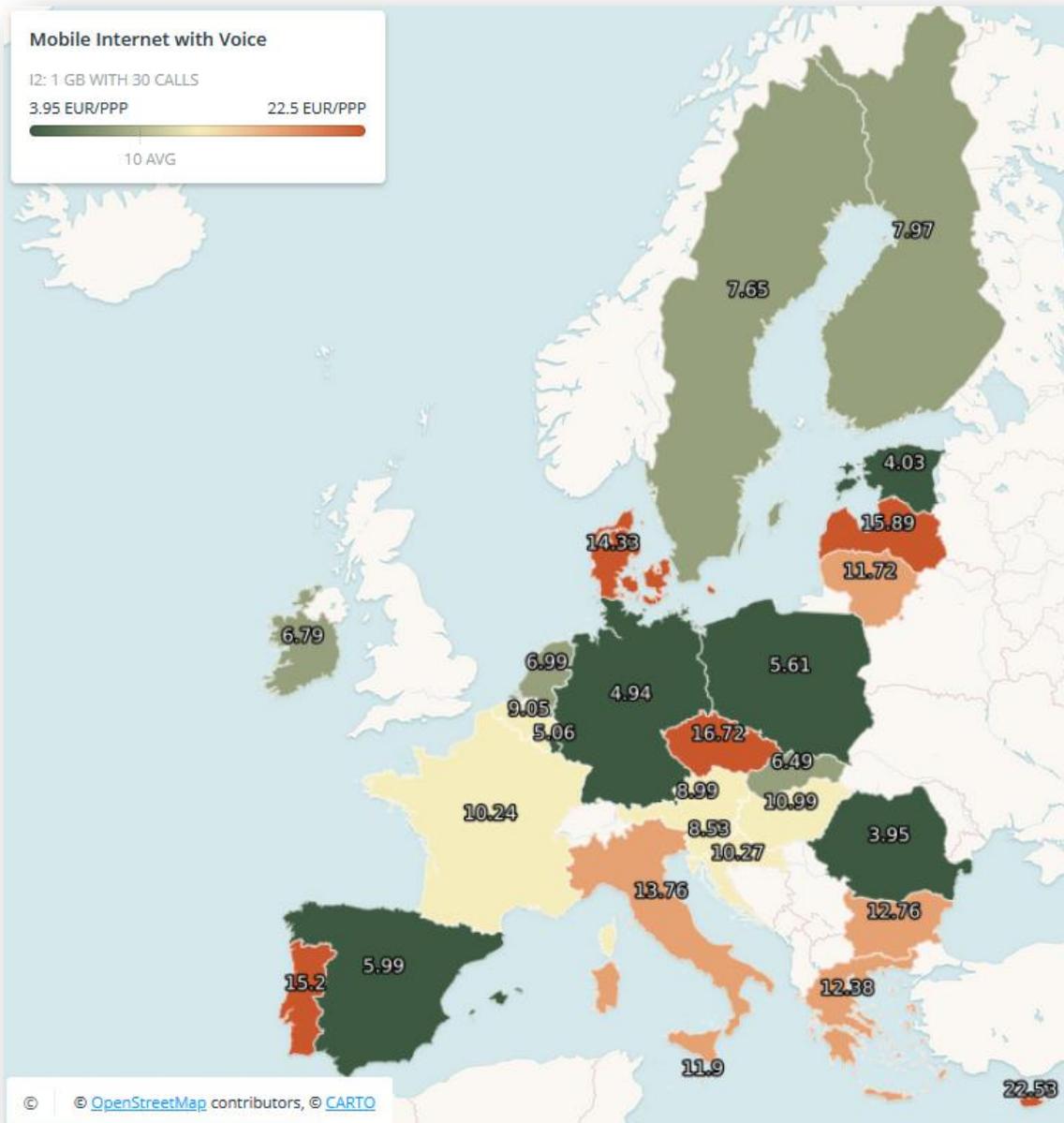
Map 28 – 0.5 GB mobile data with 30 calls



4.3.9 Basket I2 – 1 GB, 30 calls

Fourteen countries in this in this basket with 1 GB data, 30 calls exhibit prices below the EU27 average which is at €10 (Romania €3.97, Estonia €4.03, Germany €4.94, Luxembourg €5.06, Poland €5.62, Spain €5.99; Slovakia €6.49, Ireland €6.79, the Netherlands €6.99, Sweden €7.65, Finland €7.97, Slovenia €8.53, Austria €8.99 and Belgium €9.05). Another nine countries show prices below €15. The premium for adding 30 voice calls to the 1 GB usage basket lies at €2.96 on average.

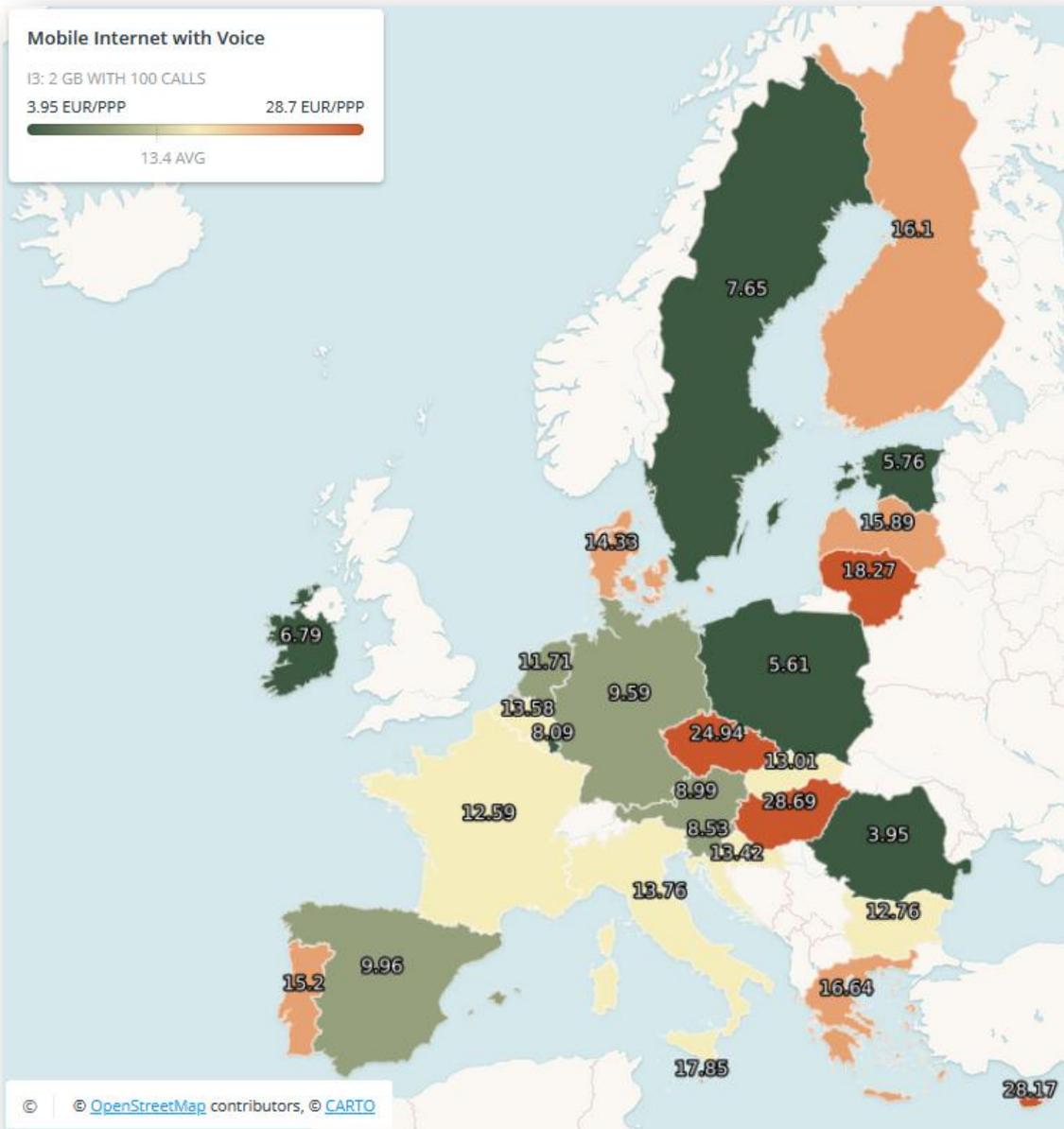
Map 29 – 1 GB mobile data with 30 calls



4.3.10 Basket I3 – 2 GB, 100 calls

Again, Romania leads this basket with 2 GB data, 100 calls at €3.95, followed by Poland (€5.61), Estonia (€5.76), Ireland (€6.79), Sweden (€7.65) and Luxembourg (€8.09). Another four countries show prices below €10 (Slovenia, Austria, Germany and Spain). The EU27 average is at €13.4. The two most expensive countries in this usage basket show prices slightly more twice as high as the EU27 average. Consumers should pay an average premium of €4.17 for adding 100 voice call to a 2 GB usage basket.

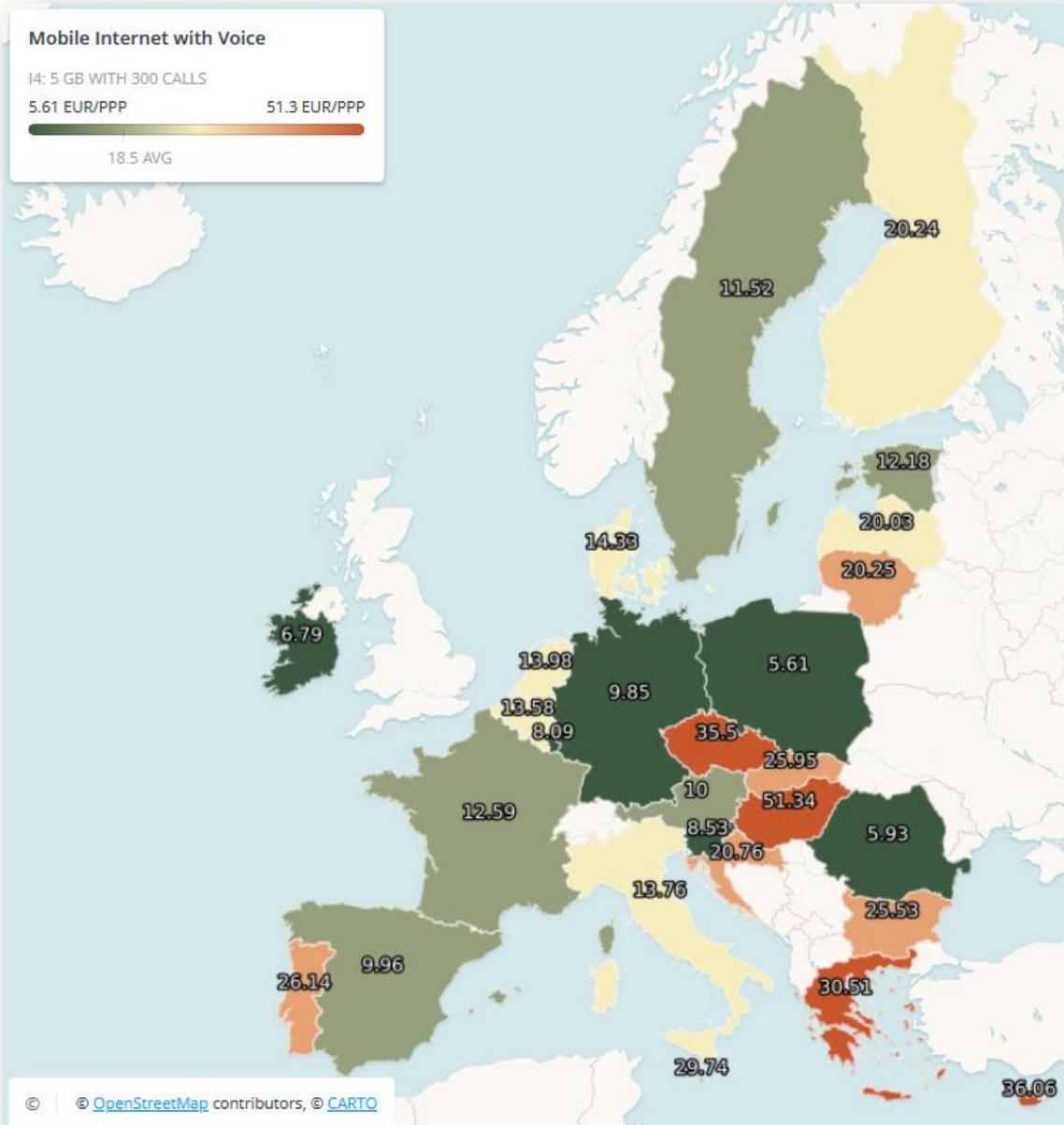
Map 30 – 2 GB mobile data with 100 calls



4.3.11 Basket I4 – 5 GB, 300 calls

The lowest price in the usage basket with 5 GB data, 300 calls can be found in Poland at €5.61. The most expensive price is found in Hungary at €51.34. More than half of the Member States in this usage basket offer options below the EU27 average, which is at €18.5. The premium for adding 300 voice calls to the basket (in comparison to the data only 5 GB usage basket) is on average €6.48.

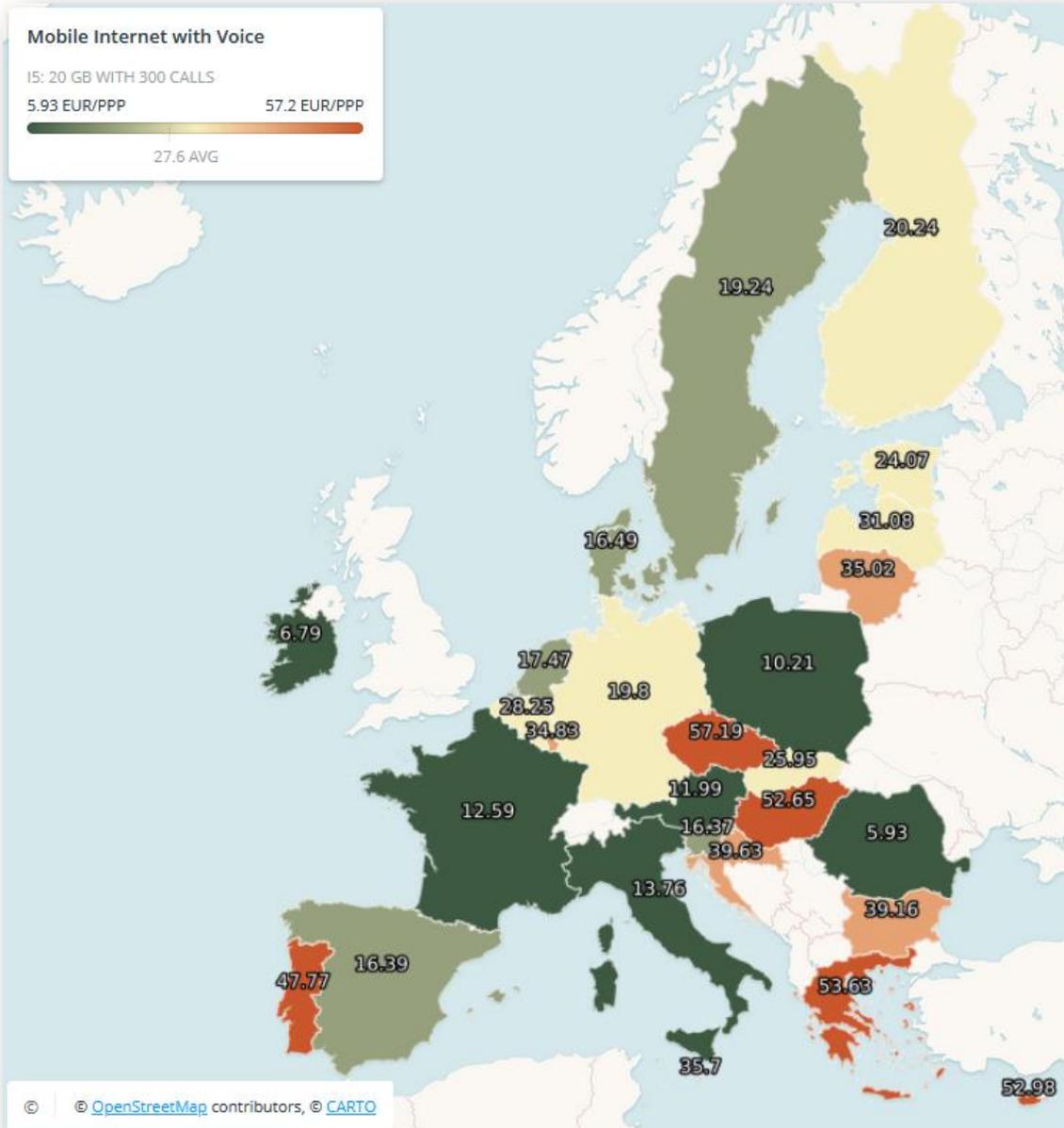
Map 31 – 5 GB mobile data with 300 calls



4.3.12 Basket I5 – 20 GB, 300 calls

The least expensive offer in this high – end usage basket with 20 GB and 300 calls is found in Romania at €5.93 followed by Ireland (€6.79), Poland (€10.21), Austria (€11.99), France (€12.59) and Italy (€13.76). The most expensive countries (Hungary, Cyprus, Greece and Czechia) demonstrate all prices above €50. Five countries in this basket exhibit prices of less than 50% of the EU27 average, which is at €27,6.

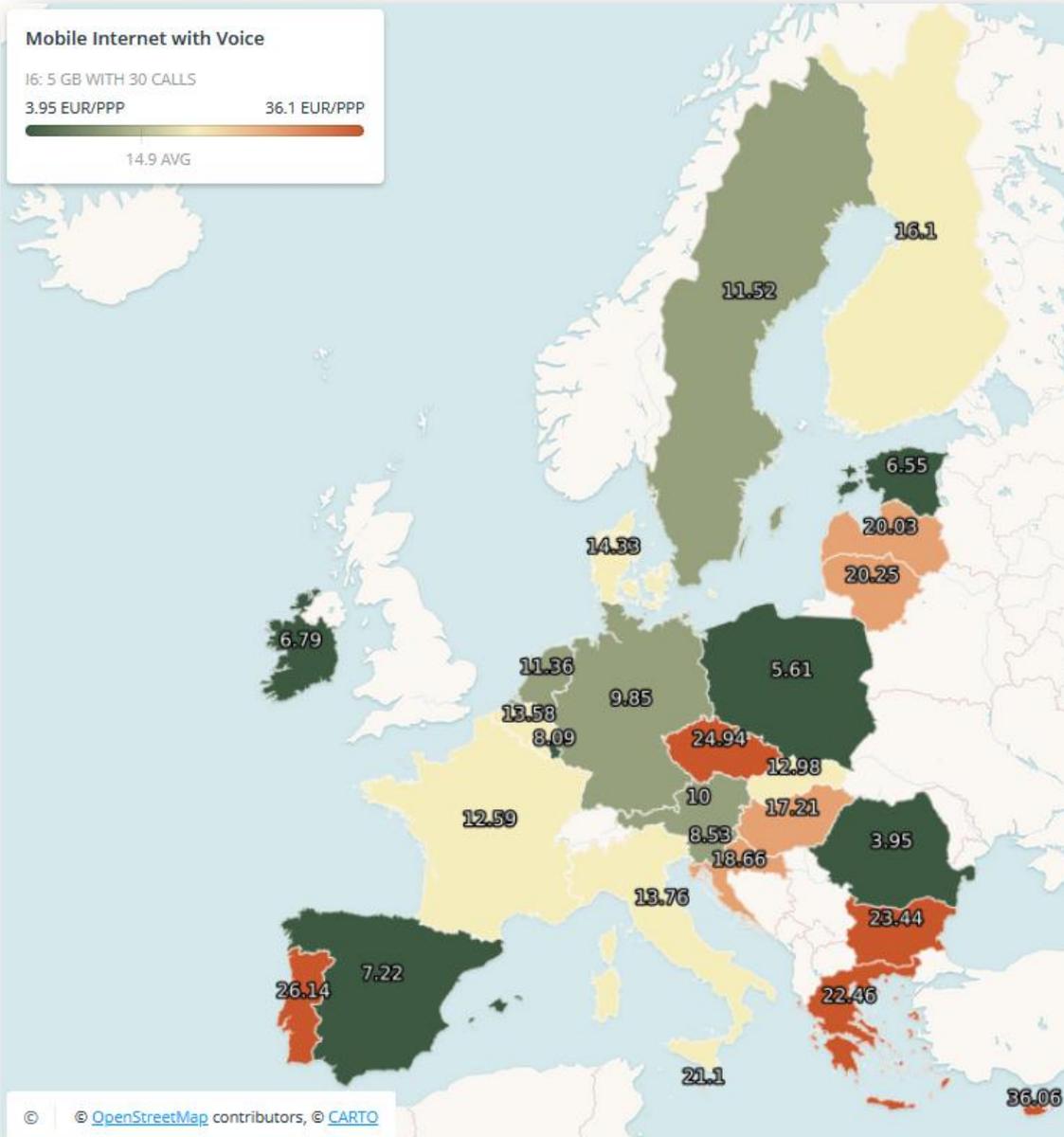
Map 32 – 20 GB mobile data with 300 calls



4.3.13 Basket I6 – 5 GB, 30 calls

The lowest-price lead in this usage basket is Romania (€3.95), followed by Poland (€5.61), Estonia (€6.55), Ireland (€6.79), Spain (€7.22) and Luxembourg (€8.09). Two more countries (Slovenia and Germany) have prices below €10. The EU27 average is €14.9 and the premium for upgrading from data only 5 GB to 5 GB and 30 calls usage basket is on average at €2.94

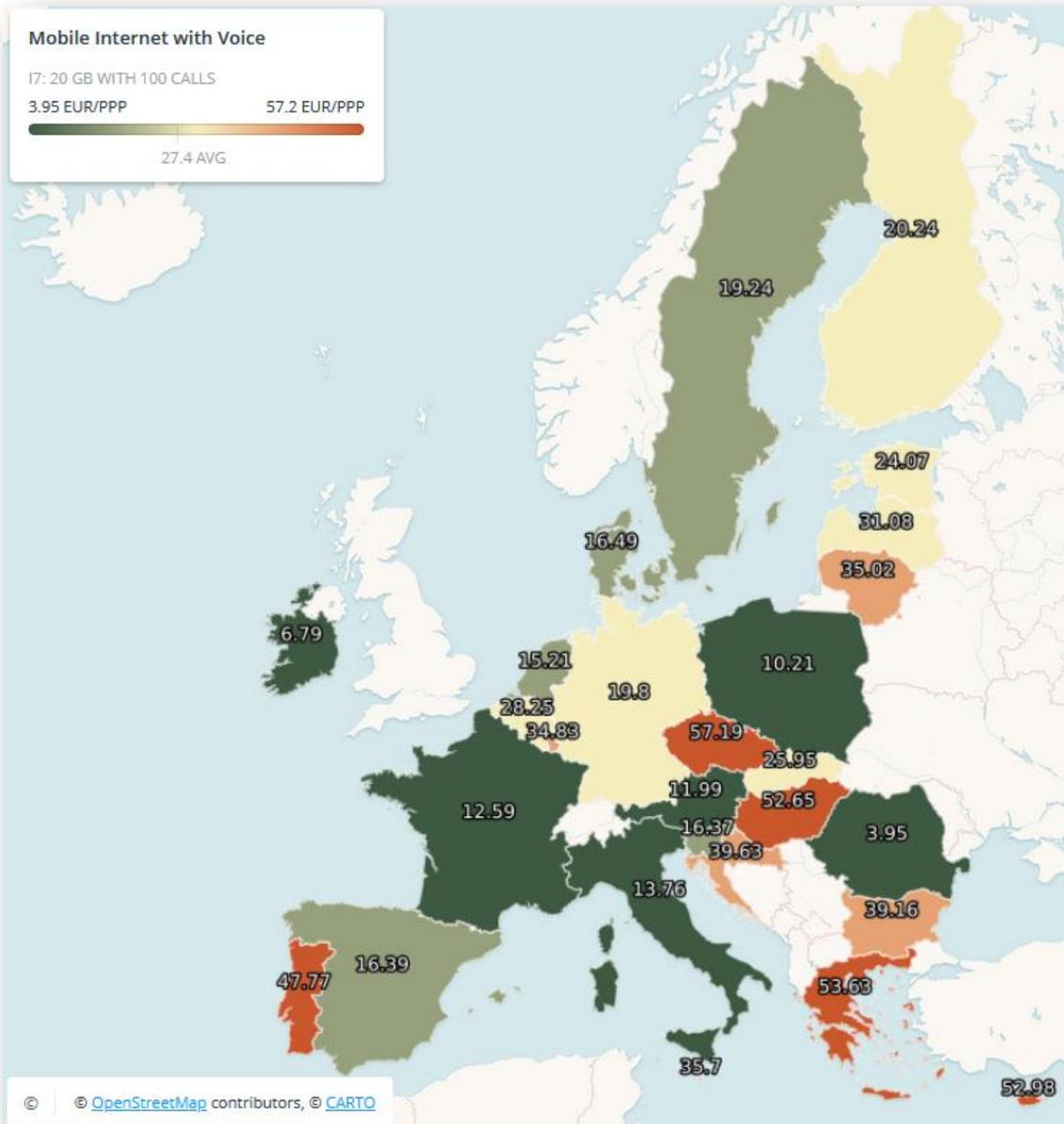
Map 33 – 5 GB mobile data with 30 calls



4.3.14 Basket I7 – 20GB, 100 calls

The least expensive offer in this usage basket with 20 GB and 100 calls comes from Romania (€3.95), followed by Ireland. (€6.79), Poland (€10.21), Austria (€11.99), France (€12.59) and Italy (€13.76). Six more countries (the Netherlands, Slovenia, Spain, Denmark, Sweden and Germany) have prices below €20. The EU27 average is €27.4 and the premium for upgrading from a data only usage basket of 20 GB to a 20 GB and 100 calls usage basket is on average €8.34.

Map 34 – 20 GB mobile data with 100 calls



4.3.15 Are performances similar between data-only and handset-based usage baskets?

Figure 39 below indicates the relationship between a Member State's average rank-order in the EU27 regarding the least expensive offer in data-only baskets on the one hand and handset-based baskets on the other hand.

The overall correlation between the rank-order in terms of data-only and handset-based prices is moderate (0.66) but significantly higher than in 2019 (0.39). Four countries (Cyprus, Czechia, Portugal and Spain) have the same rank-order position in both data-only and handset-based offers. For most of the countries, however, the position does not change significantly. Still, there are some notable exceptions:

- **Greece (11 | 24)** and **Latvia (8 | 18)** have much less expensive offers for data-only baskets but are ranked thirteen to ten positions behind for handset-based baskets, respectively.
- **France (18 |)**, **Denmark (21 | 14)** and **Lithuania (25 | 19)** have less expensive offers for handset-based baskets but are ranked nine to six positions behind for data-only baskets.

Figure 39 – Performance between data-only and handset-based usage baskets



Is more mobile data more expensive?

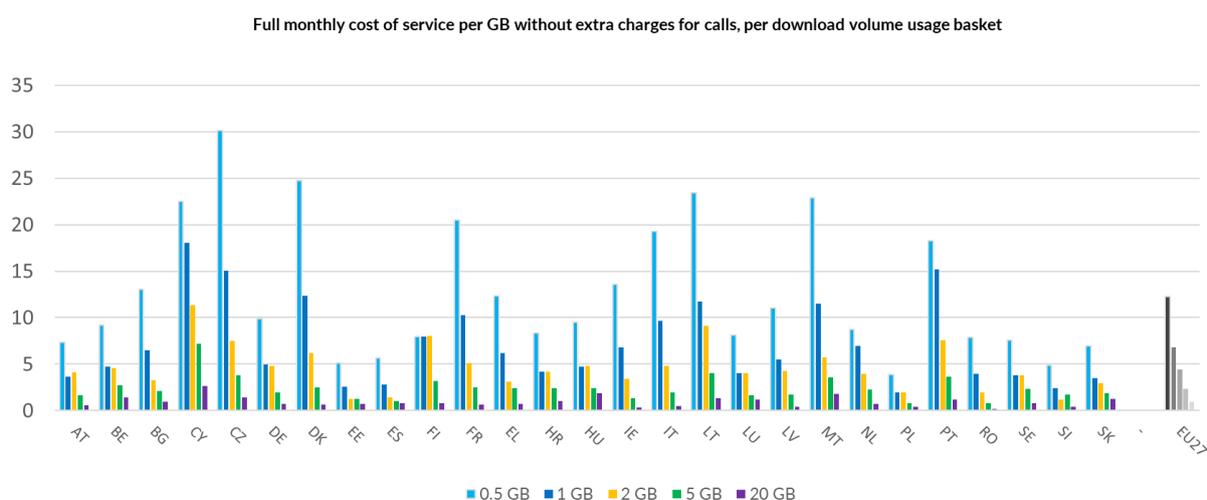
Comparing the prices of cheapest offers per country and usage basket for different data volumes, the answer is a clear yes: there is a steady rise in prices towards higher data allowances.

As might be expected, in most markets, the rise in gross price is not proportional to the increase in data allowance, so that the price per GB falls as the data allowance in the selected package gets larger. Thus, there is a clear and continuous fall of the EUR/PPP per GB ratio of the EU27 average, from 12.24 in the 500 MB basket, to 6.82 in the 1 GB basket, to 4.61 in the 2 GB basket, 2.31 the 5 GB basket and to 0.92 in the 20 GB basket, which also has the smallest ratio.

The only exceptions from this clear trend above are:

- In Austria, Finland, Croatia, Hungary, Luxembourg and Sweden, the price per GB in the 2GB basket is higher in the 1GB basket
- In Slovakia, the price per GB is higher in the 5GB basket than in the 2GB basket.

Figure 40 -Price per GB, per download volume usage basket



The spread of prices per GB across Europe in the different usage baskets is immense, reaching from 0.2 EUR/PPP per GB in Romania to 30.1 EUR/PPP per GB in Czechia.

4.3.16 Price trends

Using mobile data on smartphones in the EU is now less expensive than last year. Baskets with data allowances of 20 GB per month saw the most significant decrease in prices.

Has mobile broadband got cheaper since last year?

Mobile broadband was found to be significantly less expensive than in October 2019 with prices being around 20% lower in every basket. It is only in the 5GB basket that the price drop is not quite as pronounced, but at -15% it is still significant.

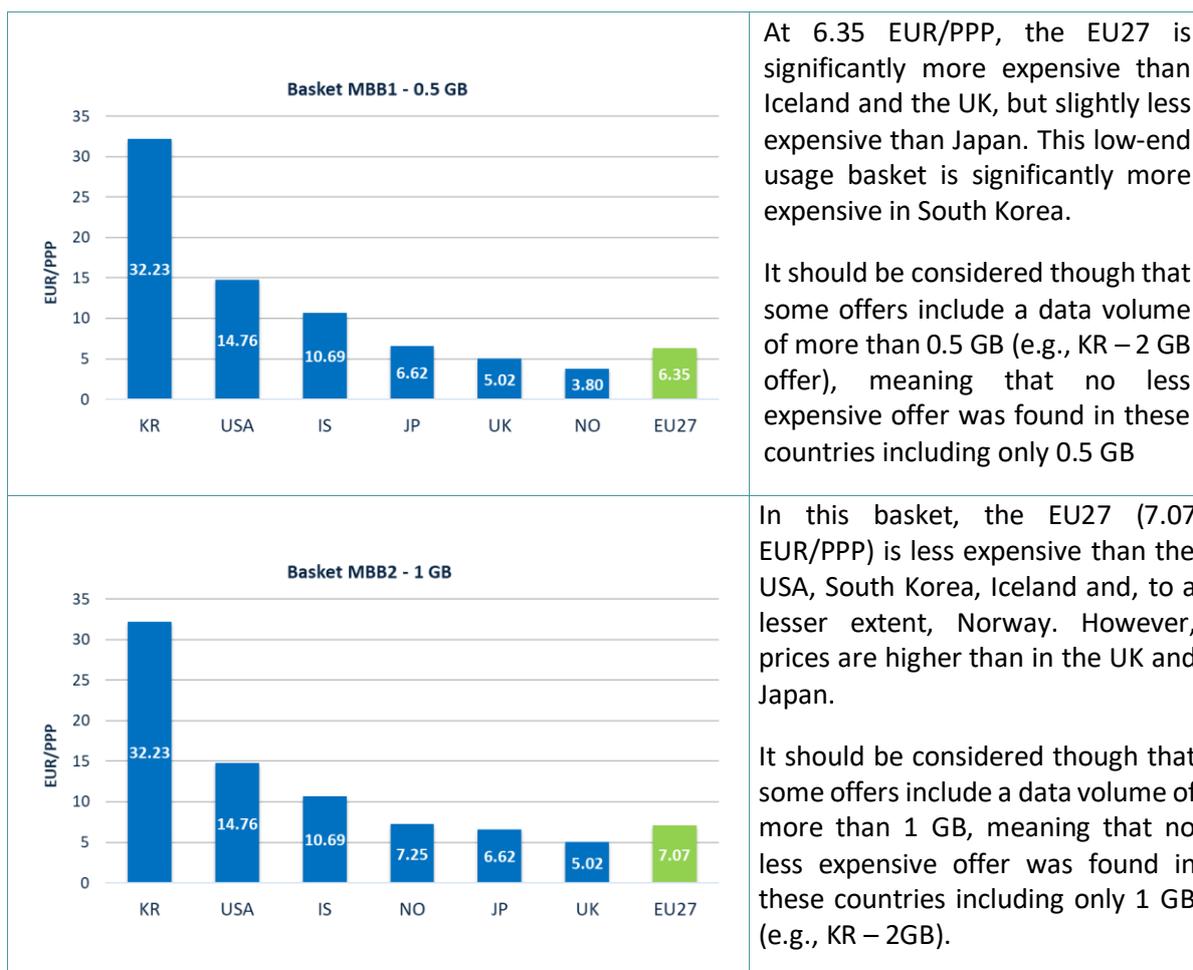
Basket	Least expensive [EUR/PPP]	EU28 average 2020 [EUR/PPP]	EU28 average 2019 [EUR/PPP]	Variation 2019/20
500 MB	1.94	6.30	7.98	-20.4%
1 GB	1.94	7.07	9.12	-22.5%
2 GB	2.44	9.23	11.38	-18.9%
5 GB	3.88	11.99	14.07	-14.8%
20 GB	3.95	19.11	23.64	-19.2%

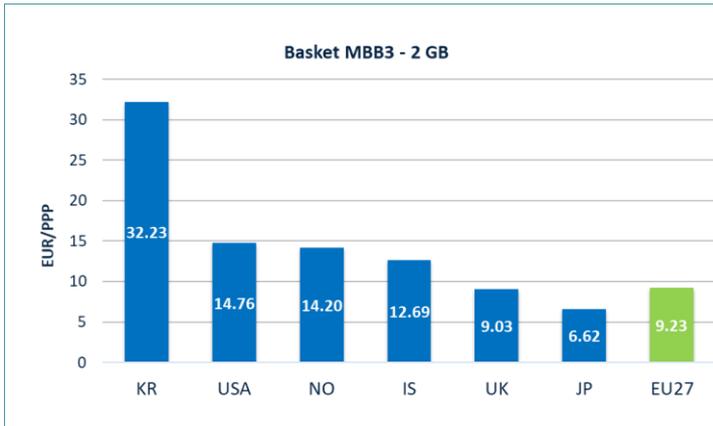
Comparing the EU28 average in the handset baskets reveals a similar trend. Prices are significantly lower than in 2019 in all baskets, ranging from -10% (5GB, 30 calls) to -17% (1GB, 30 calls).

Basket	Least expensive [EUR/PPP]	EU27 average 2020 [EUR/PPP]	EU28 average 2019 [EUR/PPP]	Variation 2019/20
0.5 GB, 30 calls	3.95	9.18	10.33	-11.1%
1 GB, 30 calls	3.95	10.03	12.07	-16.9%
2 GB, 100 calls	3.95	13.40	15.66	-14.4%
5 GB, 300 calls	5.61	18.47	20.5	-9.9%
20 GB, 300 calls	5.93	27.60	32.51	-15.1%
5 GB, 30 calls	3.95	14.93	17.61	-15.2%
20GB, 100 calls	3.95	27.44	31.01	-11.5%

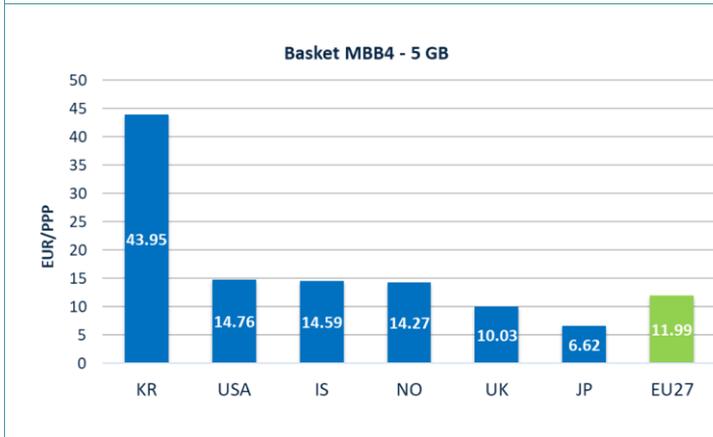
4.3.17 The bigger picture: the EU in the world

The following charts illustrate how the EU27 compare with South Korea, the United States, Iceland, Norway and the United Kingdom.





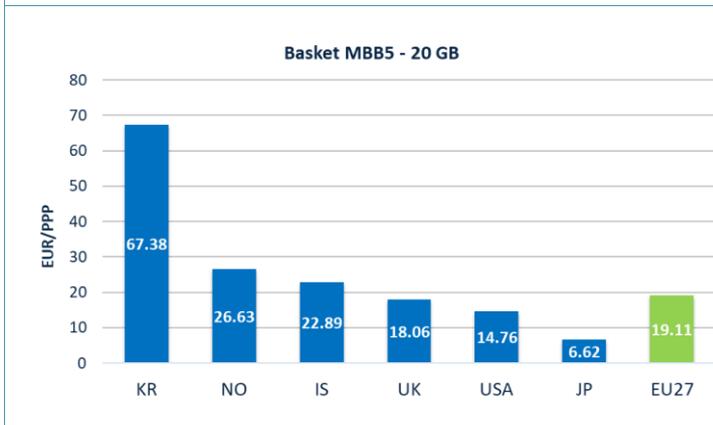
The EU27 average of 9.23 EUR/PPP is higher than prices found in Japan and the UK, but lower than prices in South Korea, the USA, Norway and Iceland.



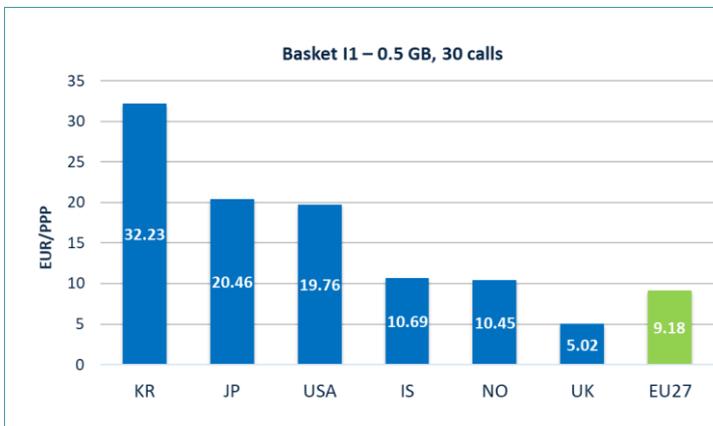
This frequent data usage basket is (significantly) less expensive in Japan and, to a lesser extent, in the UK compared to the EU27 average.

The EU27 average price (11.99 EUR/PPP) is considerably lower than the lowest prices in South Korea.

There is not significant difference between prices in the USA, Iceland and Norway in this basket.

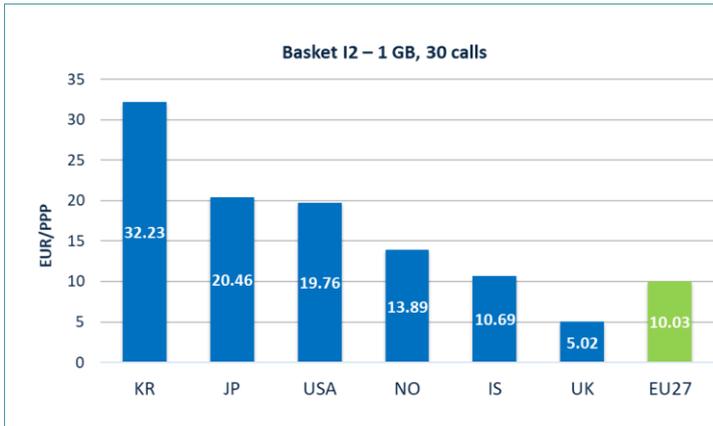


The EU27 average price (19.11 EUR/PPP) is higher than prices for this 20 GB data-only basket in Japan, the USA and the UK. Iceland, Norway and Korea show higher prices.



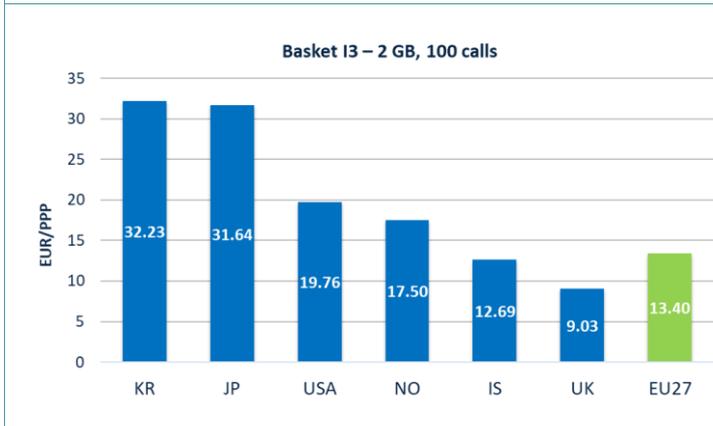
The EU27 on average has, second only to the UK, the least expensive offers in this usage basket (9.18 EUR/PPP).

It should be considered though that all offers include more than 0.5 GB (i.e. IS – 5 GB), meaning that no less expensive offer was found in these countries including only 0.5 GB.

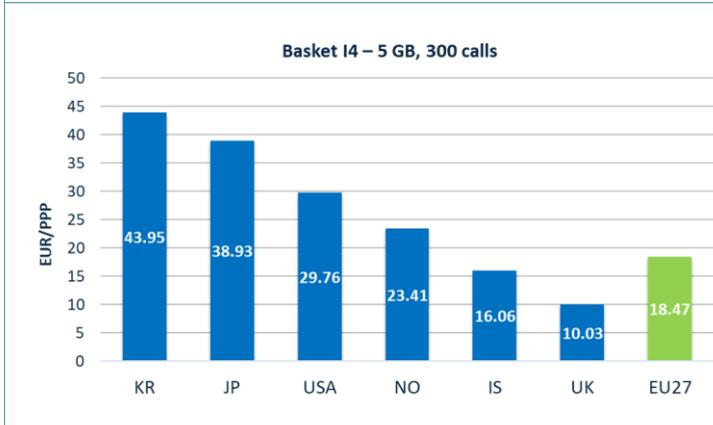


Following the UK, in this basket, the EU27 (10.03 EUR/PPP) is less expensive than in the other five countries in this comparison.

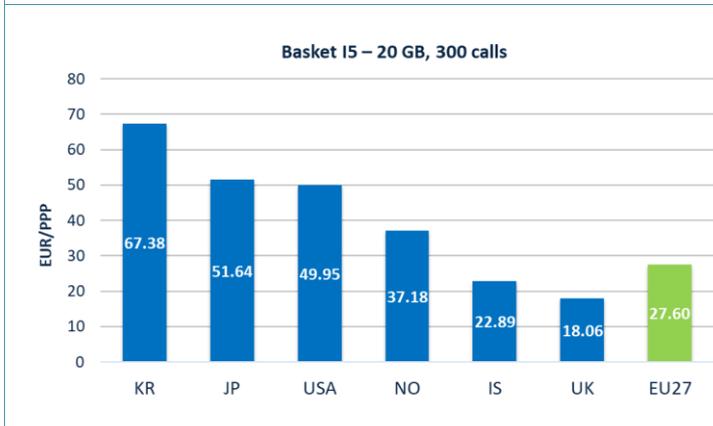
It should be considered though that some offers include a data volume of more than 1 GB, meaning that no less expensive offer was found in these countries including only 1 GB.



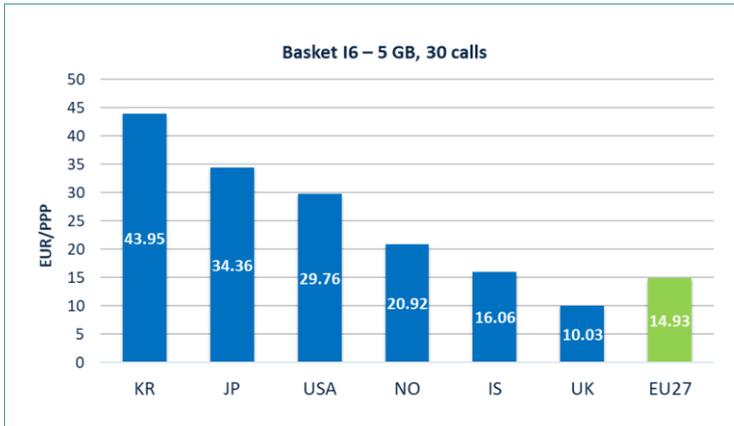
The EU27 average price (13.40 EUR/PPP) is lower than the lowest prices in South Korea, Japan, the USA and Norway, while the UK and Iceland exhibit the lowest prices in this usage basket.



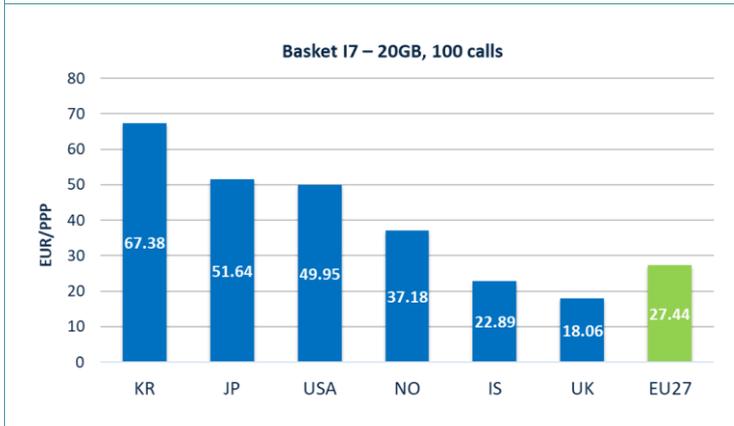
Prices in the UK and Iceland are lower than the EU27 on average (18.47 EUR/PPP) and significantly lower than the rest of the countries in this basket, while the same basket more than twice as expensive in Japan.



The EU27 average price (27.60 EUR/PPP) is significantly higher than prices in the UK and Iceland, but lower than in the rest of the countries taken in consideration.



The EU27 average price (14.93 EUR/PPP) is lower than prices for this usage basket in Iceland, Norway, the USA and Japan, but significantly higher than in the UK. Prices in South Korea even are almost three times higher than the EU27 average.



The EU27 at 27.44 EUR/PPP is more expensive than the UK and Iceland but less expensive than the prices in the rest of the countries.

5. ANNEX I - List of Internet Service Providers (ISPs) and Mobile Network Operators (MNOs) included in the study sample

Country	ISP	MNO
AT	Kabelplus	A1 Telekom Austria AG
	LIWEST	T-Mobile Austria GmbH
	Magenta	Hutchison 3 Austria
	A1 Telekom Austria	
	Salzburg AG	
BE	Proximus	Proximus
	Telenet	Telenet
	Voo	Orange
BG	Vivacom	Vivacom
	Networx-Bulgaria	Telenor
	Bulsatcom	A1 Bulgaria
	A1 Bulgaria	
	Net 1	
CL	AT&T	Verizon Wireless
	Cox Communications	AT&T
	Spectrum	T-Mobile US
CO	CenturyLink (Qwest)	Verizon Wireless
	Comcast Xfinity	AT&T
	Spectrum	T-Mobile US
CY	Cytanet	Cyta
	Cablenet	Epic
	Primetel	T-Mobile
CZ	O2 Czech Republic	Vodafone
	Vodafone Czech Republic (incl. UPC Česká republika due to merger in August 2019)	o2
	T-Mobile Czech Republic	
	Starnet	
	PODA	
DE	Vodafone / Kabel Deutschland	Telekom
	United Internet	Vodafone
	Telefonica Germany (O2)	Telefónica (o2)
	Deutsche Telekom	
DK	TDC	TDC
	Stofa (Norlys)	Telenor
	Telenor Denmark	Hi3G
	Telia	

Country	ISP	MNO
	Fibia	
EE	Elisa Teleteenused Telia STV Fill OÜ	Telia Elisa Eesti
ES	Telefonica Spain (Movistar) Orange Spain (including Jazztel) Vodafone Spain (including Ono) Grupo MASMOVIL	Movistar Vodafone Orange
FI	Elisa Telia Finland DNA group Lounea	Elisa Telia DNA group
FR	Orange France Free SFR Bouygues Télécom	Orange SFR Free
GR	OTE Forthnet Wind Vodafone	Cosmote Vodafone Wind
HR	T-Hrvatski Telekom OT Optima Telekom Iskon A1	HT A1
HU	Magyar Telekom (T-Home) Vodafone Magyarország Zrt. Digi Group Tarr ViDaNet	Magyar Telekom Vodafone
IE	Eircom Sky Virgin Media Vodafone at home Imagine	Vodafone Three Eir Mobile
IS	Siminn Vodafone Nova Hringdu	Nova Vodafone Síminn
IT	Telecom Italia	Vodafone

Country	ISP	MNO
	WindTre Fastweb Vodafone (including TeleTu)	Telecom Italia (TIM) WindTre
JP	NTT East NTT West Yahoo Japan Jupiter Telecommunications	NTT DoCoMo KDDI
KR	Korea Telecom SK broadband LG U+	SKT KT
LT	Telia Lietuva Cgates BALTICUM TV Init Splus	Tele2 Bite Lietuva Telia Lietuva
LU	Eltrona Luxembourg Online Proximus Luxembourg (Tango) Orange Lux Post Telecom Lux	Post Telecom Lux Proximus Luxembourg (Tango)
LV	TET Balticom Baltcom Livas KTV Dautkom TV	Tele2 LMT Bite Latvia
MT	GO Melita Vodafone Malta	Vodafone GO Mobile Melita plc
NL	VodafoneZiggo T-Mobile KPN	KPN VodafoneZiggo T-Mobile
NO	Telenor Norway Telia Norge Lyse Fiber NextGenTel Viken Fibernet	Tele2 Telenor TeliaSonera
NY	AT&T Comcast Xfinity Verizon	Verizon Wireless AT&T T-Mobile US
PL	UPC Polska Netia Vectra	Orange P4 Polkomtel

Country	ISP	MNO
	MultiMedia Polska Orange	
PT	MEO (PT Comunicações) NOS Vodafone Portugal	MEO Vodafone NOS
RO	Telekom Romania Communications Orange Romania Nextgen Communications RCS & RDS Vodafone Romania	Orange RCS & RDS Vodafone
SE	Telia Company Telenor Sverige Bredband 2 Tele2 Bahnhof	Telia Company Tele2 Telenor
SI	Telekom Slovenije Telemach A1 Slovenija T-2	Telekom Slovenije Telemach A1 Slovenija
SK	Slovak Telekom UPC Broadband Slovakia O2 Slovakia ANTIK Telekom Orange Slovensko	Orange Slovak Telekom O2 Slovakia
UK	BT Sky Virgin Media EE TalkTalk	Vodafone Three EE Telefonica

6. ANNEX II – Country Reports



Austria



Belvedere by Enrico Stocchi, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Kabelplus | LIWEST | Magenta | A1 Telekom Austria
| Salzburg AG

MNOs in sample

A1 Telekom Austria AG | T-Mobile Austria GmbH |
Hutchison 3 Austria

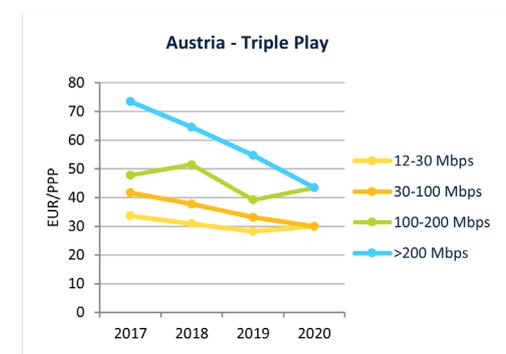
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Austria show no clear trend compared to the previous year (2019). Prices for offers including >200 Mbps fixed internet fell strongly.



Market competition

Kabelplus provides most of the least expensive offers across all service bundles on the market in Austria (12 of 13). Salzburg AG provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Austria are slightly lower than the EU average. However, the lowest price of offers for consumers requiring >100 Mbps fixed internet with fixed phone is slightly higher than the EU average.

Prices in Austria compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● -28%	● -16%	● -20%
30-100Mbit		
Single Play	Double Play	Triple Play
● -31%	● -20%	● -22%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -1%	● 6%	● -1%
>200 Mbit		
Single Play	Double Play	Triple Play
● -2%	● 6%	● -2%

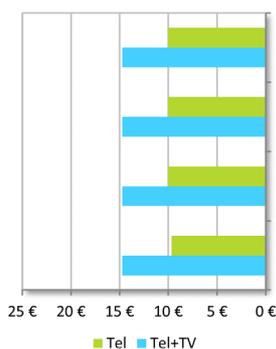
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

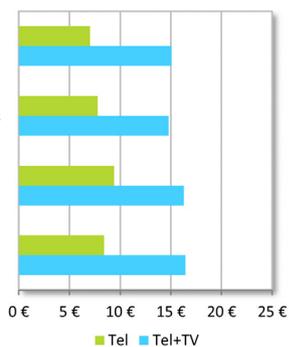
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Kabelplus kabelNET small	15.21	20.49
12-30 Mbps fixed internet	Kabelplus kabelNET small	15.21	21.13
30-100 Mbps fixed internet	Kabelplus kabelNET small	15.21	22.10
100-200 Mbps fixed internet	Kabelplus kabelNET large	28.69	28.89
>200 Mbps fixed internet	Kabelplus kabelNET large	28.69	29.37
12-30 Mbps fixed internet with fixed phone	Salzburg AG Cablelink Light + Phone	24.90	29.55
30-100 Mbps fixed internet with fixed phone	Kabelplus kabelTWIN small	25.23	31.51
100-200 Mbps fixed internet with fixed phone	Kabelplus kabelTWIN large	38.72	36.67
>200 Mbps fixed internet with fixed phone	Kabelplus kabelTWIN large	38.72	36.38
12-30 Mbps fixed internet with fixed phone and TV	Kabelplus kabelCOMPLETE small	29.95	37.56
30-100 Mbps fixed internet with fixed phone and TV	Kabelplus kabelCOMPLETE small	29.95	38.37
100-200 Mbps fixed internet with fixed phone and TV	Kabelplus kabelCOMPLETE large	43.43	43.67
>200 Mbps fixed internet with fixed phone and TV	Kabelplus kabelCOMPLETE large	43.43	44.43

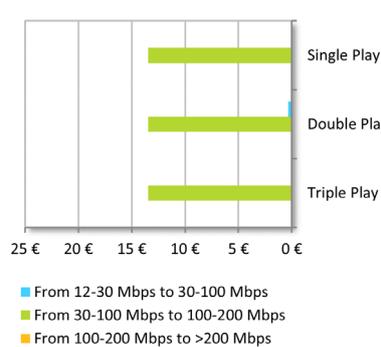
Bundle premium - Austria



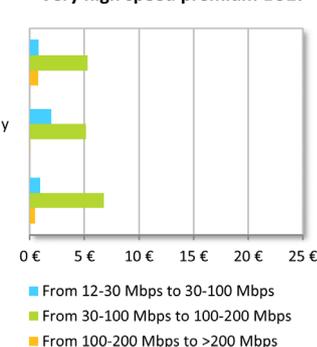
Bundle premium - EU27



Very high speed premium - Austria



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in Austria show no clear trend compared to the previous year (2019). Prices for offers including >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile fell strongly.

Market competition

Kabelplus provides most of the least expensive offers across all service bundles on the market in Austria (8 of 9). Salzburg AG provides the remainder.

EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Austria are slightly lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component

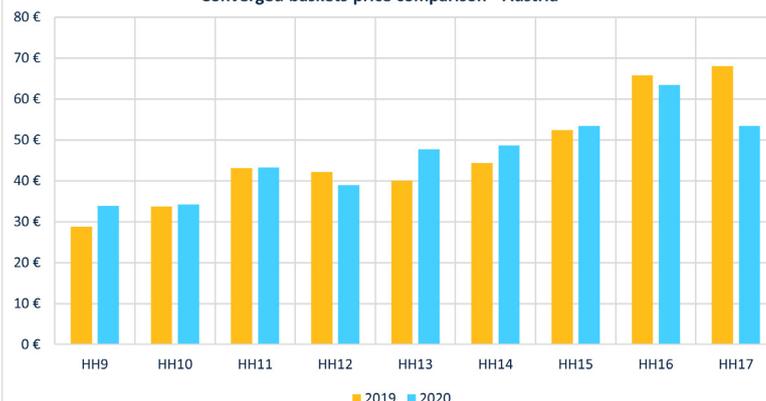
			Austria	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	8,99			9,43
	Double Play 30-100 Mbps	8,99			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	8,99			12,42
	Double Play 100-200 Mbps	8,99			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	10,00			18,25
	Triple Play 100-200 Mbps	10,00			18,18
	Triple Play >200 Mbps	10,00			17,20

Prices in Austria compared with EU average*

HH9	HH10	HH11
-13%	-16%	-23%
HH12	HH13	HH14
-23%	-5%	-11%
HH15	HH16	HH17
-14%	-21%	-13%

*deviation in percent from the EU average in the respective basket/bundle combination

Converged baskets price comparison - Austria



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Salzburg AG / Hutchison 3 Austria Cablelink Light + Phone / Talk M	33.88	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Kabelplus / Hutchison 3 Austria kabelT-WIN small / Talk M	34.22	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Kabelplus / Hutchison 3 Austria kabelT-WIN small / Talk M	43.21	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Kabelplus / Hutchison 3 Austria kabelCOMPLETE small / Talk M	38.94	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Kabelplus / Hutchison 3 Austria kabelT-WIN large / Talk M	47.70	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Kabelplus / T-Mobile Austria GmbH kabelTWIN large / Klax S	48.72	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Kabelplus / T-Mobile Austria GmbH kabelCOMPLETE large / Klax S	53.44	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Kabelplus / T-Mobile Austria GmbH kabelCOMPLETE large / Klax S	63.44	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Kabelplus / T-Mobile Austria GmbH kabelCOMPLETE large / Klax S	53.44	61.63

Mobile Broadband

Price development

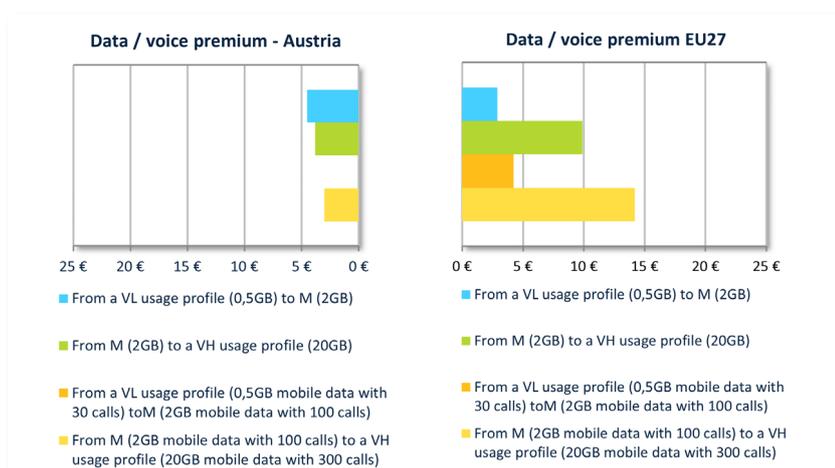
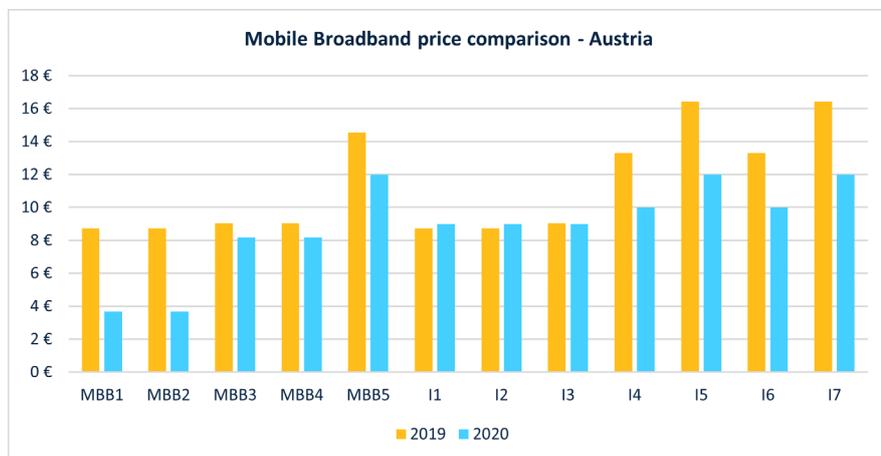
Compared to 2019, averaging over the usage baskets shown, prices in Austria fell strongly. In contrast, for consumers requiring 0.5 GB mobile data with 30 calls, prices rose somewhat (by 4%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Austria are lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Hutchison 3 Austria provides most of the least expensive offers across all service bundles on the market in Austria (10 of 12). T-Mobile Austria GmbH provides the remainder.



Prices in Austria compared with EU average*

Usage Basket	Deviation (%)
MBB1	-42%
MBB2	-48%
MBB3	-11%
MBB4	-32%
MBB5	-37%
I1	-2%
I2	-10%
I3	-33%
I4	-46%
I5	-57%
I6	-33%
I7	-56%

*deviation in percent from the EU average in the respective basket/bundle combination

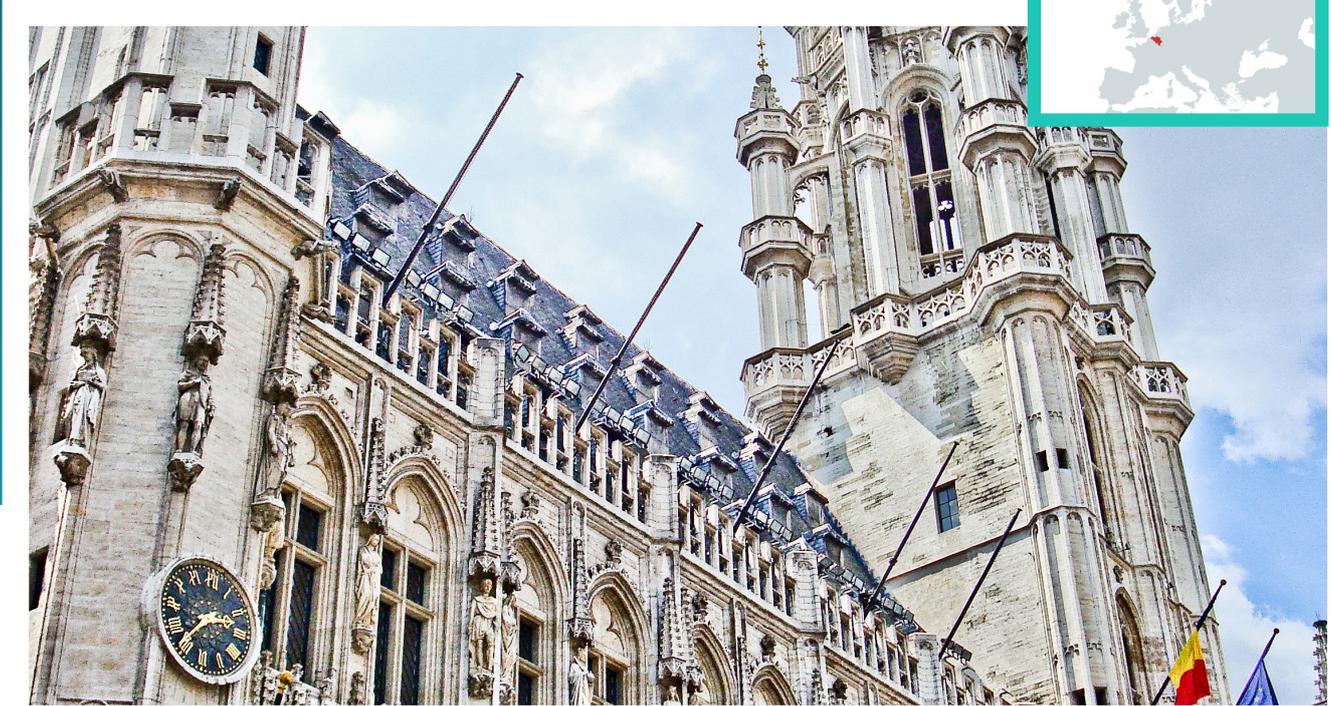
Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Hutchison 3 Austria Hui SIM 1GB + 1GB	3.68	6.35
MBB2: 1 GB mobile data with no calls	Hutchison 3 Austria Hui SIM 1GB + 1GB	3.68	7.07
MBB3: 2 GB mobile data with no calls	Hutchison 3 Austria Hui SIM 9GB + 1GB	8.17	9.23
MBB4: 5 GB mobile data with no calls	Hutchison 3 Austria Hui SIM 9GB + 1GB	8.17	11.99
MBB5: 20 GB mobile data with no calls	Hutchison 3 Austria MyLife Sim L	11.99	19.11
I1: 0.5 GB mobile data with 30 calls	Hutchison 3 Austria Talk M	8.99	9.18
I2: 1 GB mobile data with 30 calls	Hutchison 3 Austria Talk M	8.99	10.03
I3: 2 GB mobile data with 100 calls	Hutchison 3 Austria Talk M	8.99	13.40
I4: 5 GB mobile data with 300 calls	T-Mobile Austria GmbH Klax S	10.00	18.47
I5: 20 GB mobile data with 300 calls	Hutchison 3 Austria MyLife Sim L	11.99	27.60
I6: 5 GB mobile data with 30 calls	T-Mobile Austria GmbH Klax S	10.00	14.93
I7: 20 GB mobile data with 100 calls	Hutchison 3 Austria MyLife Sim L	11.99	27.44



Belgium



TownHall2 by Abhishek Srivastava, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Proximus | Telenet | Voo

MNOs in sample

Proximus | Telenet | Orange

October 2020 data

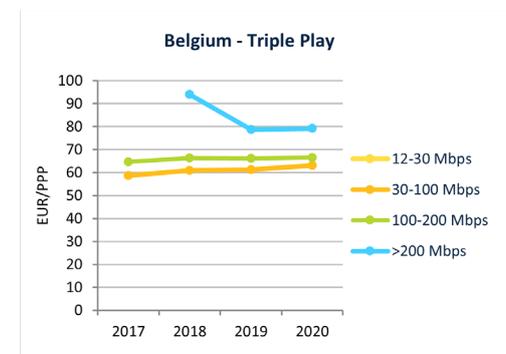
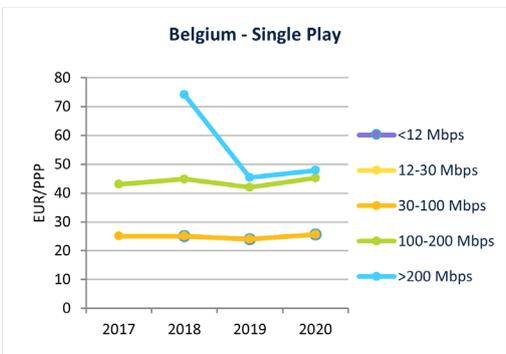
2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.



Fixed Broadband

Price development

Prices for fixed broadband services in Belgium show no clear trend compared to the previous year (2019). Prices for offers including >200 Mbps fixed internet with fixed phone fell strongly.



Market competition

Voo provides a slightly higher number of the least expensive offers across all service bundles on the market in Belgium (5 of 13) in comparison to the rest of the providers. Proximus or Telenet provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Belgium are much higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Belgium compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
21%	88%	68%
30-100Mbit		
Single Play	Double Play	Triple Play
16%	76%	64%
100-200 Mbit		
Single Play	Double Play	Triple Play
57%	60%	52%
>200 Mbit		
Single Play	Double Play	Triple Play
63%	68%	78%

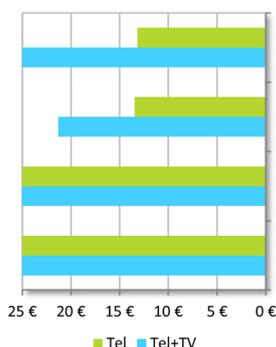
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

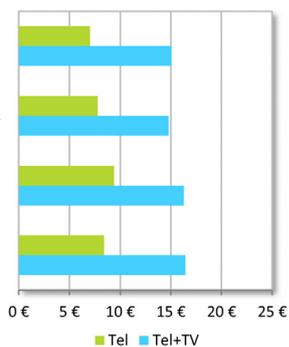
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Telenet Basic Internet	25.63	20.49
12-30 Mbps fixed internet	Telenet Basic Internet	25.63	21.13
30-100 Mbps fixed internet	Telenet Basic Internet	25.63	22.10
100-200 Mbps fixed internet	Voo Solo relax	45.22	28.89
>200 Mbps fixed internet	Telenet All-Internet	47.87	29.37
12-30 Mbps fixed internet with fixed phone	Proximus Internet Start + Phone	55.42	29.55
30-100 Mbps fixed internet with fixed phone	Proximus Internet Start + Phone	55.42	31.51
100-200 Mbps fixed internet with fixed phone	Voo Duo relax	58.71	36.67
>200 Mbps fixed internet with fixed phone	Voo Duo max	61.07	36.38
12-30 Mbps fixed internet with fixed phone and TV	Proximus Flex (Internet Maxi + TV) + Phone	63.03	37.56
30-100 Mbps fixed internet with fixed phone and TV	Proximus Flex (Internet Maxi + TV) + Phone	63.03	38.37
100-200 Mbps fixed internet with fixed phone and TV	Voo Trio relax	66.52	43.67
>200 Mbps fixed internet with fixed phone and TV	Voo Trio max	79.18	44.43

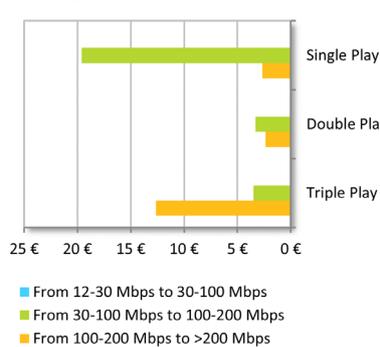
Bundle premium - Belgium



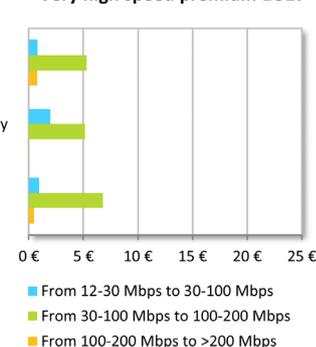
Bundle premium - EU27



Very high speed premium - Belgium



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Belgium rose somewhat. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile, prices fell somewhat (by 4%).

Market competition

Voo provides the majority of the least expensive offers across all service bundles on the market in Belgium (5 of 9). Proximus provides the remainder.

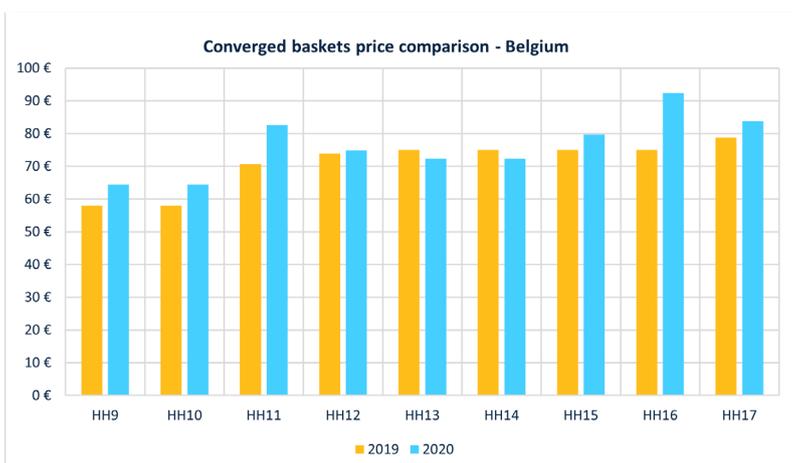
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Belgium are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Bundle premium - mobile component				Belgium	EU
30 calls 1GB mobile	Double Play 12-30 Mbps	9,05			9,43
	Double Play 30-100 Mbps	9,05			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	11,88			12,42
	Double Play 100-200 Mbps	13,58			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	13,58			18,25
	Triple Play 100-200 Mbps	13,13			18,18
	Triple Play >200 Mbps	4,57			17,20

Prices in Belgium compared with EU average*			
HH9	HH10	HH11	
65%	58%	46%	
HH12	HH13	HH14	
48%	45%	32%	
HH15	HH16	HH17	
29%	16%	36%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Proximus / Telenet Internet Start + Phone / Base prepaid 10	64.47	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Proximus / Telenet Internet Start + Phone / Base prepaid 10	64.47	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Proximus / Telenet Internet Start + Phone / Base 5 GB	82.58	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Proximus Flex (Internet + Phone + TV + 5 GB Mobile)	74.91	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Voo / Telenet Duo relax / Base 5 GB	72.29	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Voo / Telenet Duo relax / Base 5 GB	72.29	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Voo Quatro relax (15 GB)	79.65	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Voo Quatro relax (15 GB) - 2 SIM	92.33	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Voo Quatro max (15 GB)	83.75	61.63

Mobile Broadband

Price development

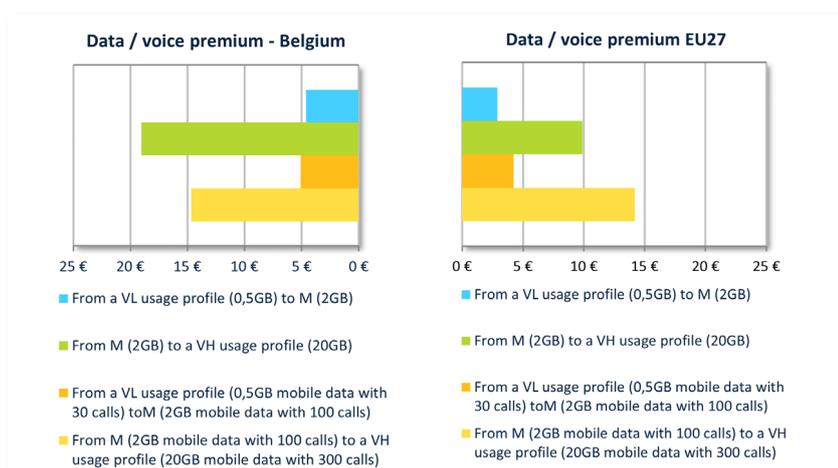
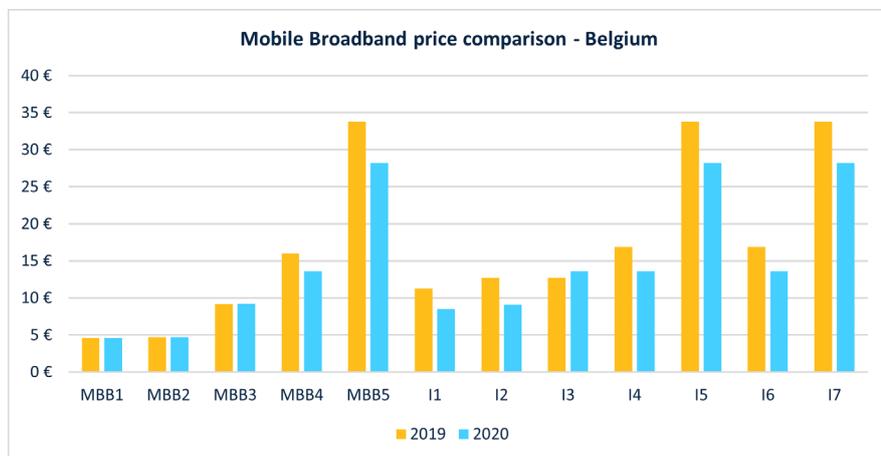
Compared to 2019, averaging over the usage baskets shown, prices in Belgium fell noticeably. In contrast, for consumers requiring 2 GB mobile data with 100 calls, prices rose somewhat (by 7%).

Market competition

Telenet provides most of the least expensive offers across all service bundles on the market in Belgium (11 of 12). Orange provides the remainder.

EU comparison

Prices for mobile broadband in Belgium show a different pattern compared to EU27 countries overall. Whereas consumers requiring 1 GB mobile data with no calls find offers lower than the EU average, those seeking 20 GB mobile data with no calls find prices somewhat higher than the EU average.



Prices in Belgium compared with EU average*

Usage Basket	Deviation (%)
MBB1	-27%
MBB2	-33%
MBB3	0%
MBB4	13%
MBB5	48%
I1	-8%
I2	-10%
I3	1%
I4	-26%
I5	2%
I6	-9%
I7	3%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Telenet King Surf	4.61	6.35
MBB2: 1 GB mobile data with no calls	Telenet Prijs volgens verbruik 1 GB	4.72	7.07
MBB3: 2 GB mobile data with no calls	Telenet Kong Surf	9.22	9.23
MBB4: 5 GB mobile data with no calls	Telenet Base 5 GB	13.58	11.99
MBB5: 20 GB mobile data with no calls	Telenet Base 16 GB	28.25	19.11
I1: 0.5 GB mobile data with 30 calls	Orange Go Light	8.49	9.18
I2: 1 GB mobile data with 30 calls	Telenet Base prepaid 10	9.05	10.03
I3: 2 GB mobile data with 100 calls	Telenet Base 5 GB	13.58	13.40
I4: 5 GB mobile data with 300 calls	Telenet Base 5 GB	13.58	18.47
I5: 20 GB mobile data with 300 calls	Telenet Base 16 GB	28.25	27.60
I6: 5 GB mobile data with 30 calls	Telenet Base 5 GB	13.58	14.93
I7: 20 GB mobile data with 100 calls	Telenet Base 16 GB	28.25	27.44



Bulgaria



Cathedral Saint Alexander Nevsky by Deensel, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Vivacom | Networx-Bulgaria | Bulsatcom |
A1 Bulgaria | Net 1

MNOs in sample

Vivacom | Telenor | A1 Bulgaria

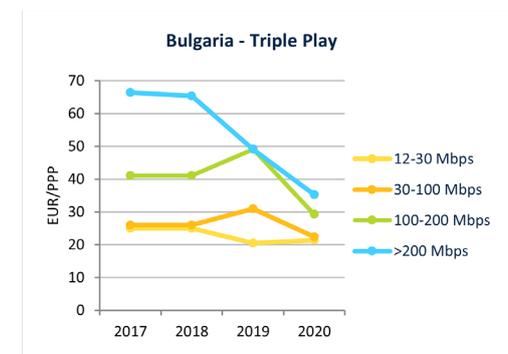
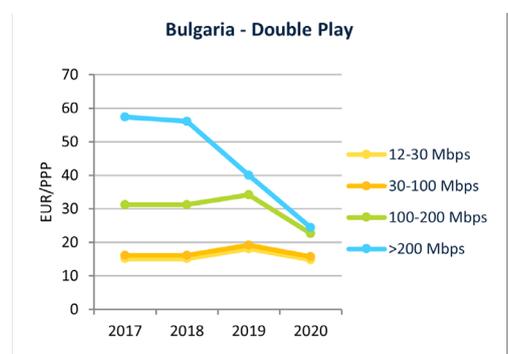
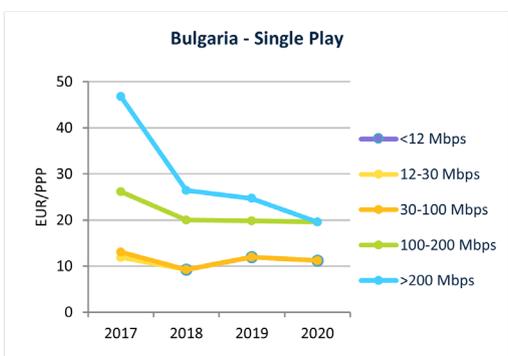
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, across all baskets on average, prices in Bulgaria fell noticeably. In contrast, for consumers requiring 12-30 Mbps fixed internet with fixed phone and TV, prices rose somewhat (by 7%).



Market competition

Bulsatcom provides a slightly higher number of the least expensive offers across all service bundles on the market in Bulgaria (6 of 13) in comparison to the rest of the providers. Vivacom or Net 1 provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Bulgaria are lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Bulgaria compared with EU average*

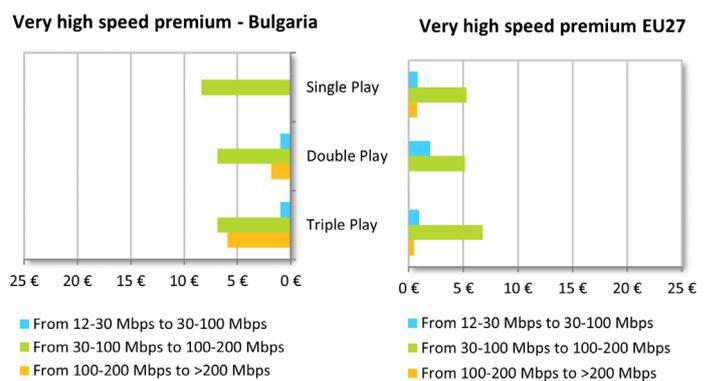
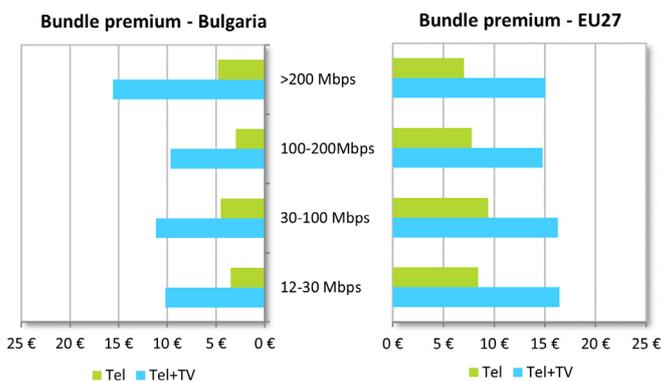
12-30Mbit		
Single Play	Double Play	Triple Play
● -47%	● -50%	● -43%
30-100Mbit		
Single Play	Double Play	Triple Play
● -49%	● -50%	● -42%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -32%	● -38%	● -33%
>200 Mbit		
Single Play	Double Play	Triple Play
● -33%	● -33%	● -21%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Net 1 Internet 55 Mbps for 18 months	11.20	20.49
12-30 Mbps fixed internet	Net 1 Internet 55 Mbps for 18 months	11.20	21.13
30-100 Mbps fixed internet	Net 1 Internet 55 Mbps for 18 months	11.20	22.10
100-200 Mbps fixed internet	Vivacom FiberNet 300	19.60	28.89
>200 Mbps fixed internet	Vivacom FiberNet 300	19.60	29.37
12-30 Mbps fixed internet with fixed phone	Bulsatcom Start + Start telephony	14.72	29.55
30-100 Mbps fixed internet with fixed phone	Bulsatcom Standard + Start telephony	15.71	31.51
100-200 Mbps fixed internet with fixed phone	Bulsatcom Max + Start telephony	22.58	36.67
>200 Mbps fixed internet with fixed phone	Vivacom FiberNet 300 + VIVAFIX S	24.41	36.38
12-30 Mbps fixed internet with fixed phone and TV	Bulsatcom Start + Start telephony + TV	21.40	37.56
30-100 Mbps fixed internet with fixed phone and TV	Bulsatcom Standard + Start telephony + TV	22.38	38.37
100-200 Mbps fixed internet with fixed phone and TV	Bulsatcom Max + Start telephony + TV	29.26	43.67
>200 Mbps fixed internet with fixed phone and TV	Vivacom FiberNet 300 + VIVAFIX S + TV S+	35.20	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Bulgaria fell noticeably. The most different trend was for 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile, where prices fell somewhat (by 7%).

Market competition

Bulsatcom provides most of the least expensive offers across all service bundles on the market in Bulgaria (8 of 9). Vivacom provides the remainder.

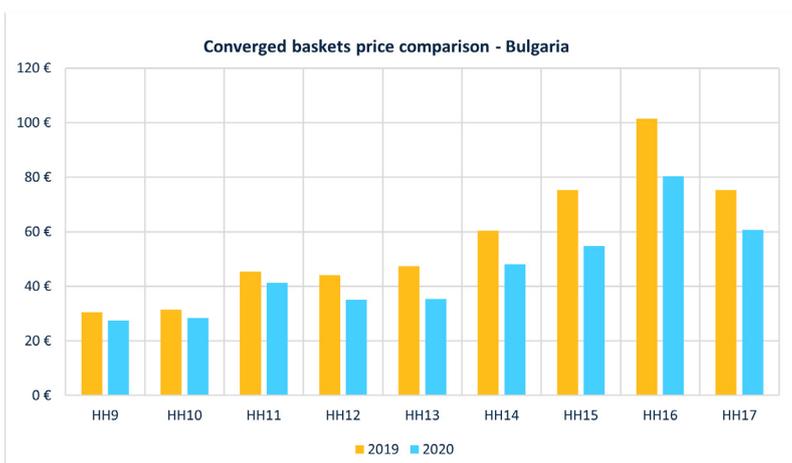
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Bulgaria are slightly lower than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile is slightly higher than the EU average.

Bundle premium - mobile component					
			Bulgaria	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	12,76			9,43
	Double Play 30-100 Mbps	12,76			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	12,76			12,42
	Double Play 100-200 Mbps	12,76			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	25,53			18,25
	Triple Play 100-200 Mbps	25,53			18,18
	Triple Play >200 Mbps	25,53			17,20

Prices in Bulgaria compared with EU average*			
HH9	HH10	HH11	
-29%	-30%	-27%	
HH12	HH13	HH14	
-31%	-29%	-12%	
HH15	HH16	HH17	
-11%	1%	-1%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Bulsatcom / Vivacom Start + Start telephony / Smart S+	27.48	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Bulsatcom / Vivacom Standard + Start telephony / Smart S+	28.46	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Bulsatcom / Vivacom Standard + Start telephony / Smart S+	41.22	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Bulsatcom / Vivacom Standard + Start telephony + TV / Smart S+	35.14	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Bulsatcom / Vivacom Max + Start telephony / Smart S+	35.34	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Bulsatcom / Vivacom Max + Start telephony / Smart L	48.11	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Bulsatcom / Vivacom Max + Start telephony + TV / Smart L	54.79	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Bulsatcom / Vivacom Max + Start telephony + TV / Smart L	80.32	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Vivacom / Vivacom FiberNet 300 + VIVAFIX S + TV S+ / Smart L	60.73	61.63

Mobile Broadband

Price development

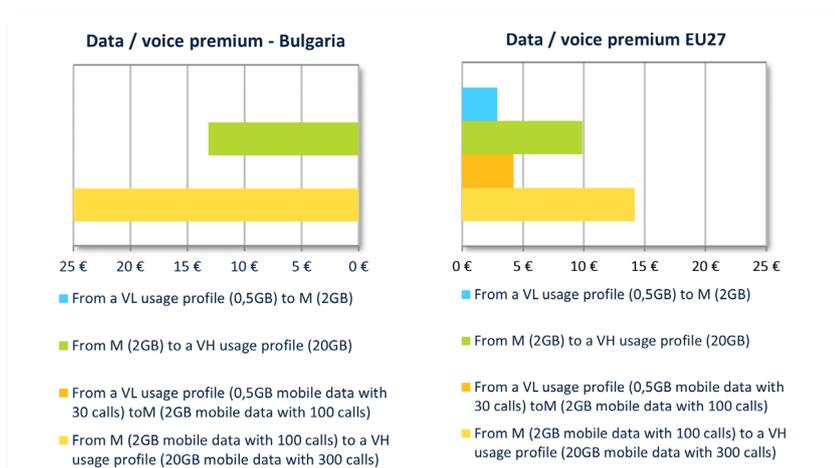
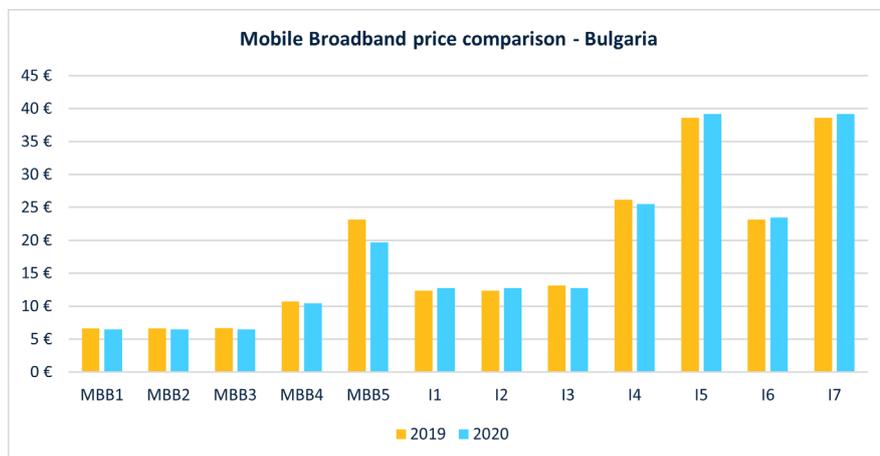
Prices for mobile broadband services in Bulgaria show no clear trend compared to the previous year (2019). Prices for offers including 20 GB mobile data with no calls fell noticeably.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Bulgaria are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 2 GB mobile data with no calls is lower than the EU average.

Market competition

A1 Bulgaria provides the majority of the least expensive offers across all service bundles on the market in Bulgaria (8 of 12). Vivacom provides the remainder.



Prices in Bulgaria compared with EU average*

MBB1	MBB2	MBB3
3%	-8%	-29%
MBB4	MBB5	I1
-13%	3%	39%
I2	I3	I4
27%	-5%	38%
I5	I6	I7
42%	57%	43%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	A1 Bulgaria A1 prepaid mobile internet 15GB + BGN 6	6.51	6.35
MBB2: 1 GB mobile data with no calls	A1 Bulgaria A1 prepaid mobile internet 15GB + BGN 6	6.51	7.07
MBB3: 2 GB mobile data with no calls	A1 Bulgaria A1 prepaid mobile internet 15GB + BGN 6	6.51	9.23
MBB4: 5 GB mobile data with no calls	A1 Bulgaria A1 prepaid mobile internet 15GB + BGN 10	10.44	11.99
MBB5: 20 GB mobile data with no calls	A1 Bulgaria A1 Surf L Special	19.68	19.11
I1: 0.5 GB mobile data with 30 calls	Vivacom Smart S+	12.76	9.18
I2: 1 GB mobile data with 30 calls	Vivacom Smart S+	12.76	10.03
I3: 2 GB mobile data with 100 calls	Vivacom Smart S+	12.76	13.40
I4: 5 GB mobile data with 300 calls	Vivacom Smart L	25.53	18.47
I5: 20 GB mobile data with 300 calls	A1 Bulgaria A1 One 4XL	39.16	27.60
I6: 5 GB mobile data with 30 calls	A1 Bulgaria A1 One S	23.44	14.93
I7: 20 GB mobile data with 100 calls	A1 Bulgaria A1 One 4XL	39.16	27.44



Croatia



Dubrovnik by alchen_x, pexels.com, CC BY-SA 2.0

Country report 2020

ISPs in sample

T-Hrvatski Telekom | OT Optima Telekom |
Iskon | A1

MNOs in sample

HT | A1

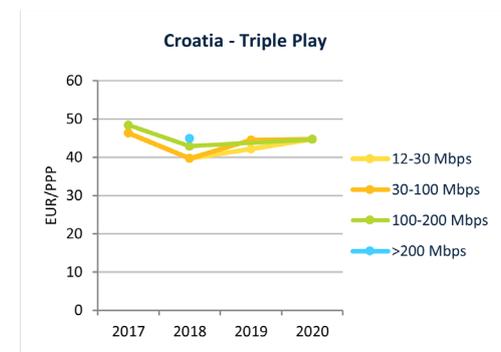
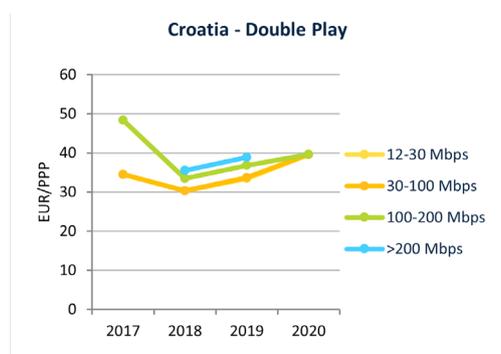
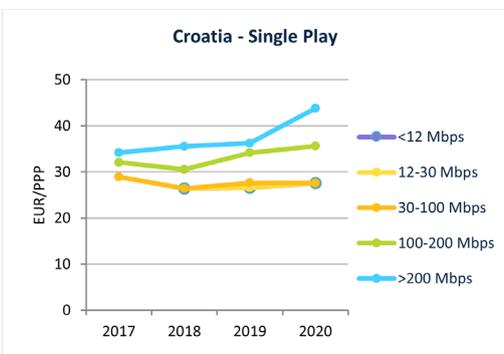
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Croatia rose somewhat. In contrast, for consumers requiring 30-100 Mbps fixed internet, prices fell somewhat (by 1%).



Market competition

A1 provides a slightly higher number of the least expensive offers across all service bundles on the market in Croatia (7 of 11) in comparison to the rest of the providers. OT Optima Telekom or Iskon provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Croatia are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Croatia compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
31%	34%	19%
30-100Mbit		
Single Play	Double Play	Triple Play
25%	26%	17%
100-200 Mbit		
Single Play	Double Play	Triple Play
23%	8%	2%
>200 Mbit		
Single Play	Double Play	Triple Play
49%		

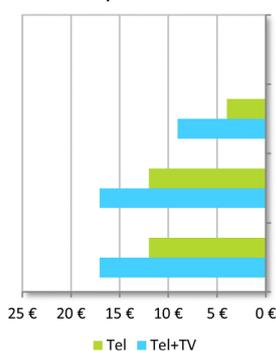
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

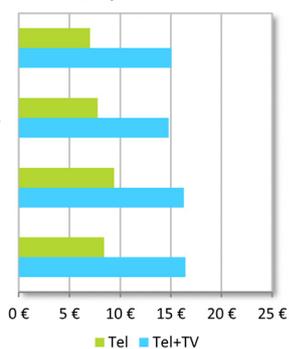
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	OT Optima Telekom Duo Surf	27.63	20.49
12-30 Mbps fixed internet	OT Optima Telekom Duo Surf	27.63	21.13
30-100 Mbps fixed internet	OT Optima Telekom Duo Surf	27.63	22.10
100-200 Mbps fixed internet	Iskon Optički Net	35.63	28.89
>200 Mbps fixed internet	A1 TURBO INTERNET	43.82	29.37
12-30 Mbps fixed internet with fixed phone	A1 SUPER INTERNET + Phone	39.63	29.55
30-100 Mbps fixed internet with fixed phone	A1 SUPER INTERNET + Phone	39.63	31.51
100-200 Mbps fixed internet with fixed phone	A1 SUPER INTERNET + Phone	39.63	36.67
>200 Mbps fixed internet with fixed phone	-	-	36.38
12-30 Mbps fixed internet with fixed phone and TV	A1 SUPER INTERNET + Phone + TV	44.70	37.56
30-100 Mbps fixed internet with fixed phone and TV	A1 SUPER INTERNET + Phone + TV	44.70	38.37
100-200 Mbps fixed internet with fixed phone and TV	A1 SUPER INTERNET + Phone + TV	44.70	43.67
>200 Mbps fixed internet with fixed phone and TV	-	-	44.43

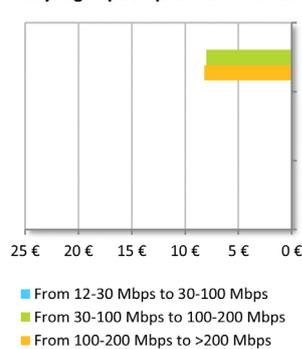
Bundle premium - Croatia



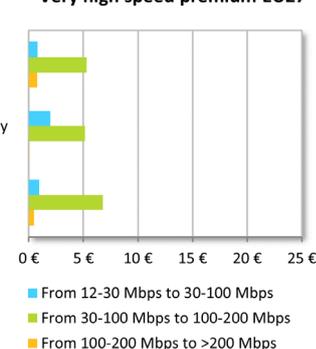
Bundle premium - EU27



Very high speed premium - Croatia



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Croatia rose somewhat. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile, prices fell noticeably (by 12%).

Market competition

A1 provides all the least expensive offers across all service bundles on the market in Croatia.

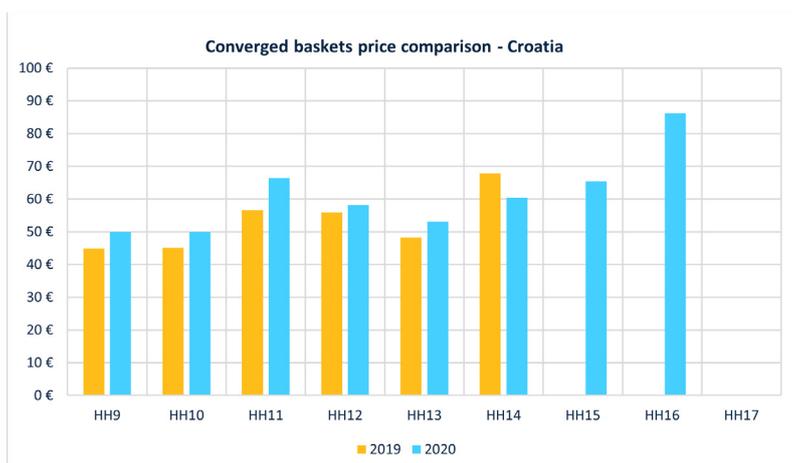
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Croatia are slightly higher than the EU average. No offers were found to be less expensive than the EU average.

Bundle premium - mobile component					
			Croatia	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	10,27			9,43
	Double Play 30-100 Mbps	10,27			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	13,42			12,42
	Double Play 100-200 Mbps	13,42			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	20,76			18,25
	Triple Play 100-200 Mbps	20,76			18,18
	Triple Play >200 Mbps	#NV			17,20

Prices in Croatia compared with EU average*			
HH9	HH10	HH11	
 28%	 22%	 18%	
HH12	HH13	HH14	
 14%	 6%	 10%	
HH15	HH16	HH17	
 6%	 8%		

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	A1 / A1 SUPER INTERNET + Phone / Spikalica	49.91	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	A1 / A1 SUPER INTERNET + Phone / Spikalica	49.91	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	A1 / A1 SUPER INTERNET + Phone / Spikalica	66.47	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	A1 / A1 SUPER INTERNET + Phone + TV / Spikalica	58.12	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	A1 / A1 SUPER INTERNET + Phone / Spikalica	53.05	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	A1 / A1 SUPER INTERNET + Phone / Surferica	60.39	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	A1 / A1 SUPER INTERNET + Phone + TV / Surferica	65.46	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	A1 / A1 SUPER INTERNET + Phone + TV / Surferica	86.22	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	-	-	61.63

Mobile Broadband

Price development

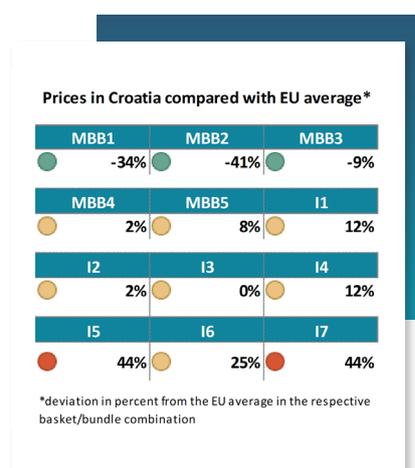
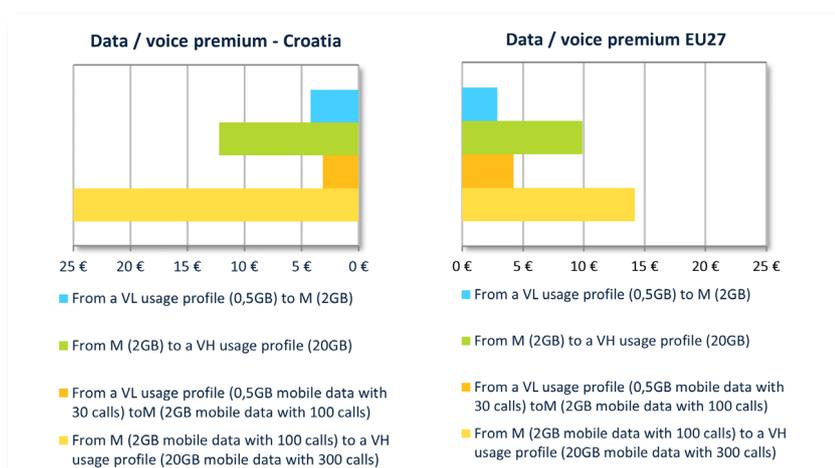
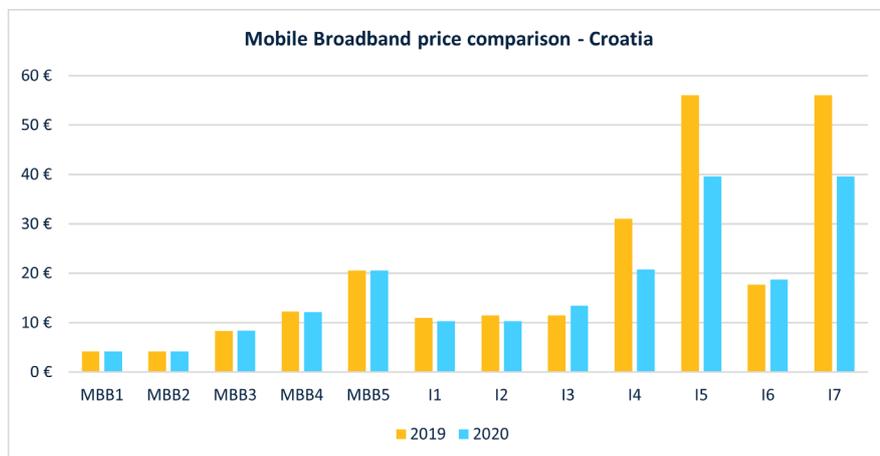
Prices for mobile broadband services in Croatia show no clear trend compared to the previous year (2019). Prices for offers including 2 GB mobile data with 100 calls rose noticeably.

Market competition

A1 provides the majority of the least expensive offers across all service bundles on the market in Croatia (9 of 12). HT provides the remainder.

EU comparison

Prices for mobile broadband in Croatia show a different pattern compared to EU27 countries overall. Whereas consumers requiring 20 GB mobile data with 100 calls find offers somewhat higher than the EU average, those seeking 1 GB mobile data with no calls find prices much lower than the EU average.



Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	HT Internet S	4.19	6.35
MBB2: 1 GB mobile data with no calls	HT Internet S	4.19	7.07
MBB3: 2 GB mobile data with no calls	HT Internet S	8.38	9.23
MBB4: 5 GB mobile data with no calls	A1 Mobilni Net S	12.20	11.99
MBB5: 20 GB mobile data with no calls	A1 Mobilni Net M	20.58	19.11
I1: 0.5 GB mobile data with 30 calls	A1 Spikalica	10.27	9.18
I2: 1 GB mobile data with 30 calls	A1 Spikalica	10.27	10.03
I3: 2 GB mobile data with 100 calls	A1 Spikalica	13.42	13.40
I4: 5 GB mobile data with 300 calls	A1 Surferica	20.76	18.47
I5: 20 GB mobile data with 300 calls	A1 SAVRŠENA TARIFA	39.63	27.60
I6: 5 GB mobile data with 30 calls	A1 Spikalica + 4GB	18.66	14.93
I7: 20 GB mobile data with 100 calls	A1 SAVRŠENA TARIFA	39.63	27.44



Cyprus



Paphos by Sergei Gussev, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Cytanet | Cablenet | Primetel

MNOs in sample

Cyta | Epic

October 2020 data

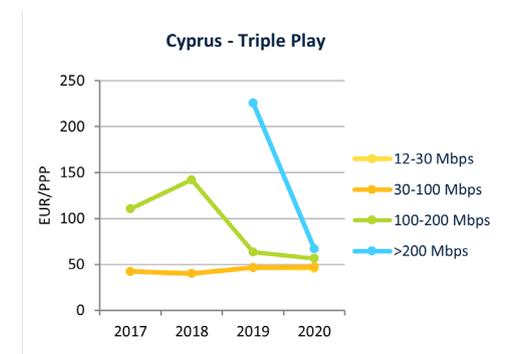
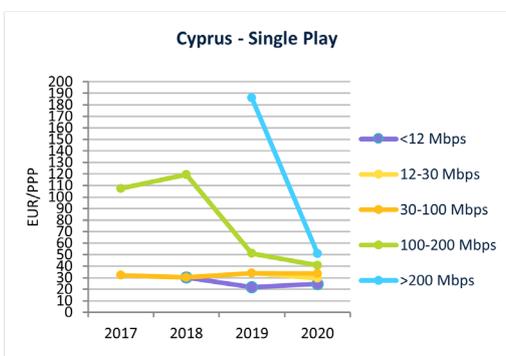
2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.



Fixed Broadband

Price development

Compared to 2019, across all baskets on average, prices in Cyprus fell noticeably. In contrast, for consumers requiring < 12 Mbps fixed internet, prices rose noticeably (by 15%).



Market competition

Primetel provides the majority of the least expensive offers across all service bundles on the market in Cyprus (10 of 13). Cablenet provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Cyprus are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Cyprus compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● 40%	● 20%	● 21%
30-100Mbit		
Single Play	Double Play	Triple Play
● 53%	● 18%	● 23%
100-200 Mbit		
Single Play	Double Play	Triple Play
● 40%	● 27%	● 30%
>200 Mbit		
Single Play	Double Play	Triple Play
● 73%	● 56%	● 50%

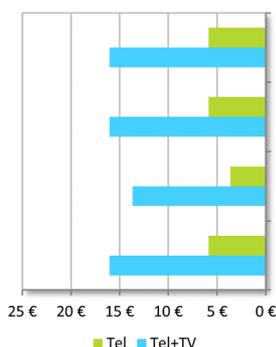
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

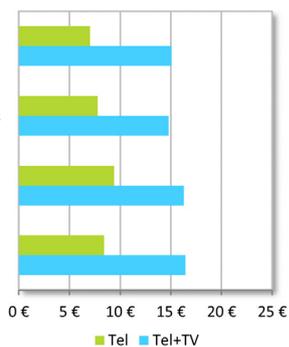
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Primetel Internet 10Mbps	24.65	20.49
12-30 Mbps fixed internet	Primetel Internet 15Mbps	29.58	21.13
30-100 Mbps fixed internet	Cablenet Fiberpower 100M	33.70	22.10
100-200 Mbps fixed internet	Primetel Home Fiber 150Mbps	40.57	28.89
>200 Mbps fixed internet	Primetel Home Fiber 250Mbps	50.71	29.37
12-30 Mbps fixed internet with fixed phone	Primetel Internet 15Mbps + Telephony	35.46	29.55
30-100 Mbps fixed internet with fixed phone	Cablenet Fiberpower 100M	37.33	31.51
100-200 Mbps fixed internet with fixed phone	Primetel Home Fiber 150Mbps + Telephony	46.45	36.67
>200 Mbps fixed internet with fixed phone	Primetel Home Fiber 250Mbps + Telephony	56.60	36.38
12-30 Mbps fixed internet with fixed phone and TV	Primetel Internet 15Mbps + Telephony + Basic TV	45.61	37.56
30-100 Mbps fixed internet with fixed phone and TV	Cablenet Fiberpower 100M + Telephony + Variety TV	47.36	38.37
100-200 Mbps fixed internet with fixed phone and TV	Primetel Home Fiber 150Mbps + Telephony + Basic TV	56.60	43.67
>200 Mbps fixed internet with fixed phone and TV	Primetel Home Fiber 250Mbps + Telephony + Basic TV	66.74	44.43

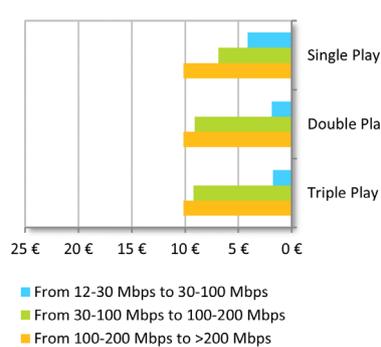
Bundle premium - Cyprus



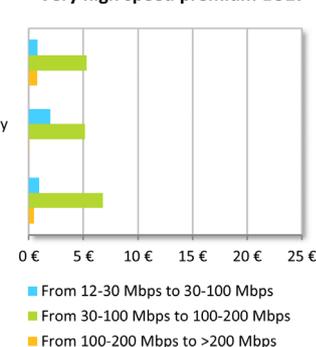
Bundle premium - EU27



Very high speed premium - Cyprus



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in Cyprus show no clear trend compared to the previous year (2019). Prices for offers including 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile rose somewhat.

Market competition

Cablenet provides the majority of the least expensive offers across all service bundles on the market in Cyprus (5 of 9). Primetel provides the remainder.

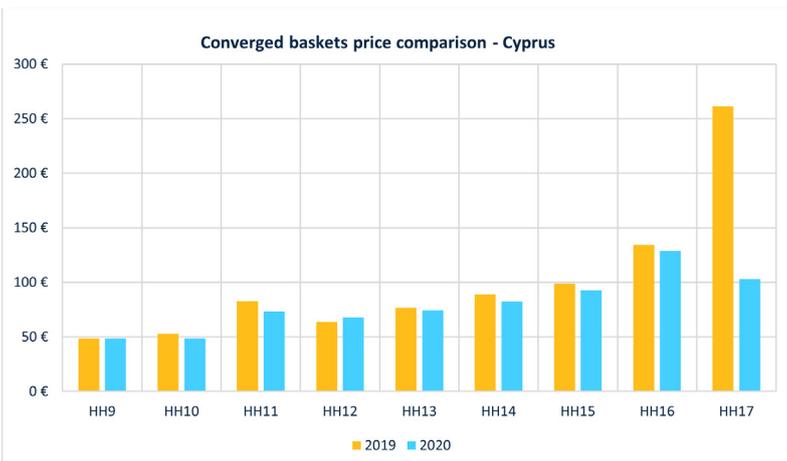
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Cyprus are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Bundle premium - mobile component					
				Cyprus	EU
30 calls 1GB mobile	Double Play 12-30 Mbps	13,14			9,43
	Double Play 30-100 Mbps	11,27			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	20,29			12,42
	Double Play 100-200 Mbps	28,08			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	36,06	5,06		18,25
	Triple Play 100-200 Mbps	36,06	5,06		18,18
	Triple Play >200 Mbps	36,06	5,06		17,20

Prices in Cyprus compared with EU average*			
HH9	HH10	HH11	
25%	19%	30%	
HH12	HH13	HH14	
33%	49%	50%	
HH15	HH16	HH17	
50%	61%	67%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Cablenet Fiberpower 100M + Mobile Purple 2	48.60	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Cablenet Fiberpower 100M + Mobile Purple 2	48.60	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Cablenet Fiberpower 100M + Mobile Purple 2 (2 SIM)	73.40	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Cablenet Fiberpower 100M + Mobile Purple 2 + Mobile Internet 1GB + Variety TV	67.65	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Cablenet Fiberpower 200M + Mobile Purple 2 + Mobile Internet 1GB	74.53	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Primetel / Epic Home Fiber 150Mbps + Telephony / unlimited 6	82.51	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Primetel / Epic Home Fiber 150Mbps + Telephony + Basic TV / unlimited 6	92.66	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Primetel / Epic Home Fiber 150Mbps + Telephony + Basic TV / unlimited 6	128.71	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Primetel / Epic Home Fiber 250Mbps + Telephony + Basic TV / unlimited 6	102.80	61.63

Mobile Broadband

Price development

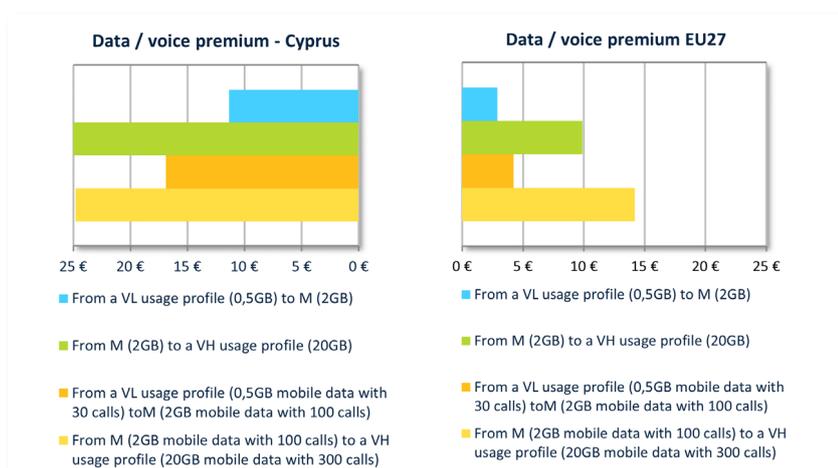
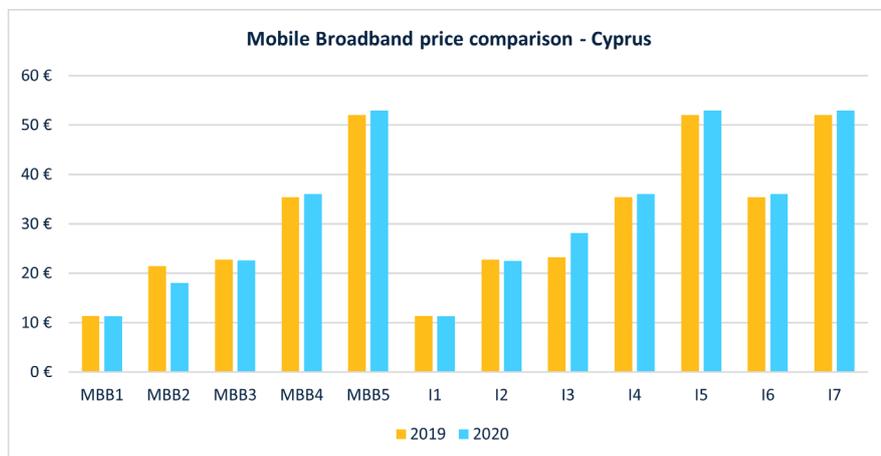
Prices for mobile broadband services in Cyprus show no clear trend compared to the previous year (2019). Prices for offers including 1 GB mobile data with no calls fell noticeably.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Cyprus are more than twice as high as the EU average. No offers were found to be less expensive than the EU average.

Market competition

Epic provides the majority of the least expensive offers across all service bundles on the market in Cyprus (7 of 12). Cyta provides the remainder.



Prices in Cyprus compared with EU average*

MBB1	MBB2	MBB3
78%	155%	145%
MBB4	MBB5	I1
201%	177%	23%
I2	I3	I4
125%	110%	95%
I5	I6	I7
92%	142%	93%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Cyta so_easy_pay_as_you_go 0.5 GB	11.27	6.35
MBB2: 1 GB mobile data with no calls	Epic Mobile Internet 1 GB	18.04	7.07
MBB3: 2 GB mobile data with no calls	Epic Pay as you go + Pay As You Surf 2GB	22.64	9.23
MBB4: 5 GB mobile data with no calls	Epic unlimited 6	36.06	11.99
MBB5: 20 GB mobile data with no calls	Cyta Freedom	52.98	19.11
I1: 0.5 GB mobile data with 30 calls	Cyta so_easy_pay_as_you_go 0.5 GB	11.27	9.18
I2: 1 GB mobile data with 30 calls	Epic medium	22.53	10.03
I3: 2 GB mobile data with 100 calls	Epic unlimited 2	28.17	13.40
I4: 5 GB mobile data with 300 calls	Epic unlimited 6	36.06	18.47
I5: 20 GB mobile data with 300 calls	Cyta Freedom	52.98	27.60
I6: 5 GB mobile data with 30 calls	Epic unlimited 6	36.06	14.93
I7: 20 GB mobile data with 100 calls	Cyta Freedom	52.98	27.44



Czechia



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Country report 2020

ISPs in sample

O2 Czech Republic | Vodafone Czech Republic
(incl. UPC Česká republika due to merger in August
2019) | T-Mobile Czech Republic | Starnet | PODA

MNOs in sample

T-Mobile | Vodafone | o2

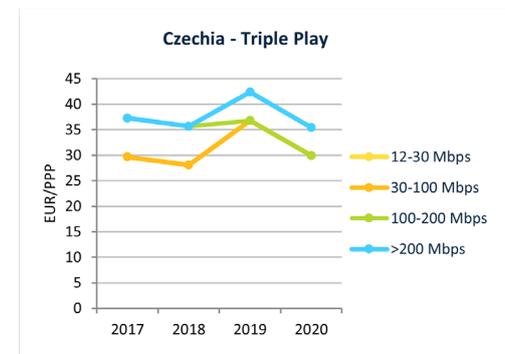
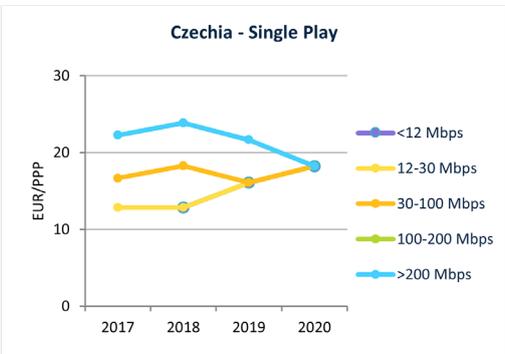
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in the Czechia show no clear trend compared to the previous year (2019). Prices for offers including 12-30 Mbps fixed internet with fixed phone and TV fell noticeably.



Market competition

PODA provides the majority of the least expensive offers across all service bundles on the market in the Czechia (8 of 13). Starnet provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in the Czechia are slightly lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Czechia compared with EU average*

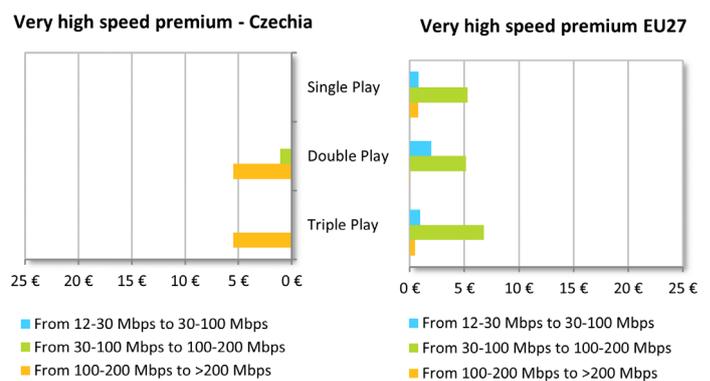
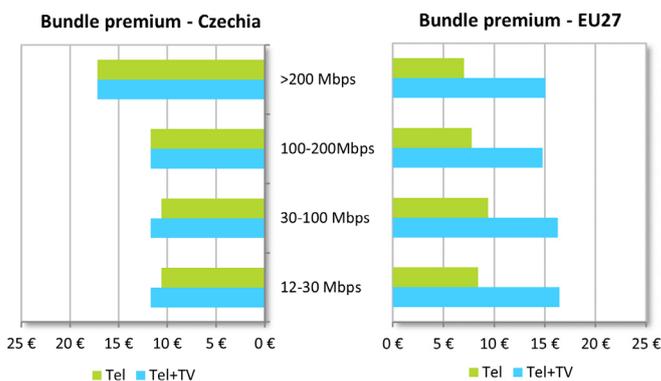
12-30Mbit		
Single Play	Double Play	Triple Play
● -14%	● -2%	● -20%
30-100Mbit		
Single Play	Double Play	Triple Play
● -17%	● -8%	● -22%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -37%	● -18%	● -31%
>200 Mbit		
Single Play	Double Play	Triple Play
● -38%	● -3%	● -20%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Starnet Internet pro domácnost 50	18.24	20.49
12-30 Mbps fixed internet	Starnet Internet pro domácnost 50	18.24	21.13
30-100 Mbps fixed internet	Starnet Internet pro domácnost 50	18.24	22.10
100-200 Mbps fixed internet	Starnet Internet pro domácnost optical 300	18.24	28.89
>200 Mbps fixed internet	Starnet Internet pro domácnost optical 300	18.24	29.37
12-30 Mbps fixed internet with fixed phone	PODA Speed 40	28.84	29.55
30-100 Mbps fixed internet with fixed phone	PODA Speed 40	28.84	31.51
100-200 Mbps fixed internet with fixed phone	PODA GPON 150	29.94	36.67
>200 Mbps fixed internet with fixed phone	PODA GPON 250	35.42	36.38
12-30 Mbps fixed internet with fixed phone and TV	PODA Fiber 60	29.94	37.56
30-100 Mbps fixed internet with fixed phone and TV	PODA Fiber 60	29.94	38.37
100-200 Mbps fixed internet with fixed phone and TV	PODA GPON 150	29.94	43.67
>200 Mbps fixed internet with fixed phone and TV	PODA GPON 250	35.42	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in the Czechia show no clear trend compared to the previous year (2019). Prices for offers including 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile rose noticeably.

Market competition

PODA provides all the least expensive offers across all service bundles on the market in the Czechia.

EU comparison

Compared to all EU27 countries, prices for household broadband baskets in the Czechia are slightly higher than the EU average. No offers were found to be less expensive than the EU average.

Bundle premium - mobile component

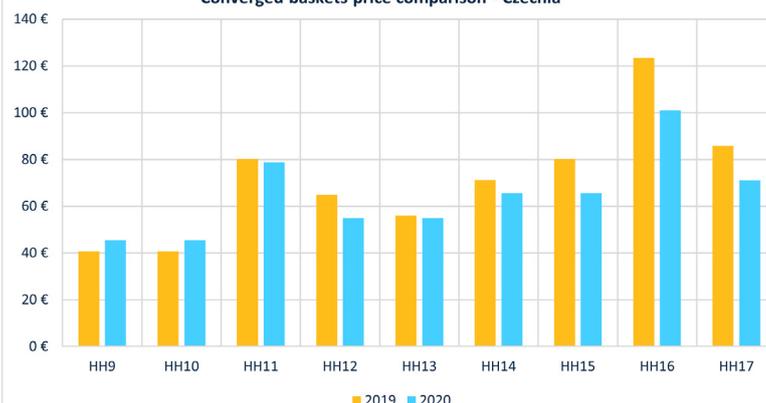
			Czechia	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	16,72			9,43
	Double Play 30-100 Mbps	16,72			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	24,94			12,42
	Double Play 100-200 Mbps	24,94			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	35,50	5,50		18,25
	Triple Play 100-200 Mbps	35,50	5,50		18,18
	Triple Play >200 Mbps	35,50	5,50		17,20

Prices in Czechia compared with EU average*

HH9	HH10	HH11
17%	12%	40%
HH12	HH13	HH14
8%	10%	19%
HH15	HH16	HH17
6%	26%	15%

*deviation in percent from the EU average in the respective basket/bundle combination

Converged baskets price comparison - Czechia



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	PODA / o2 Speed 40 / GO Data 3 GB	45.57	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	PODA / o2 Speed 40 / GO Data 3 GB	45.57	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	PODA / o2 Speed 40 / GO Data 5 GB	78.73	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	PODA / o2 Fiber 60 / GO Data 5 GB	54.88	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	PODA / o2 GPON 150 / GO Data 5 GB	54.88	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	PODA / Vodafone GPON 150 / Red Basic a Dostatek dat 4GB	65.43	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	PODA / Vodafone GPON 150 / Red Basic a Dostatek dat 4GB	65.43	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	PODA / Vodafone GPON 150 / Red Basic a Dostatek dat 4GB	100.93	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	PODA / Vodafone GPON 250 / Red Basic a Dostatek dat 4GB	70.91	61.63

Mobile Broadband

Price development

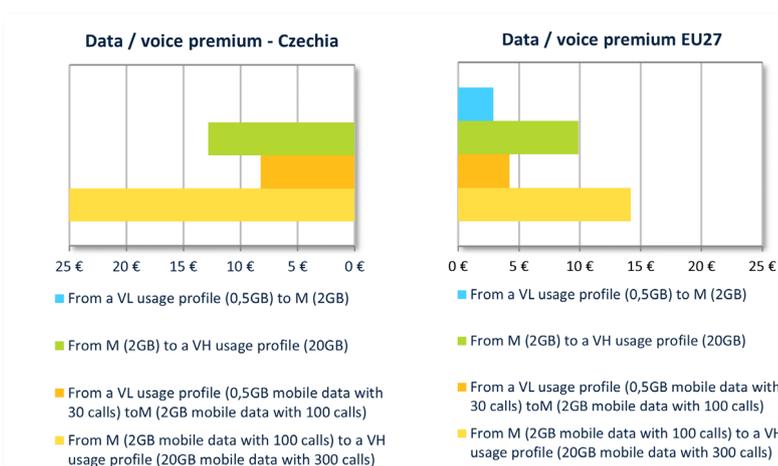
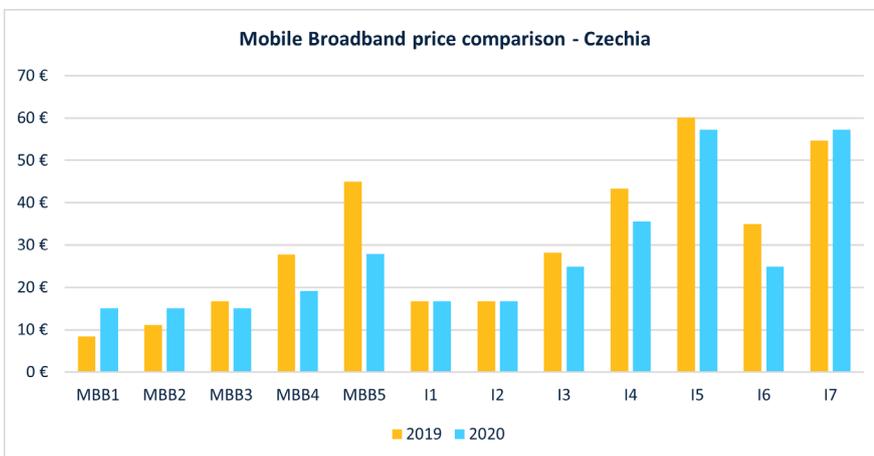
Prices for mobile broadband services in the Czechia show no clear trend compared to the previous year (2019). Prices for offers including 0.5 GB mobile data with no calls rose very strongly.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in the Czechia are much higher than the EU average. No offers were found to be less expensive than the EU average.

Market competition

T-Mobile, Vodafone and o2 each provide equal proportions of the least expensive offers across all service bundles on the market in the Czechia.



Prices in Czechia compared with EU average*

MBB1	MBB2	MBB3
137%	113%	63%
MBB4	MBB5	I1
60%	46%	82%
I2	I3	I4
67%	86%	92%
I5	I6	I7
107%	67%	108%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	T-Mobile Můj svobodný tarif 4 GB	15.06	6.35
MBB2: 1 GB mobile data with no calls	T-Mobile Můj svobodný tarif 4 GB	15.06	7.07
MBB3: 2 GB mobile data with no calls	T-Mobile Můj svobodný tarif 4 GB	15.06	9.23
MBB4: 5 GB mobile data with no calls	T-Mobile Můj svobodný tarif 4 GB	19.17	11.99
MBB5: 20 GB mobile data with no calls	Vodafone Wi-Fi síť na doma i na chatu	27.88	19.11
I1: 0.5 GB mobile data with 30 calls	o2 GO Data 3 GB	16.72	9.18
I2: 1 GB mobile data with 30 calls	o2 GO Data 3 GB	16.72	10.03
I3: 2 GB mobile data with 100 calls	o2 GO Data 5 GB	24.94	13.40
I4: 5 GB mobile data with 300 calls	Vodafone Red Basic a Dostatek dat 4GB	35.50	18.47
I5: 20 GB mobile data with 300 calls	Vodafone Red Standard a Dostatek dat 15GB	57.19	27.60
I6: 5 GB mobile data with 30 calls	o2 GO Data 5 GB	24.94	14.93
I7: 20 GB mobile data with 100 calls	Vodafone Red Standard a Dostatek dat 15GB	57.19	27.44



Denmark



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Country report 2020

ISPs in sample

TDC | Stofa (Norlys) | Telenor Denmark |
Telia | Fibia |

MNOs in sample

TDC | Telenor | Hi3G

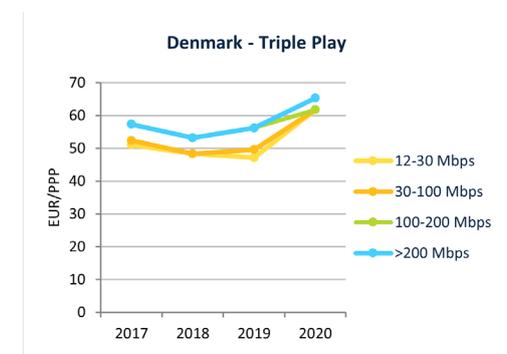
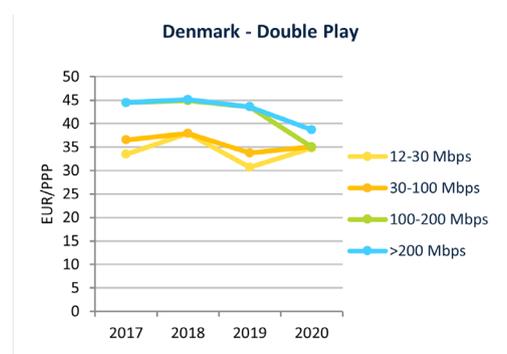
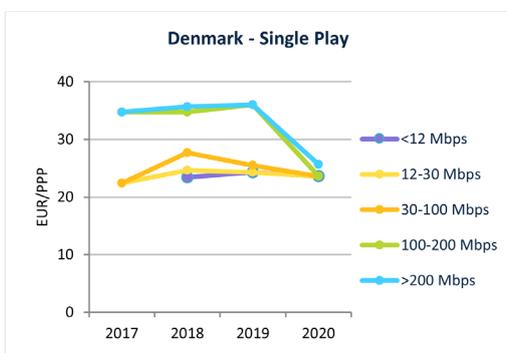
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Denmark show no clear trend compared to the previous year (2019). Prices for offers including 12-30 Mbps fixed internet with fixed phone and TV rose strongly.



Market competition

Fibia provides a slightly higher number of the least expensive offers across all service bundles on the market in Denmark (7 of 13) in comparison to the rest of the providers. Stofa (Norlys) or Telenor Denmark provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Denmark are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet is slightly lower than the EU average.

Prices in Denmark compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
12%	18%	64%
30-100Mbit		
Single Play	Double Play	Triple Play
7%	11%	61%
100-200 Mbit		
Single Play	Double Play	Triple Play
-18%	-4%	41%
>200 Mbit		
Single Play	Double Play	Triple Play
-13%	6%	47%

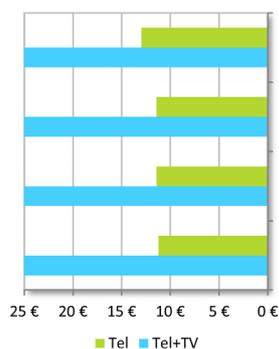
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

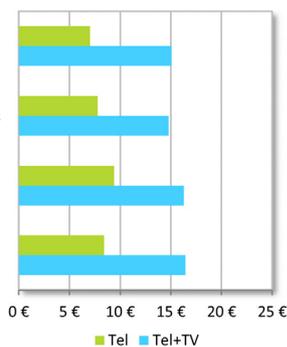
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Telenor Denmark Internet via kabel 200 Mbit	23.61	20.49
12-30 Mbps fixed internet	Telenor Denmark Internet via kabel 200 Mbit	23.61	21.13
30-100 Mbps fixed internet	Telenor Denmark Internet via kabel 200 Mbit	23.61	22.10
100-200 Mbps fixed internet	Telenor Denmark Internet via kabel 200 Mbit	23.61	28.89
>200 Mbps fixed internet	Telenor Denmark Internet via kabel 200 Mbit	25.67	29.37
12-30 Mbps fixed internet with fixed phone	Stofa (Norlys) Giga 30/30 Mbit + Forbrugsafregnet	34.82	29.55
30-100 Mbps fixed internet with fixed phone	Fibia Wao Fiber Basic + Fastnet Forbrug	35.05	31.51
100-200 Mbps fixed internet with fixed phone	Fibia Wao Fiber Basic + Fastnet Forbrug	35.05	36.67
>200 Mbps fixed internet with fixed phone	Fibia Wao Fiber Extra + Fastnet Forbrug	38.66	36.38
12-30 Mbps fixed internet with fixed phone and TV	Fibia Wao Fiber Basic + Fastnet Forbrug + TV Go Lille	61.75	37.56
30-100 Mbps fixed internet with fixed phone and TV	Fibia Wao Fiber Basic + Fastnet Forbrug + TV Go Lille	61.75	38.37
100-200 Mbps fixed internet with fixed phone and TV	Fibia Wao Fiber Basic + Fastnet Forbrug + TV Go Lille	61.75	43.67
>200 Mbps fixed internet with fixed phone and TV	Fibia Wao Fiber Extra + Fastnet Forbrug + TV Go Lille	65.36	44.43

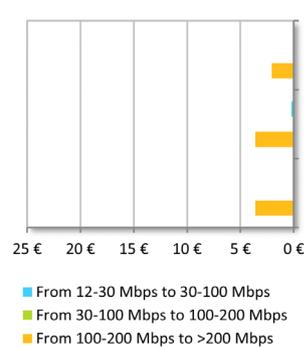
Bundle premium - Denmark



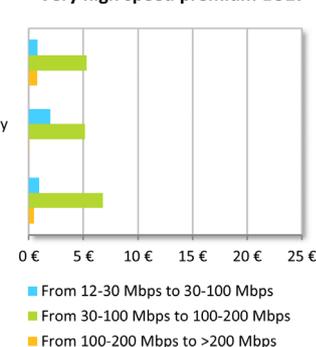
Bundle premium - EU27



Very high speed premium - Denmark



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in Denmark show no clear trend compared to the previous year (2019). Prices for offers including 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile fell noticeably.

Market competition

Fibia provides most of the least expensive offers across all service bundles on the market in Denmark (8 of 9). Stofa (Norlys) provides the remainder.

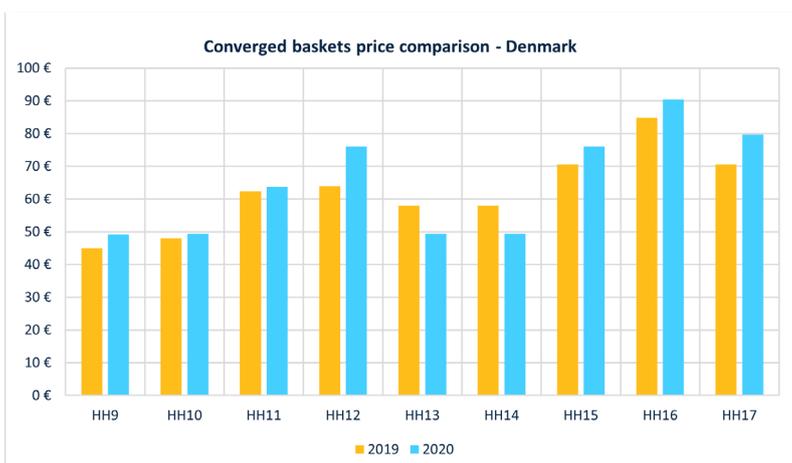
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Denmark are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile is slightly lower than the EU average.

Bundle premium - mobile component					
			Denmark	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	14,33			9,43
	Double Play 30-100 Mbps	14,33			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	14,33			12,42
	Double Play 100-200 Mbps	14,33			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	14,33			18,25
	Triple Play 100-200 Mbps	14,33			18,18
	Triple Play >200 Mbps	14,33			17,20

Prices in Denmark compared with EU average*			
HH9	HH10	HH11	
	26%	21%	13%
HH12	HH13	HH14	
	50%	-1%	-10%
HH15	HH16	HH17	
	23%	13%	29%

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Stofa (Norlys) / Telenor Giga 30/30 Mbit + Forbrugsafregnet / 15 GB	49.15	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug / 15 GB	49.38	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug / 15 GB	63.71	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug + TV Go Lille / 15 GB	76.08	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug / 15 GB	49.38	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug / 15 GB	49.38	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug + TV Go Lille / 15 GB	76.08	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Fibia / Telenor Wao Fiber Basic + Fastnet Forbrug + TV Go Lille / 15 GB	90.41	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Fibia / Telenor Wao Fiber Extra + Fastnet Forbrug + TV Go Lille / 15 GB	79.68	61.63

Mobile Broadband

Price development

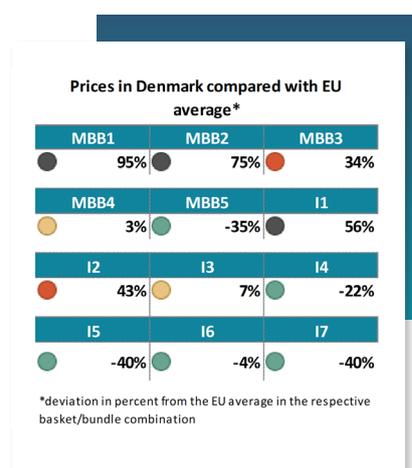
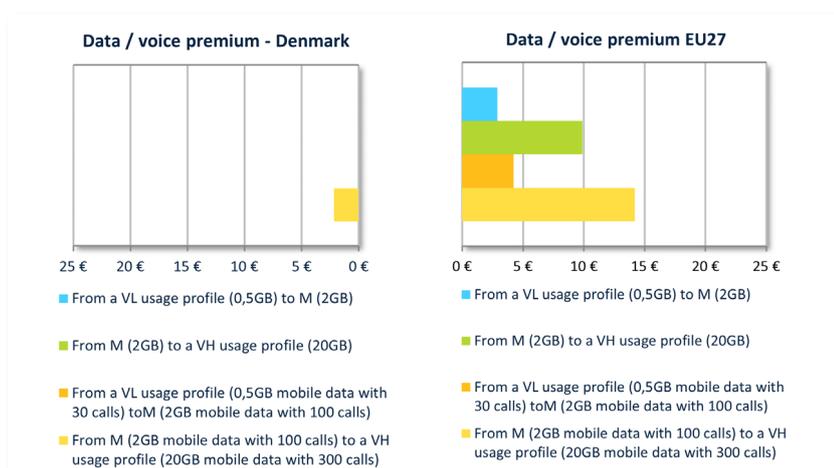
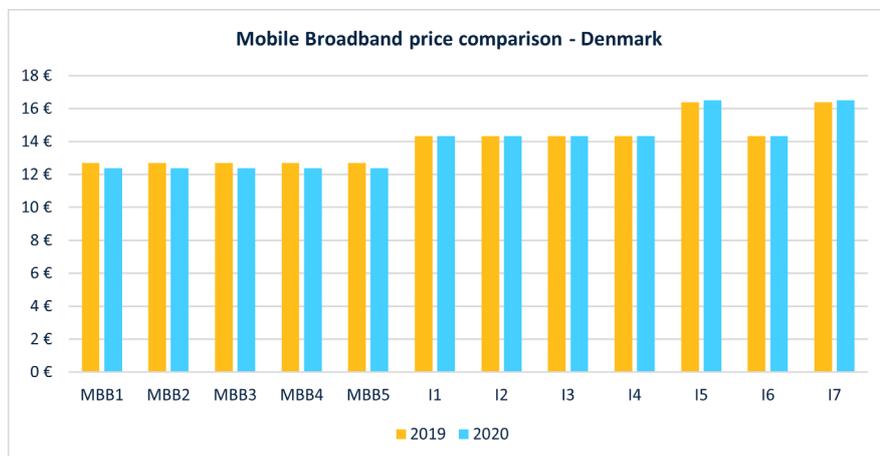
Compared to 2019, averaging over the usage baskets shown, prices in Denmark fell somewhat. In contrast, for consumers requiring 20 GB mobile data with 300 calls, prices remained nearly unchanged.

Market competition

Telenor provides the majority of the least expensive offers across all service bundles on the market in Denmark (7 of 12). Hi3G provides the remainder.

EU comparison

Prices for mobile broadband in Denmark show a different pattern compared to EU27 countries overall. Whereas consumers requiring 0.5 GB mobile data with no calls find offers nearly twice as high as the EU average, those seeking 20 GB mobile data with 300 calls find prices much lower than the EU average.



Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Hi3G Broadband 20 GB	12.37	6.35
MBB2: 1 GB mobile data with no calls	Hi3G Broadband 20 GB	12.37	7.07
MBB3: 2 GB mobile data with no calls	Hi3G Broadband 20 GB	12.37	9.23
MBB4: 5 GB mobile data with no calls	Hi3G Broadband 20 GB	12.37	11.99
MBB5: 20 GB mobile data with no calls	Hi3G Broadband 20 GB	12.37	19.11
I1: 0.5 GB mobile data with 30 calls	Telenor 15 GB	14.33	9.18
I2: 1 GB mobile data with 30 calls	Telenor 15 GB	14.33	10.03
I3: 2 GB mobile data with 100 calls	Telenor 15 GB	14.33	13.40
I4: 5 GB mobile data with 300 calls	Telenor 15 GB	14.33	18.47
I5: 20 GB mobile data with 300 calls	Telenor 20 GB	16.49	27.60
I6: 5 GB mobile data with 30 calls	Telenor 15 GB	14.33	14.93
I7: 20 GB mobile data with 100 calls	Telenor 20 GB	16.49	27.44



Estonia



Old Town from Toompea Hill by Richard, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Elisa Teleteenused | Telia | STV | Fill OÜ

MNOs in sample

Telia | Elisa Eesti

October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

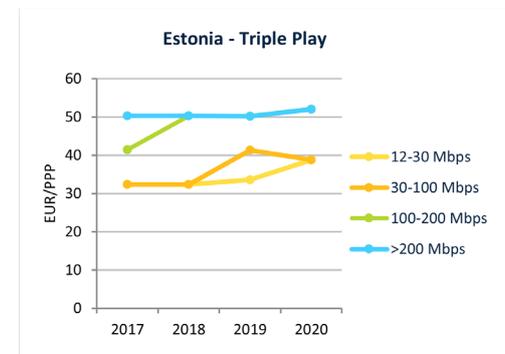
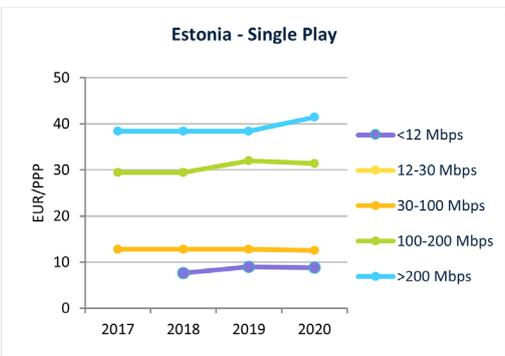
Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Estonia rose somewhat. In contrast, for consumers requiring 30-100 Mbps fixed internet with fixed phone and TV, prices fell somewhat (by 4%).

Market competition

STV provides the majority of the least expensive offers across all service bundles on the market in Estonia (9 of 13). Fill OÜ provides the remainder.



EU comparison

Prices for fixed broadband in Estonia show a different pattern compared to EU27 countries overall. Whereas consumers requiring >200 Mbps fixed internet find offers somewhat higher than the EU average, those seeking < 12 Mbps fixed internet find prices less than half the EU average.

Prices in Estonia compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● -40%	● 1%	● 3%
30-100Mbit		
Single Play	Double Play	Triple Play
● -43%	● 19%	● 1%
100-200 Mbit		
Single Play	Double Play	Triple Play
● 9%	● 26%	● 19%
>200 Mbit		
Single Play	Double Play	Triple Play
● 41%	● 27%	● 17%

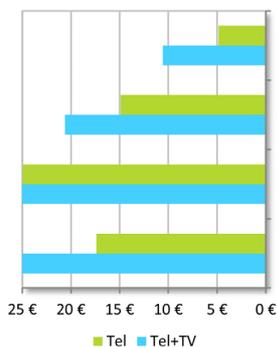
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

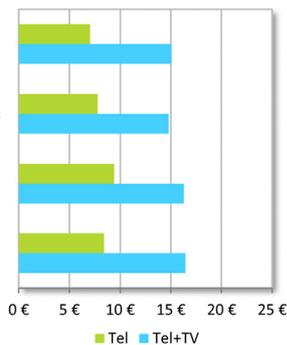
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Fill OÜ Speed 5/5 Mbps	8.80	20.49
12-30 Mbps fixed internet	Fill OÜ Speed 40/40 Mbps	12.57	21.13
30-100 Mbps fixed internet	Fill OÜ Speed 40/40 Mbps	12.57	22.10
100-200 Mbps fixed internet	Fill OÜ Speed 50/300 Mbps	31.43	28.89
>200 Mbps fixed internet	STV Speed 300/300 Mbps	41.49	29.37
12-30 Mbps fixed internet with fixed phone	STV Speed 25/25 Mbps + PAKETT 60 min	29.98	29.55
30-100 Mbps fixed internet with fixed phone	STV Speed 100/100 Mbps + PAKETT 60 min	37.53	31.51
100-200 Mbps fixed internet with fixed phone	STV Speed 300/300 Mbps + PAKETT 60 min	46.33	36.67
>200 Mbps fixed internet with fixed phone	STV Speed 300/300 Mbps + PAKETT 60 min	46.33	36.38
12-30 Mbps fixed internet with fixed phone and TV	STV START PAKETT + PAKETT 60 min	38.78	37.56
30-100 Mbps fixed internet with fixed phone and TV	STV START PAKETT + PAKETT 60 min	38.78	38.37
100-200 Mbps fixed internet with fixed phone and TV	STV START PAKETT 100 + PAKETT 240 min	52.06	43.67
>200 Mbps fixed internet with fixed phone and TV	STV START PAKETT 100 + PAKETT 240 min	52.06	44.43

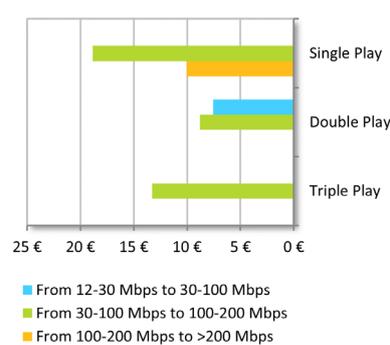
Bundle premium - Estonia



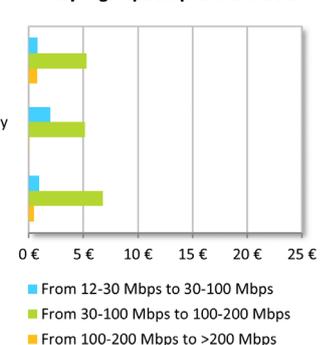
Bundle premium - EU27



Very high speed premium - Estonia



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in Estonia show no clear trend compared to the previous year (2019). Prices for offers including 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile rose somewhat.

Market competition

STV provides all the least expensive offers across all service bundles on the market in Estonia.

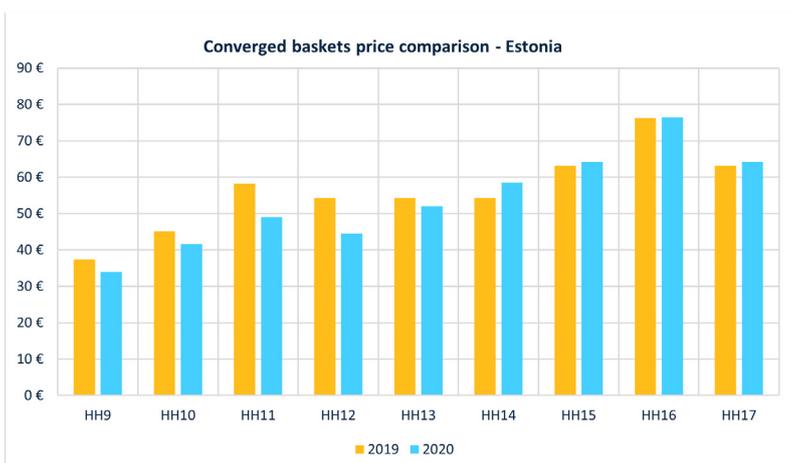
EU comparison

Prices for household broadband baskets in Estonia show a different pattern compared to EU27 countries overall. Whereas consumers requiring 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile find offers slightly higher than the EU average, those seeking 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile find prices slightly lower than the EU average.

Bundle premium - mobile component			Estonia	EU
30 calls 1GB mobile	Double Play 12-30 Mbps	4,03		9,43
	Double Play 30-100 Mbps	4,03		9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	5,76		12,42
	Double Play 100-200 Mbps	5,76		13,29
300 calls 5GB mobile	Double Play 100-200Mbps	12,18		18,25
	Triple Play 100-200 Mbps	12,18		18,18
	Triple Play >200 Mbps	12,18		17,20

Prices in Estonia compared with EU average*					
HH9	HH10	HH11			
-13%	2%	-13%			
HH12	HH13	HH14			
-12%	4%	7%			
HH15	HH16	HH17			
4%	-4%	4%			

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	STV / Telia Speed 25/25 Mbps + PAKETT 60 min / Super 3	34.01	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	STV / Telia Speed 100/100 Mbps + PAKETT 60 min / Super 3	41.56	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	STV / Telia Speed 100/100 Mbps + PAKETT 60 min / Super Mobile Net 3GB + Super 3	49.05	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	STV / Telia START PAKETT + PAKETT 60 min / Super Mobile Net 3GB + Super 3	44.54	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	STV / Telia Speed 300/300 Mbps + PAKETT 60 min / Super Mobile Net 3GB + Super 3	52.09	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	STV / Telia Speed 300/300 Mbps + PAKETT 60 min / Super 8	58.51	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	STV / Telia START PAKETT 100 + PAKETT 240 min / Super 8	64.24	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	STV / Telia START PAKETT 100 + PAKETT 240 min / Super 8	76.43	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	STV / Telia START PAKETT 100 + PAKETT 240 min / Super 8	64.24	61.63

Mobile Broadband

Price development

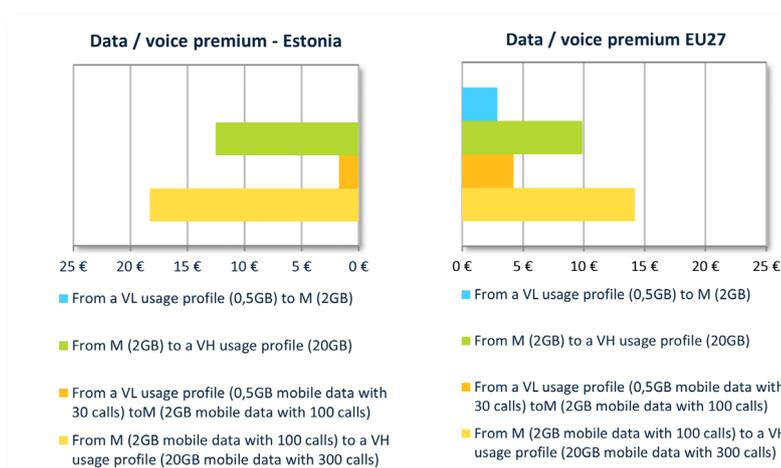
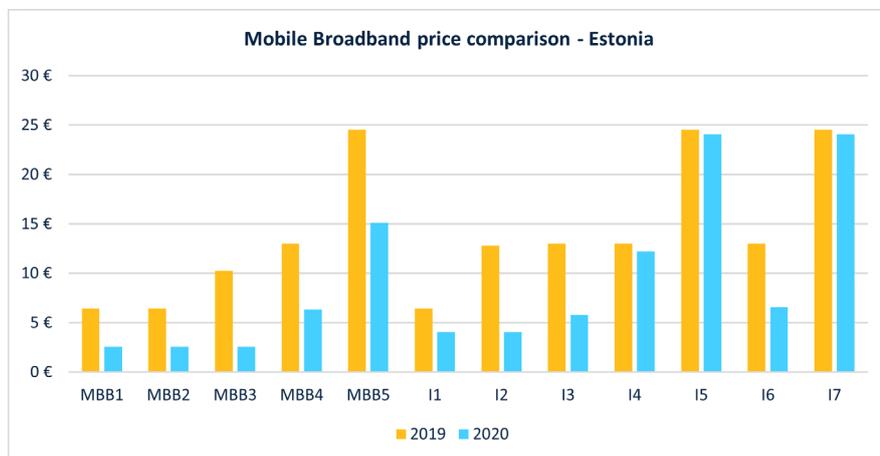
Compared to 2019, averaging over the usage baskets shown, prices in Estonia fell very strongly. In contrast, for consumers requiring 20 GB mobile data with 300 calls, prices remained nearly unchanged.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Estonia are much lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Telia provides most of the least expensive offers across all service bundles on the market in Estonia (10 of 12). Elisa Eesti provides the remainder.



Prices in Estonia compared with EU average*

MBB1	MBB2	MBB3
-60%	-64%	-72%
MBB4	MBB5	I1
-47%	-21%	-56%
I2	I3	I4
-60%	-57%	-34%
I5	I6	I7
-13%	-56%	-12%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Telia Super combo package S	2.55	6.35
MBB2: 1 GB mobile data with no calls	Telia Super combo package S	2.55	7.07
MBB3: 2 GB mobile data with no calls	Telia Super combo package S	2.55	9.23
MBB4: 5 GB mobile data with no calls	Telia Super Mobile Net 5GB	6.34	11.99
MBB5: 20 GB mobile data with no calls	Telia Kuumaskuta Internet 20 GB	15.09	19.11
I1: 0.5 GB mobile data with 30 calls	Telia Super 3	4.03	9.18
I2: 1 GB mobile data with 30 calls	Telia Super 3	4.03	10.03
I3: 2 GB mobile data with 100 calls	Telia Super Mobile Net 3GB + Super 3	5.76	13.40
I4: 5 GB mobile data with 300 calls	Telia Super 8	12.18	18.47
I5: 20 GB mobile data with 300 calls	Elisa Eesti Elisa Ulme 19	24.07	27.60
I6: 5 GB mobile data with 30 calls	Telia Super Mobile Net 5GB + Super 3	6.55	14.93
I7: 20 GB mobile data with 100 calls	Elisa Eesti Elisa Ulme 19	24.07	27.44



Finland



Dimitris Karagiorgos, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Elisa | Telia Finland | DNA group | Lounea

MNOs in sample

Elisa | Telia | DNA group

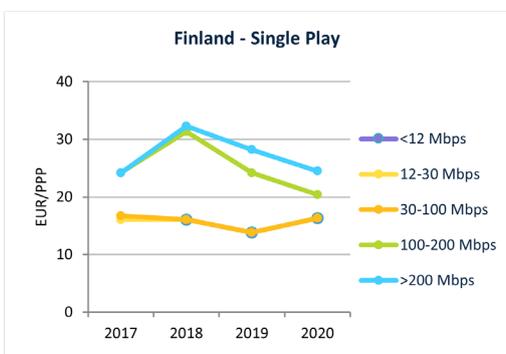
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Finland show no clear trend compared to the previous year (2019). Prices for offers including 100-200 Mbps fixed internet fell noticeably. The lack of offers bundled with fixed telephony does not allow for further comparison.



Market competition

Elisa provides the majority of the least expensive offers across all service bundles on the market in Finland (3 of 5). DNA group provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Finland are lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Finland compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● -23%	●	●
30-100Mbit		
Single Play	Double Play	Triple Play
● -26%	●	●
100-200 Mbit		
Single Play	Double Play	Triple Play
● -29%	●	●
>200 Mbit		
Single Play	Double Play	Triple Play
● -17%	●	●

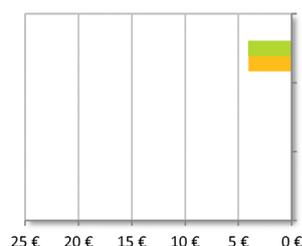
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

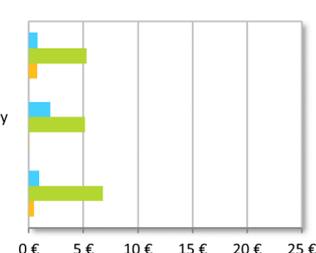
Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Elisa Elisa Netti kotiin S 50 Mbit/s	16.31	20.49
12-30 Mbps fixed internet	Elisa Elisa Netti kotiin S 50 Mbit/s	16.31	21.13
30-100 Mbps fixed internet	Elisa Elisa Netti kotiin S 50 Mbit/s	16.31	22.10
100-200 Mbps fixed internet	DNA group DNA Netti 4G 200M	20.41	28.89
>200 Mbps fixed internet	DNA group DNA Netti 5G 400M	24.47	29.37
12-30 Mbps fixed internet with fixed phone	-	-	29.55
30-100 Mbps fixed internet with fixed phone	-	-	31.51
100-200 Mbps fixed internet with fixed phone	-	-	36.67
>200 Mbps fixed internet with fixed phone	-	-	36.38
12-30 Mbps fixed internet with fixed phone and TV	-	-	37.56
30-100 Mbps fixed internet with fixed phone and TV	-	-	38.37
100-200 Mbps fixed internet with fixed phone and TV	-	-	43.67
>200 Mbps fixed internet with fixed phone and TV	-	-	44.43

Very high speed premium - Finland



■ From 12-30 Mbps to 30-100 Mbps
■ From 30-100 Mbps to 100-200 Mbps
■ From 100-200 Mbps to >200 Mbps

Very high speed premium EU27



■ From 12-30 Mbps to 30-100 Mbps
■ From 30-100 Mbps to 100-200 Mbps
■ From 100-200 Mbps to >200 Mbps

Mobile Broadband

Price development

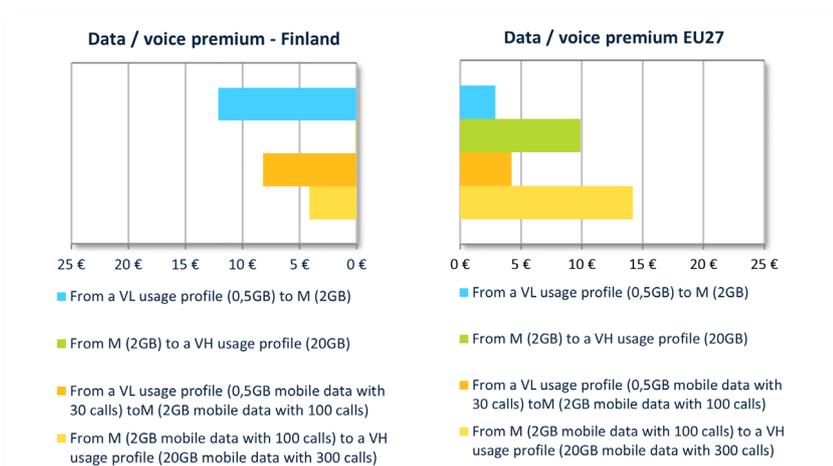
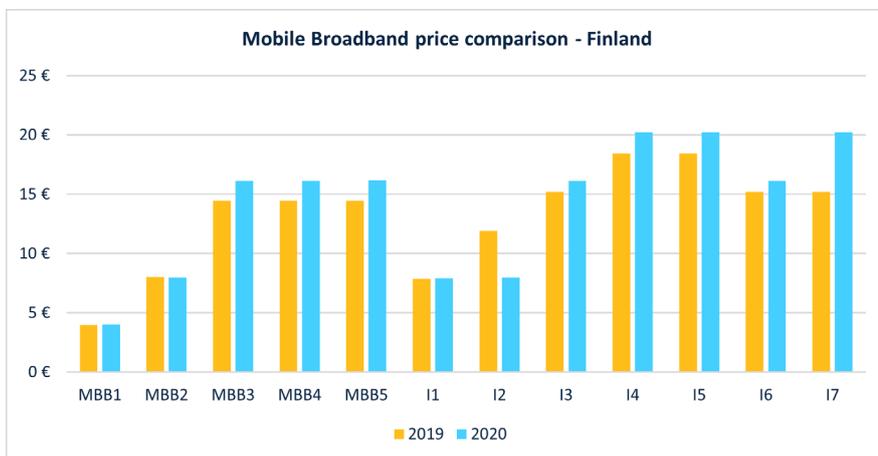
Prices for mobile broadband services in Finland show no clear trend compared to the previous year (2019). Prices for offers including 1 GB mobile data with 30 calls fell strongly.

Market competition

Telia provides the majority of the least expensive offers across all service bundles on the market in Finland (8 of 12). Elisa provides the remainder.

EU comparison

Prices for mobile broadband in Finland show a different pattern compared to EU27 countries overall. Whereas consumers requiring 0.5 GB mobile data with no calls find offers lower than the EU average, those seeking 2 GB mobile data with no calls find prices much higher than the EU average.



Prices in Finland compared with EU average*

MBB1	MBB2	MBB3
-37%	13%	74%
MBB4	MBB5	I1
34%	-15%	-14%
I2	I3	I4
-20%	20%	10%
I5	I6	I7
-27%	8%	-26%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Telia Prepaid Pulehemeen	3.99	6.35
MBB2: 1 GB mobile data with no calls	Telia Prepaid Pulehemeen + Prepaid Paketti S	7.97	7.07
MBB3: 2 GB mobile data with no calls	Telia Prepaid Pulehemeen + Prepaid Paketti S	16.10	9.23
MBB4: 5 GB mobile data with no calls	Telia Prepaid Pulehemeen + Prepaid Paketti M	16.10	11.99
MBB5: 20 GB mobile data with no calls	Elisa Sauhnahti Prepaid + Month Internet 4G	16.17	19.11
I1: 0.5 GB mobile data with 30 calls	Telia Prepaid Pulehemeen	7.90	9.18
I2: 1 GB mobile data with 30 calls	Telia Prepaid Pulehemeen + Prepaid Paketti S	7.97	10.03
I3: 2 GB mobile data with 100 calls	Telia Prepaid Pulehemeen + Prepaid Paketti M	16.10	13.40
I4: 5 GB mobile data with 300 calls	Elisa Sauhnahti Prepaid + Unlimited 3G	20.24	18.47
I5: 20 GB mobile data with 300 calls	Elisa Sauhnahti Prepaid + Unlimited 3G	20.24	27.60
I6: 5 GB mobile data with 30 calls	Telia Prepaid Pulehemeen + Prepaid Paketti M	16.10	14.93
I7: 20 GB mobile data with 100 calls	Elisa Sauhnahti Prepaid + Unlimited 3G	20.24	27.44



France



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Country report 2020

ISPs in sample

Orange France | Free | SFR | Bouygues Télécom

MNOs in sample

Orange | SFR | Free

October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

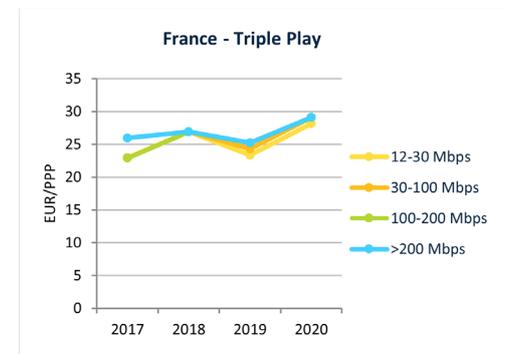
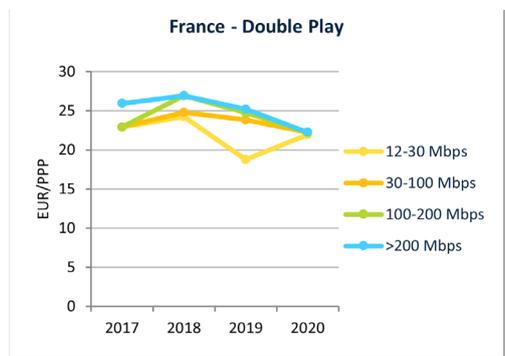
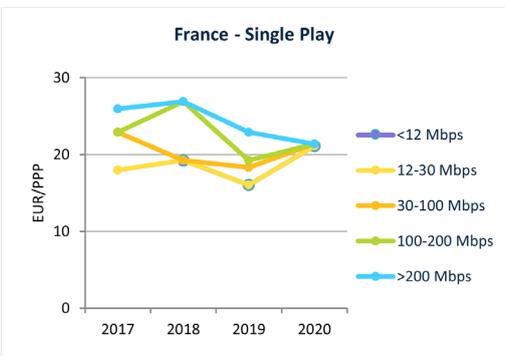
Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in France rose somewhat. In contrast, for consumers requiring >200 Mbps fixed internet with fixed phone, prices fell noticeably (by 14%).

Market competition

Bouygues Télécom provides the majority of the least expensive offers across all service bundles on the market in France (10 of 13). Free provides the remainder.



EU comparison

Compared to all EU27 countries, prices for fixed broadband in France are lower than the EU average. However, the lowest price of offers for consumers requiring < 12 Mpbs fixed internet is slightly higher than the EU average.

Prices in France compared with EU average*

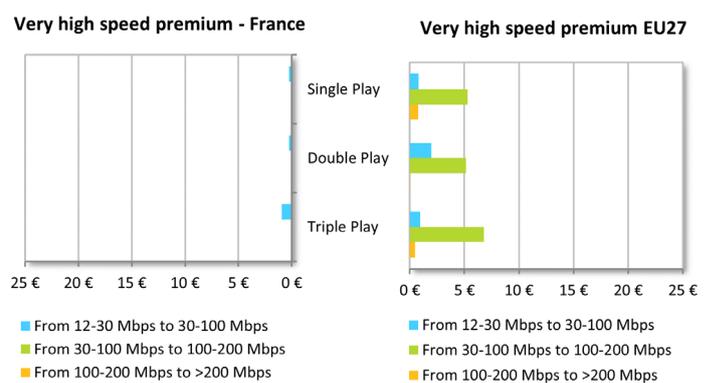
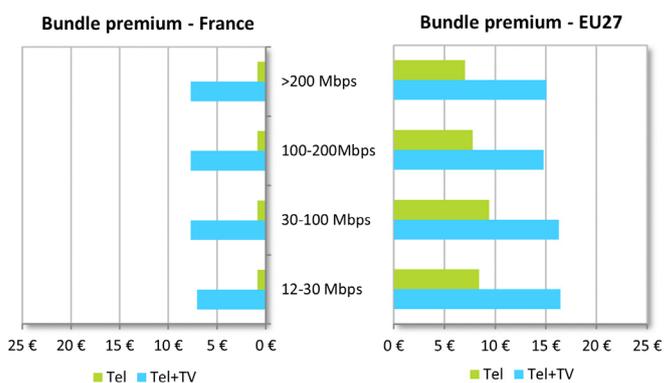
12-30Mbit		
Single Play	Double Play	Triple Play
0%	-26%	-25%
30-100Mbit		
Single Play	Double Play	Triple Play
-3%	-29%	-24%
100-200 Mbit		
Single Play	Double Play	Triple Play
-26%	-39%	-33%
>200 Mbit		
Single Play	Double Play	Triple Play
-27%	-39%	-34%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Bouygues Télécom Bbox fit	21.12	20.49
12-30 Mbps fixed internet	Bouygues Télécom Bbox fit	21.12	21.13
30-100 Mbps fixed internet	Bouygues Télécom Bbox fit	21.40	22.10
100-200 Mbps fixed internet	Bouygues Télécom Bbox fit	21.40	28.89
>200 Mbps fixed internet	Bouygues Télécom Bbox fit	21.40	29.37
12-30 Mbps fixed internet with fixed phone	Bouygues Télécom Bbox fit	21.96	29.55
30-100 Mbps fixed internet with fixed phone	Bouygues Télécom Bbox fit	22.23	31.51
100-200 Mbps fixed internet with fixed phone	Bouygues Télécom Bbox fit	22.23	36.67
>200 Mbps fixed internet with fixed phone	Bouygues Télécom Bbox fit	22.23	36.38
12-30 Mbps fixed internet with fixed phone and TV	Bouygues Télécom Bbox must	28.17	37.56
30-100 Mbps fixed internet with fixed phone and TV	Free FreeBox mini 4K	29.11	38.37
100-200 Mbps fixed internet with fixed phone and TV	Free FreeBox mini 4K	29.11	43.67
>200 Mbps fixed internet with fixed phone and TV	Free FreeBox mini 4K	29.11	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in France show no clear trend compared to the previous year (2019). Prices for offers including 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile fell noticeably.

Market competition

Bouygues Télécom provides a slightly higher number of the least expensive offers across all service bundles on the market in France (5 of 9) in comparison to the rest of the providers. Free or SFR provide the remainder.

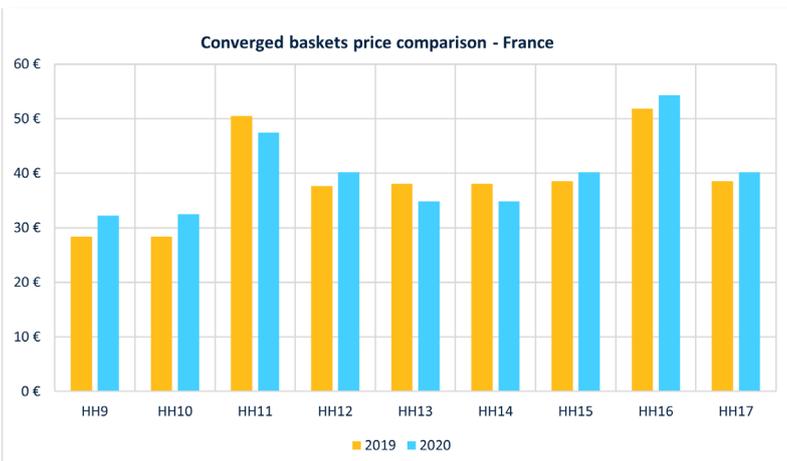
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in France are lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component					
			France	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	10,24	■	■	9,43
	Double Play 30-100 Mbps	10,24	■	■	9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	11,05	■	■	12,42
	Double Play 100-200 Mbps	12,59	■	■	13,29
300 calls 5GB mobile	Double Play 100-200Mbps	12,59	■	■	18,25
	Triple Play 100-200 Mbps	11,05	■	■	18,18
	Triple Play >200 Mbps	11,05	■	■	17,20

Prices in France compared with EU average*			
HH9	HH10	HH11	
● -17%	● -20%	● -16%	
HH12	HH13	HH14	
● -21%	● -30%	● -37%	
HH15	HH16	HH17	
● -35%	● -32%	● -35%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Bouygues Télécom / Orange Bbox fit / 2h 100Mo	32.20	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Bouygues Télécom / Orange Bbox fit / 2h 100Mo	32.48	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Bouygues Télécom / Free Bbox fit / Série Free 80 Go	47.42	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	SFR Packs Internet + Mobile	40.16	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Bouygues Télécom / Free Bbox fit / Série Free 80 Go	34.82	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Bouygues Télécom / Free Bbox fit / Série Free 80 Go	34.82	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	SFR Packs Internet + Mobile	40.16	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Free / Free FreeBox mini 4K / Série Free 80 Go	54.29	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	SFR Packs Internet + Mobile	40.16	61.63

Mobile Broadband

Price development

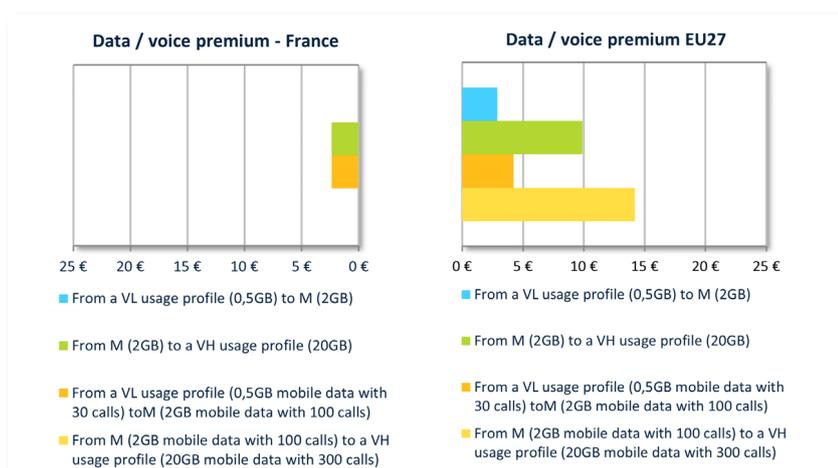
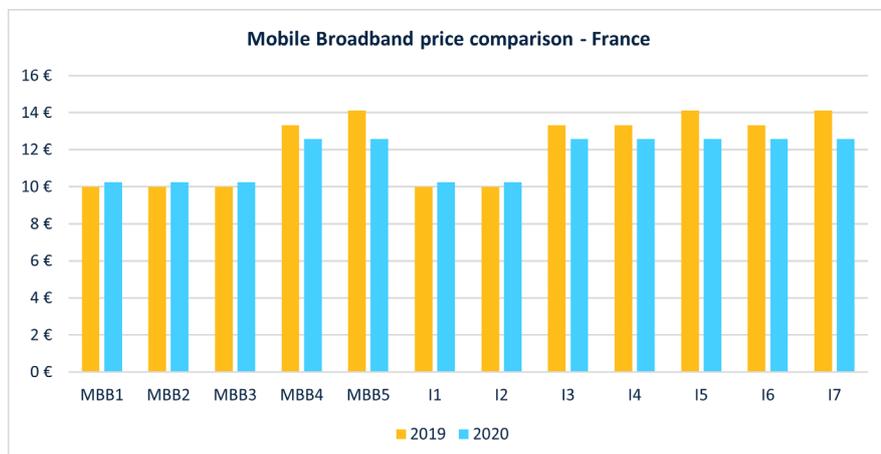
Compared to 2019, averaging over the usage baskets shown, prices in France fell somewhat. In contrast, for consumers requiring 0.5 GB mobile data with no calls, prices remained nearly unchanged.

Market competition

Free provides the majority of the least expensive offers across all service bundles on the market in France (7 of 12). Orange provides the remainder.

EU comparison

Prices for mobile broadband in France show a different pattern compared to EU27 countries overall. Whereas consumers requiring 20 GB mobile data with 300 calls find offers less than half the EU average, those seeking 0.5 GB mobile data with no calls find prices much higher than the EU average.



Prices in France compared with EU average*

Usage Basket	Deviation (%)	Usage Basket	Deviation (%)	Usage Basket	Deviation (%)
MBB1	61%	MBB2	45%	MBB3	11%
MBB4	5%	MBB5	-34%	I1	12%
I2	2%	I3	-6%	I4	-32%
I5	-54%	I6	-16%	I7	-54%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Orange 2h 100Mo	10.24	6.35
MBB2: 1 GB mobile data with no calls	Orange 2h 100Mo	10.24	7.07
MBB3: 2 GB mobile data with no calls	Orange 2h 100Mo	10.24	9.23
MBB4: 5 GB mobile data with no calls	Free Série Free 80 Go	12.59	11.99
MBB5: 20 GB mobile data with no calls	Free Série Free 80 Go	12.59	19.11
I1: 0.5 GB mobile data with 30 calls	Orange 2h 100Mo	10.24	9.18
I2: 1 GB mobile data with 30 calls	Orange 2h 100Mo	10.24	10.03
I3: 2 GB mobile data with 100 calls	Free Série Free 80 Go	12.59	13.40
I4: 5 GB mobile data with 300 calls	Free Série Free 80 Go	12.59	18.47
I5: 20 GB mobile data with 300 calls	Free Série Free 80 Go	12.59	27.60
I6: 5 GB mobile data with 30 calls	Free Série Free 80 Go	12.59	14.93
I7: 20 GB mobile data with 100 calls	Free Série Free 80 Go	12.59	27.44



Germany



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Country report 2020

ISPs in sample

Vodafone / Kabel Deutschland | United Internet |
Telefonica Germany (O2) | Deutsche Telekom

MNOs in sample

Telekom | Vodafone | Telefónica (o2)

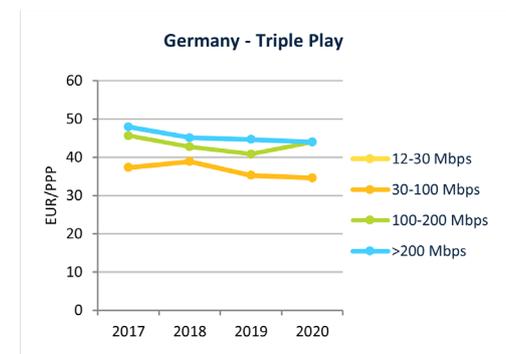
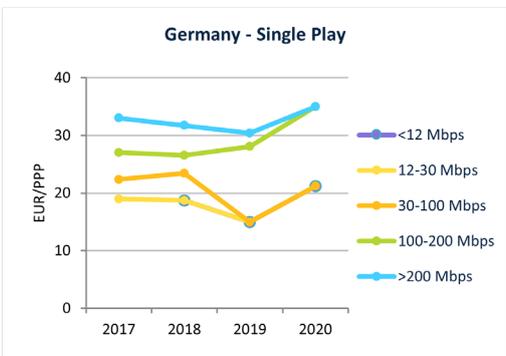
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Germany rose noticeably. In contrast, for consumers requiring 12-30 Mbps fixed internet with fixed phone and TV, prices fell somewhat (by 1%).



Market competition

Vodafone / Kabel Deutschland provides a slightly higher number of the least expensive offers across all service bundles on the market in Germany (5 of 13) in comparison to the rest of the providers. United Internet, Telefonica Germany (O2) or Deutsche Telekom provide the remainder.

EU comparison

Prices for fixed broadband in Germany show a different pattern compared to EU27 countries overall. Whereas consumers requiring 100-200 Mbps fixed internet find offers somewhat higher than the EU average, those seeking 30-100 Mbps fixed internet with fixed phone find prices slightly lower than the EU average.

Prices in Germany compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
0%	-13%	-8%
30-100Mbit		
Single Play	Double Play	Triple Play
-4%	-18%	-10%
100-200 Mbit		
Single Play	Double Play	Triple Play
21%	2%	1%
>200 Mbit		
Single Play	Double Play	Triple Play
19%	3%	-1%

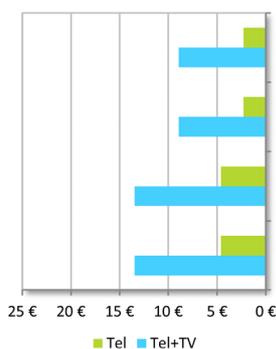
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

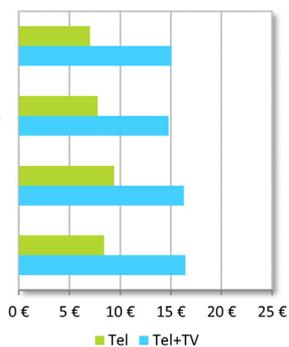
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Vodafone / Kabel Deutschland Red Internet & Phone 50 Cable	21.16	20.49
12-30 Mbps fixed internet	Vodafone / Kabel Deutschland Red Internet & Phone 50 Cable	21.16	21.13
30-100 Mbps fixed internet	Vodafone / Kabel Deutschland Red Internet & Phone 50 Cable	21.16	22.10
100-200 Mbps fixed internet	Vodafone / Kabel Deutschland Red Internet & Phone 250 Cable	35.02	28.89
>200 Mbps fixed internet	Vodafone / Kabel Deutschland Red Internet & Phone 250 Cable	35.02	29.37
12-30 Mbps fixed internet with fixed phone	Telefonica Germany (O2) O2 my Home M	25.78	29.55
30-100 Mbps fixed internet with fixed phone	Telefonica Germany (O2) O2 my Home M	25.78	31.51
100-200 Mbps fixed internet with fixed phone	Deutsche Telekom MagentaZuhause XL	37.30	36.67
>200 Mbps fixed internet with fixed phone	Deutsche Telekom MagentaZuhause XL	37.30	36.38
12-30 Mbps fixed internet with fixed phone and TV	United Internet DSL 100	34.63	37.56
30-100 Mbps fixed internet with fixed phone and TV	United Internet DSL 100	34.63	38.37
100-200 Mbps fixed internet with fixed phone and TV	Deutsche Telekom MagentaZuhause XL + TV	43.94	43.67
>200 Mbps fixed internet with fixed phone and TV	Deutsche Telekom MagentaZuhause XL + TV	43.94	44.43

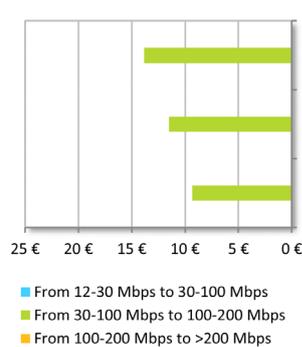
Bundle premium - Germany



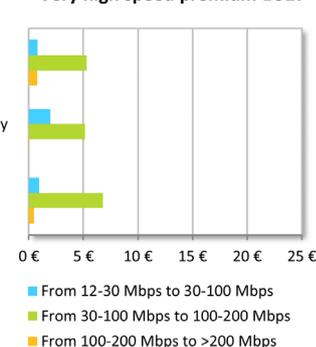
Bundle premium - EU27



Very high speed premium - Germany



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Market competition

Deutsche Telekom provides a slightly higher number of the least expensive offers across all service bundles on the market in Germany (5 of 9) in comparison to the rest of the providers. United Internet or Telefonica Germany (O2) provide the remainder.

Price development

Prices for household broadband services in Germany show no clear trend compared to the previous year (2019). Prices for offers including 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile rose strongly.

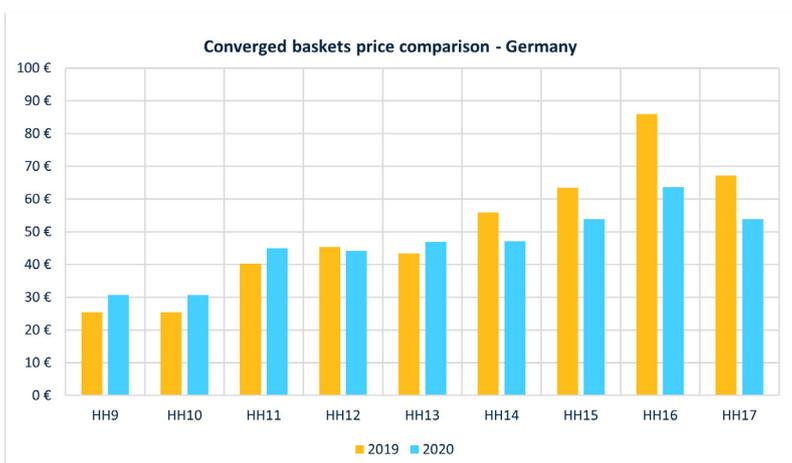
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Germany are slightly lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component				Germany	EU
30 calls 1GB mobile	Double Play 12-30 Mbps	4,94			9,43
	Double Play 30-100 Mbps	4,94			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	9,59			12,42
	Double Play 100-200 Mbps	9,59			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	9,85			18,25
	Triple Play 100-200 Mbps	9,85			18,18
	Triple Play >200 Mbps	9,85			17,20

Prices in Germany compared with EU average*			
HH9	HH10	HH11	
-21%	-25%	-20%	
HH12	HH13	HH14	
-13%	-6%	-14%	
HH15	HH16	HH17	
-13%	-20%	-13%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Telefonica Germany (O2) / Vodafone O2 my Home M / CallYa Start	30.72	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Telefonica Germany (O2) / Vodafone O2 my Home M / CallYa Start	30.72	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Telefonica Germany (O2) / Telekom O2 my Home M / MagentaMobil Prepaid M	44.96	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	United Internet / Telekom DSL 100 / MagentaMobil Prepaid M	44.22	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Deutsche Telekom / Telekom Magenta-Zuhause XL / MagentaMobil Prepaid M	46.89	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Deutsche Telekom / Telefónica (o2) MagentaZuhause XL / O2 my Prepaid M	47.15	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Deutsche Telekom / Telefónica (o2) MagentaZuhause XL + TV / O2 my Prepaid M	53.79	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Deutsche Telekom / Telefónica (o2) MagentaZuhause XL + TV / O2 my Prepaid M	63.64	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Deutsche Telekom / Telefónica (o2) MagentaZuhause XL + TV / O2 my Prepaid M	53.79	61.63

Mobile Broadband

Price development

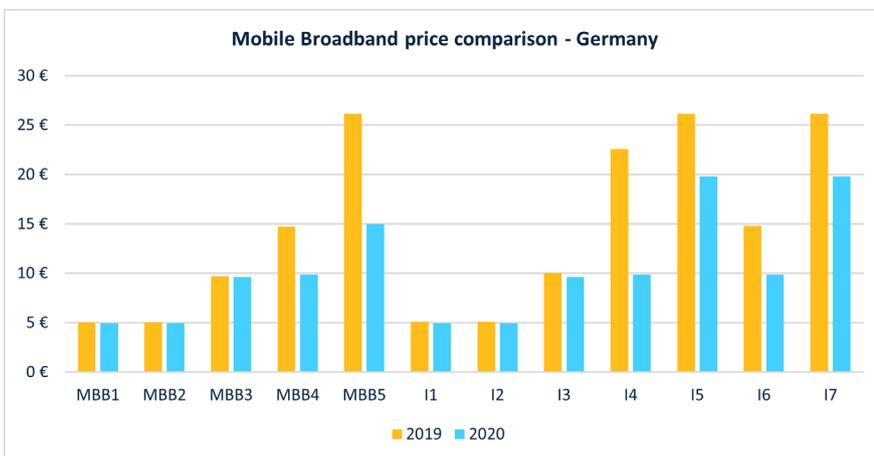
Compared to 2019, averaging over the usage baskets shown, prices in Germany fell noticeably. In contrast, for consumers requiring 2 GB mobile data with no calls, prices remained nearly unchanged.

Market competition

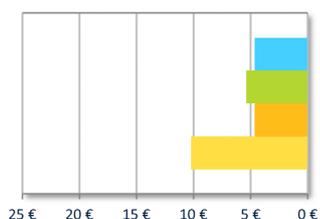
Vodafone provides a slightly higher number of the least expensive offers across all service bundles on the market in Germany (6 of 12) in comparison to the rest of the providers. Telekom or Telefónica (o2) provide the remainder.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Germany are lower than the EU average. However, the lowest price of offers for consumers requiring 2 GB mobile data with no calls is slightly higher than the EU average.

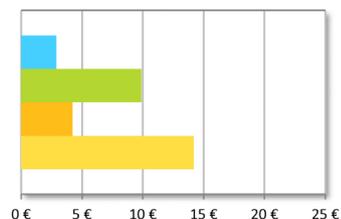


Data / voice premium - Germany



- From a VL usage profile (0,5GB) to M (2GB)
- From M (2GB) to a VH usage profile (20GB)
- From a VL usage profile (0,5GB mobile data with 30 calls) to M (2GB mobile data with 100 calls)
- From M (2GB mobile data with 100 calls) to a VH usage profile (20GB mobile data with 300 calls)

Data / voice premium EU27



- From a VL usage profile (0,5GB) to M (2GB)
- From M (2GB) to a VH usage profile (20GB)
- From a VL usage profile (0,5GB mobile data with 30 calls) to M (2GB mobile data with 100 calls)
- From M (2GB mobile data with 100 calls) to a VH usage profile (20GB mobile data with 300 calls)

Prices in Germany compared with EU average*

MBB1	MBB2	MBB3
-22%	-30%	4%
MBB4	MBB5	I1
-18%	-22%	-46%
I2	I3	I4
-51%	-28%	-47%
I5	I6	I7
-28%	-34%	-28%

*deviation in percent from the EU average in the respective basket/bundle combination

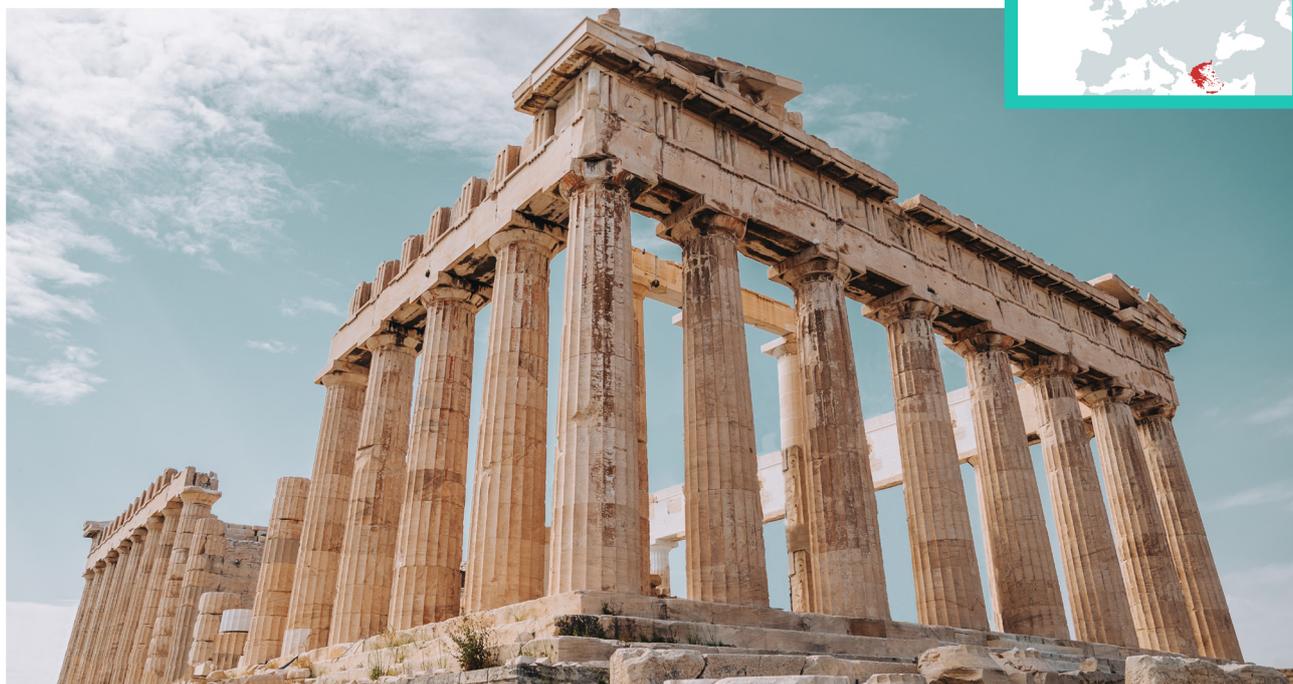
Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Vodafone CallYa Start	4.94	6.35
MBB2: 1 GB mobile data with no calls	Vodafone CallYa Start	4.94	7.07
MBB3: 2 GB mobile data with no calls	Telekom MagentaMobil Prepaid M	9.59	9.23
MBB4: 5 GB mobile data with no calls	Telefónica (o2) O2 my Prepaid M	9.85	11.99
MBB5: 20 GB mobile data with no calls	Telekom Data Comfort S	14.96	19.11
I1: 0.5 GB mobile data with 30 calls	Vodafone CallYa Start	4.94	9.18
I2: 1 GB mobile data with 30 calls	Vodafone CallYa Start	4.94	10.03
I3: 2 GB mobile data with 100 calls	Telekom MagentaMobil Prepaid M	9.59	13.40
I4: 5 GB mobile data with 300 calls	Telefónica (o2) O2 my Prepaid M	9.85	18.47
I5: 20 GB mobile data with 300 calls	Vodafone CallYa Digital	19.80	27.60
I6: 5 GB mobile data with 30 calls	Telefónica (o2) O2 my Prepaid M	9.85	14.93
I7: 20 GB mobile data with 100 calls	Vodafone CallYa Digital	19.80	27.44



Greece



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Country report 2020

ISPs in sample

OTE | Forthnet | Wind | Vodafone

MNOs in sample

Cosmote | Vodafone | Wind

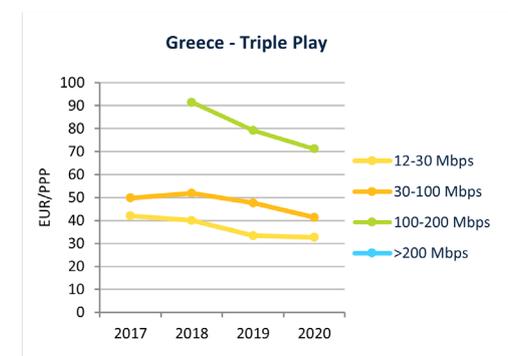
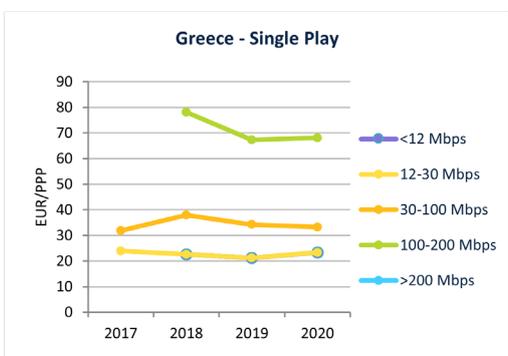
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Greece show no clear trend compared to the previous year (2019). Prices for offers including < 12 Mbps fixed internet rose somewhat.



Market competition

Vodafone provides a slightly higher number of the least expensive offers across all service bundles on the market in Greece (5 of 10) in comparison to the rest of the providers. OTE or Wind provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Greece are somewhat higher than the EU average. However, the lowest price of offers for consumers requiring 12-30 Mbps fixed internet with fixed phone is lower than the EU average.

Prices in Greece compared with EU average*

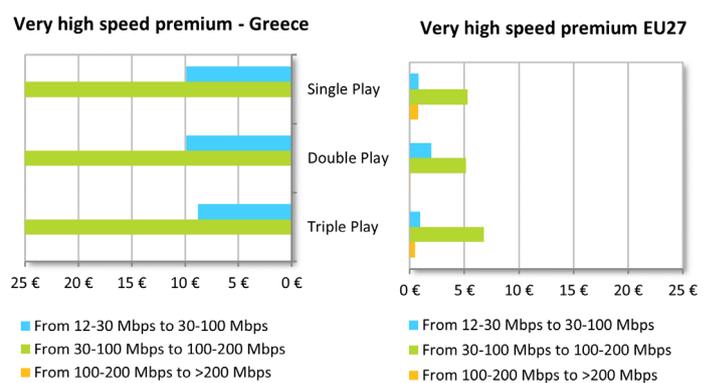
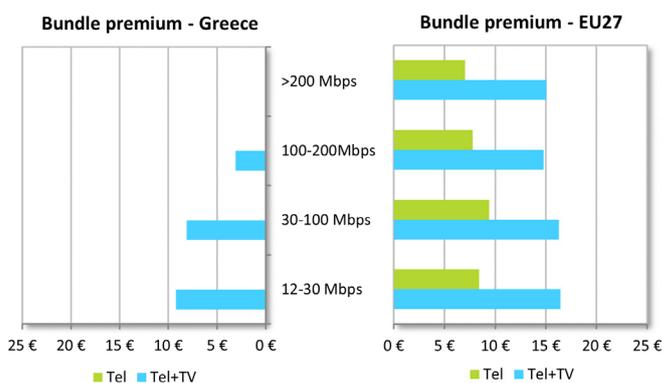
12-30Mbit		
Single Play	Double Play	Triple Play
11%	-21%	-13%
30-100Mbit		
Single Play	Double Play	Triple Play
51%	6%	8%
100-200 Mbit		
Single Play	Double Play	Triple Play
136%	86%	63%
>200 Mbit		
Single Play	Double Play	Triple Play

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Vodafone 24 Mbps Double Play	23.40	20.49
12-30 Mbps fixed internet	Vodafone 24 Mbps Double Play	23.40	21.13
30-100 Mbps fixed internet	Vodafone 50 Mbps + 360'	33.31	22.10
100-200 Mbps fixed internet	Wind Fiber 200 Plus	68.10	28.89
>200 Mbps fixed internet	-	-	29.37
12-30 Mbps fixed internet with fixed phone	Vodafone 24 Mbps Double Play	23.40	29.55
30-100 Mbps fixed internet with fixed phone	Vodafone 50 Mbps + 360'	33.31	31.51
100-200 Mbps fixed internet with fixed phone	Wind Fiber 200 Plus	68.10	36.67
>200 Mbps fixed internet with fixed phone	-	-	36.38
12-30 Mbps fixed internet with fixed phone and TV	Wind Double Play Plus 24 & WIND vision Family Pack	32.62	37.56
30-100 Mbps fixed internet with fixed phone and TV	Wind Double Play Plus 50 & WIND vision Family Pack	41.41	38.37
100-200 Mbps fixed internet with fixed phone and TV	OTE Double Play Fibrespeed 200 XL with TV entry pack	71.18	43.67
>200 Mbps fixed internet with fixed phone and TV	-	-	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Greece fell somewhat. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile, prices rose somewhat (by 5%).

Market competition

Wind and Vodafone each provide the majority of the least expensive offers across all service bundles on the market in Greece (3 of 8). OTE provides the remainder.

EU comparison

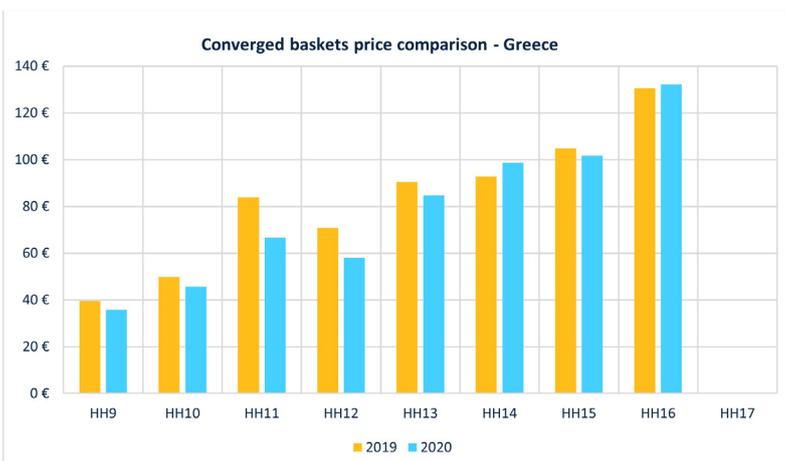
Compared to all EU27 countries, prices for household broadband baskets in Greece are somewhat higher than the EU average. However, the lowest price of offers for consumers requiring 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile is slightly lower than the EU average.

Bundle premium - mobile component					
			Greece	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	12,38			9,43
	Double Play 30-100 Mbps	12,38			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	16,64			12,42
	Double Play 100-200 Mbps	16,64			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	30,51	1		18,25
	Triple Play 100-200 Mbps	30,51	1		18,18
	Triple Play >200 Mbps	#NV			17,20

Prices in Greece compared with EU average*

HH9	HH10	HH11
-8%	12%	18%
HH12	HH13	HH14
14%	70%	80%
HH15	HH16	HH17
64%	66%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone / Wind 24 Mbps Double Play / Q Star Auto incl. Online Top Up	35.78	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone / Wind 50 Mbps + 360' / Q Star Auto incl. Online Top Up	45.69	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Vodafone / Cosmote 50 Mbps + 360' / WhatsUp Combo Max (incl. ReloadIt)	66.59	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Wind / Cosmote Double Play Plus 50 & WIND vision Family Pack / WhatsUp Combo Max (incl. ReloadIt)	58.05	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Wind / Cosmote Fiber 200 Plus / WhatsUp Combo Max (incl. ReloadIt)	84.74	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Wind / Vodafone Fiber 200 Plus / Prepaid 400' to all, 400' to Vodafone, 100SMS, 600MB + Surf&Mail 4GB; incl. top up bonus 500MB	98.60	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	OTE / Vodafone Double Play Fibre-speed 200 XL with TV entry pack / Prepaid 400' to all, 400' to Vodafone, 100SMS, 600MB + Surf&Mail 4GB; incl. top up bonus 500MB	101.69	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	OTE / Vodafone Double Play Fibre-speed 200 XL with TV entry pack / Prepaid 400' to all, 400' to Vodafone, 100SMS, 600MB + Surf&Mail 4GB; incl. top up bonus 500MB	132.19	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	-	-	61.63

Mobile Broadband

Price development

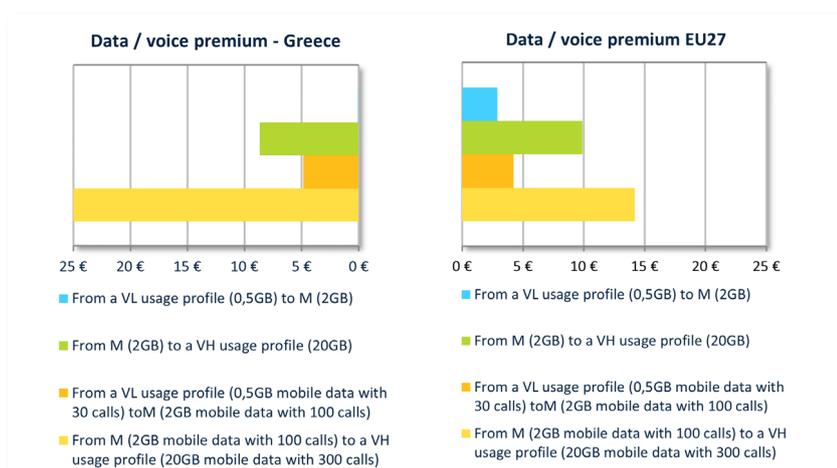
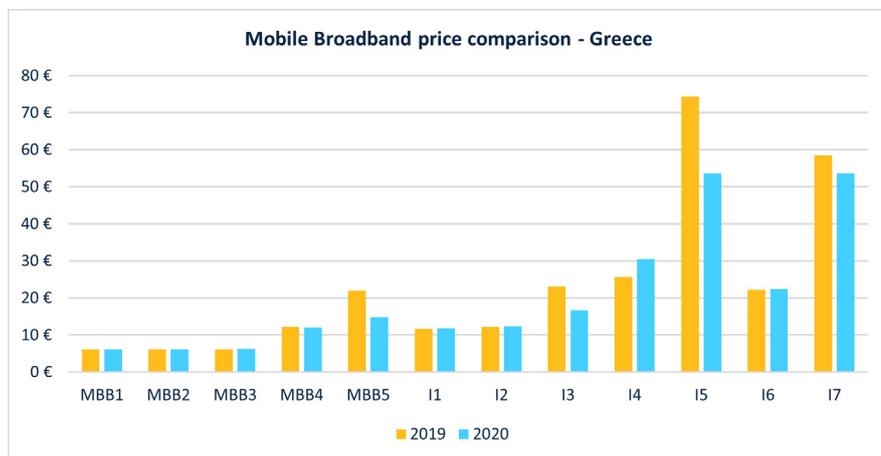
Prices for mobile broadband services in Greece show no clear trend compared to the previous year (2019). Prices for offers including 20 GB mobile data with 300 calls fell strongly.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Greece are somewhat higher than the EU average. However, the lowest price of offers for consumers requiring 2 GB mobile data with no calls is lower than the EU average.

Market competition

Vodafone provides a slightly higher number of the least expensive offers across all service bundles on the market in Greece (5 of 12) in comparison to the rest of the providers. Cosmote or Wind provide the remainder.



Prices in Greece compared with EU average*

MBB1	MBB2	MBB3
-3%	-13%	-33%
MBB4	MBB5	I1
0%	-22%	28%
I2	I3	I4
23%	24%	65%
I5	I6	I7
94%	50%	95%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Vodafone Vodafone international 1GB	6.16	6.35
MBB2: 1 GB mobile data with no calls	Vodafone Vodafone international 1GB	6.16	7.07
MBB3: 2 GB mobile data with no calls	Wind SimpleFi on the go with card 2 GB	6.19	9.23
MBB4: 5 GB mobile data with no calls	Vodafone Giga WiFi SIM card & Giga Boost 10	12.00	11.99
MBB5: 20 GB mobile data with no calls	Wind SimpleFi on the go 20GB	14.86	19.11
I1: 0.5 GB mobile data with 30 calls	Wind Q Star	11.79	9.18
I2: 1 GB mobile data with 30 calls	Wind Q Star Auto incl. Online Top Up	12.38	10.03
I3: 2 GB mobile data with 100 calls	Cosmote WhatsUp Combo Max (incl. ReloadIt)	16.64	13.40
I4: 5 GB mobile data with 300 calls	Vodafone Prepaid 400' to all, 400' to Vodafone, 100SMS, 600MB + Surf&Mail 4GB; incl. top up bonus 500MB	30.51	18.47
I5: 20 GB mobile data with 300 calls	Cosmote Gigamax 1GB M + Gigamax 20GB	53.63	27.60
I6: 5 GB mobile data with 30 calls	Vodafone Vodafone international 5GB + Vodafone international 200' to all	22.46	14.93
I7: 20 GB mobile data with 100 calls	Cosmote Gigamax 1GB M + Gigamax 20GB	53.63	27.44



Hungary



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Country report 2020

ISPs in sample

Magyar Telekom (T-Home) | Vodafone Magyarország Zrt. |
Digi Group | Tarr | ViDaNet

MNOs in sample

Magyar Telekom | Vodafone

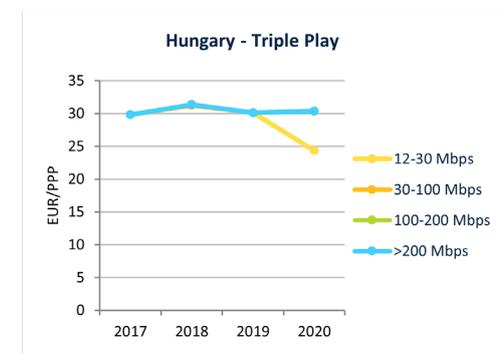
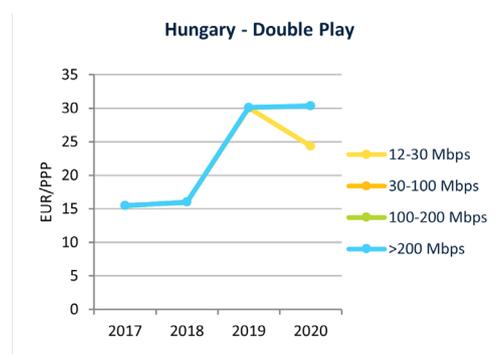
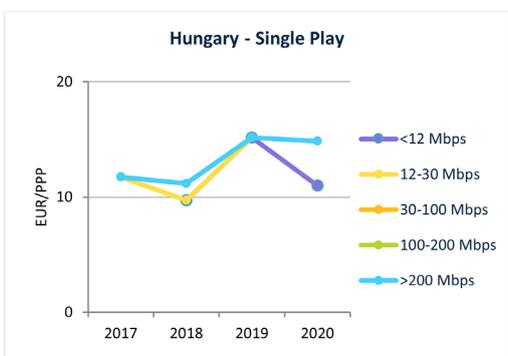
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Hungary show no clear trend compared to the previous year (2019). Prices for offers including < 12 Mbps fixed internet fell strongly.



Market competition

Digi Group provides all the least expensive offers across all service bundles on the market in Hungary.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Hungary are lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Hungary compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
-30%	-18%	-35%
30-100Mbit		
Single Play	Double Play	Triple Play
-33%	-4%	-21%
100-200 Mbit		
Single Play	Double Play	Triple Play
-49%	-17%	-31%
>200 Mbit		
Single Play	Double Play	Triple Play
-49%	-17%	-32%

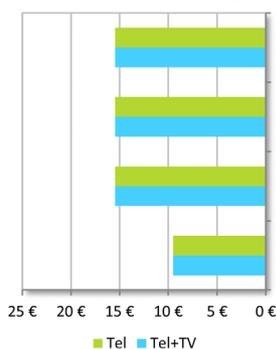
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

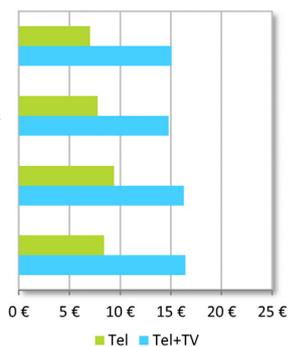
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Digi Group RITMO	10.99	20.49
12-30 Mbps fixed internet	Digi Group DIGINet 1000 (FTTH)	14.85	21.13
30-100 Mbps fixed internet	Digi Group DIGINet 1000 (FTTH)	14.85	22.10
100-200 Mbps fixed internet	Digi Group DIGINet 1000 (FTTH)	14.85	28.89
>200 Mbps fixed internet	Digi Group DIGINet 1000 (FTTH)	14.85	29.37
12-30 Mbps fixed internet with fixed phone	Digi Group DIGI COMPACT PACK	24.36	29.55
30-100 Mbps fixed internet with fixed phone	Digi Group DIGINet 1000 (FFTH)	30.34	31.51
100-200 Mbps fixed internet with fixed phone	Digi Group DIGINet 1000 (FFTH)	30.34	36.67
>200 Mbps fixed internet with fixed phone	Digi Group DIGINet 1000 (FFTH)	30.34	36.38
12-30 Mbps fixed internet with fixed phone and TV	Digi Group DIGI COMPACT PACK	24.36	37.56
30-100 Mbps fixed internet with fixed phone and TV	Digi Group DIGINet 1000 (FFTH)	30.34	38.37
100-200 Mbps fixed internet with fixed phone and TV	Digi Group DIGINet 1000 (FFTH)	30.34	43.67
>200 Mbps fixed internet with fixed phone and TV	Digi Group DIGINet 1000 (FFTH)	30.34	44.43

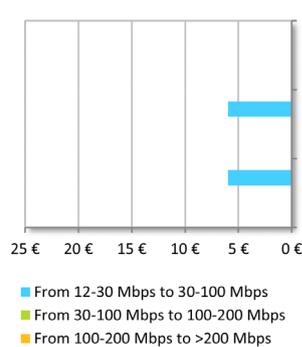
Bundle premium - Hungary



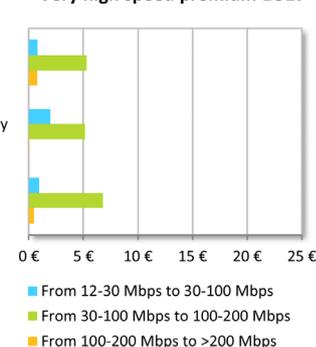
Bundle premium - EU27



Very high speed premium - Hungary



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Hungary rose noticeably. In contrast, for consumers requiring 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile, prices fell noticeably (by 14%).

Market competition

Digi Group provides the majority of the least expensive offers across all service bundles on the market in Hungary (7 of 9). Magyar Telekom (T-Home) provides the remainder.

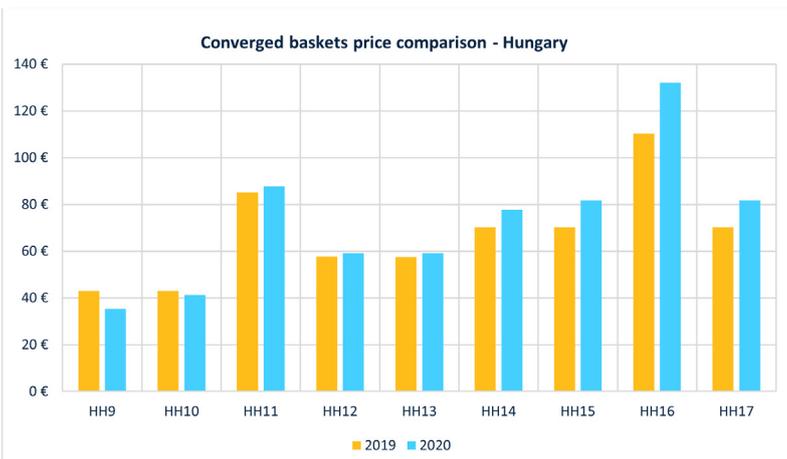
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Hungary are somewhat higher than the EU average. However, the lowest price of offers for consumers requiring 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile is slightly lower than the EU average.

Bundle premium - mobile component					
			Hungary		EU
30 calls 1GB mobile	Double Play 12-30 Mbps	10,99			9,43
	Double Play 30-100 Mbps	10,99			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	28,69			12,42
	Double Play 100-200 Mbps	28,69			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	47,29	47,29		18,25
	Triple Play 100-200 Mbps	51,34	51,34		18,18
	Triple Play >200 Mbps	51,34	51,34		17,20

Prices in Hungary compared with EU average*					
HH9	HH10	HH11			
-9%	1%	56%			
HH12	HH13	HH14			
16%	18%	41%			
HH15	HH16	HH17			
32%	65%	33%			

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Digi Group / Vodafone DIGI COMPACT PACK / TUTI+Net 1 GB	35.35	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Digi Group / Vodafone DIGINet 1000 (FFTH) / TUTI+Net 1 GB	41.33	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Digi Group / Vodafone DIGINet 1000 (FFTH) / Go Next	87.73	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Digi Group / Vodafone DIGINet 1000 (FFTH) / Go Next	59.04	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Digi Group / Vodafone DIGINet 1000 (FFTH) / Go Next	59.04	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Magyar Telekom (T-Home) Net 150/50 + Telephony + Mobile	77.63	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Digi Group / Vodafone DIGINet 1000 (FFTH) / Go Next	81.68	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Magyar Telekom (T-Home) Net 150/50 + Telephony + TV + Mobile	132.05	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Digi Group / Vodafone DIGINet 1000 (FFTH) / Go Next	81.68	61.63

Mobile Broadband

Price development

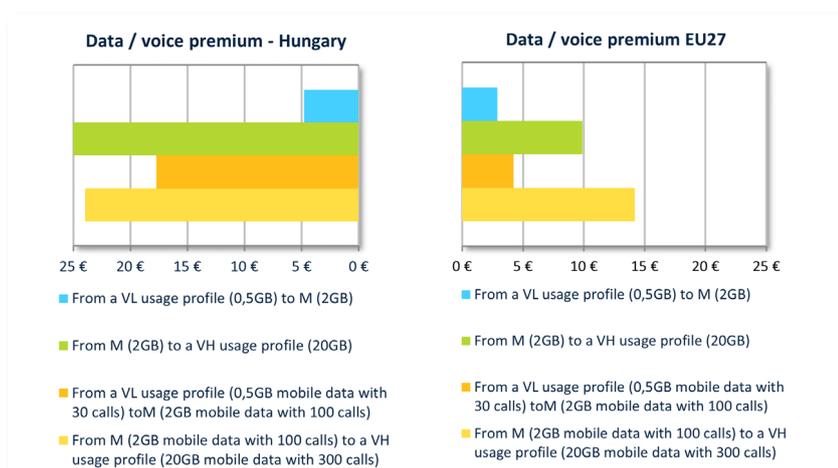
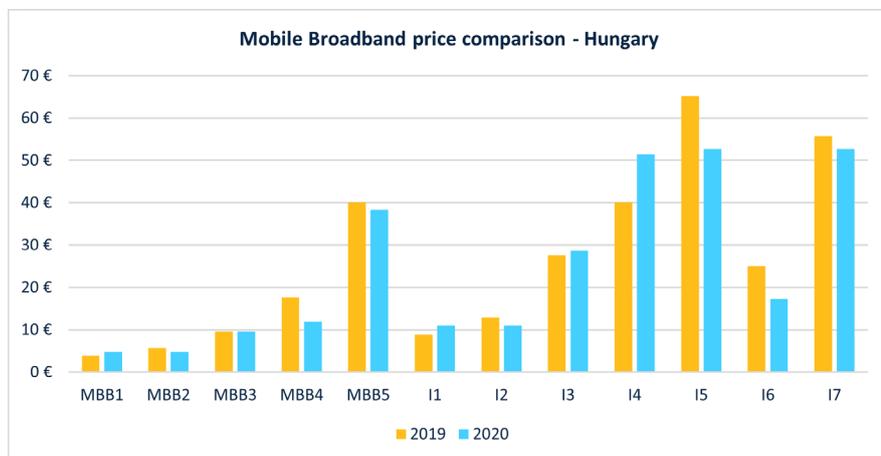
Prices for mobile broadband services in Hungary show no clear trend compared to the previous year (2019). Prices for offers including 5 GB mobile data with 300 calls rose strongly.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Hungary are somewhat higher than the EU average. However, the lowest price of offers for consumers requiring 1 GB mobile data with no calls is lower than the EU average.

Market competition

Vodafone provides all the least expensive offers across all service bundles on the market in Hungary.



Prices in Hungary compared with EU average*

Service Bundle	Deviation from EU Average (%)
MBB1	-25%
MBB2	-33%
MBB3	3%
MBB4	-1%
MBB5	100%
I1	20%
I2	10%
I3	114%
I4	178%
I5	91%
I6	15%
I7	92%

*deviation in percent from the EU average in the respective basket/bundle combination

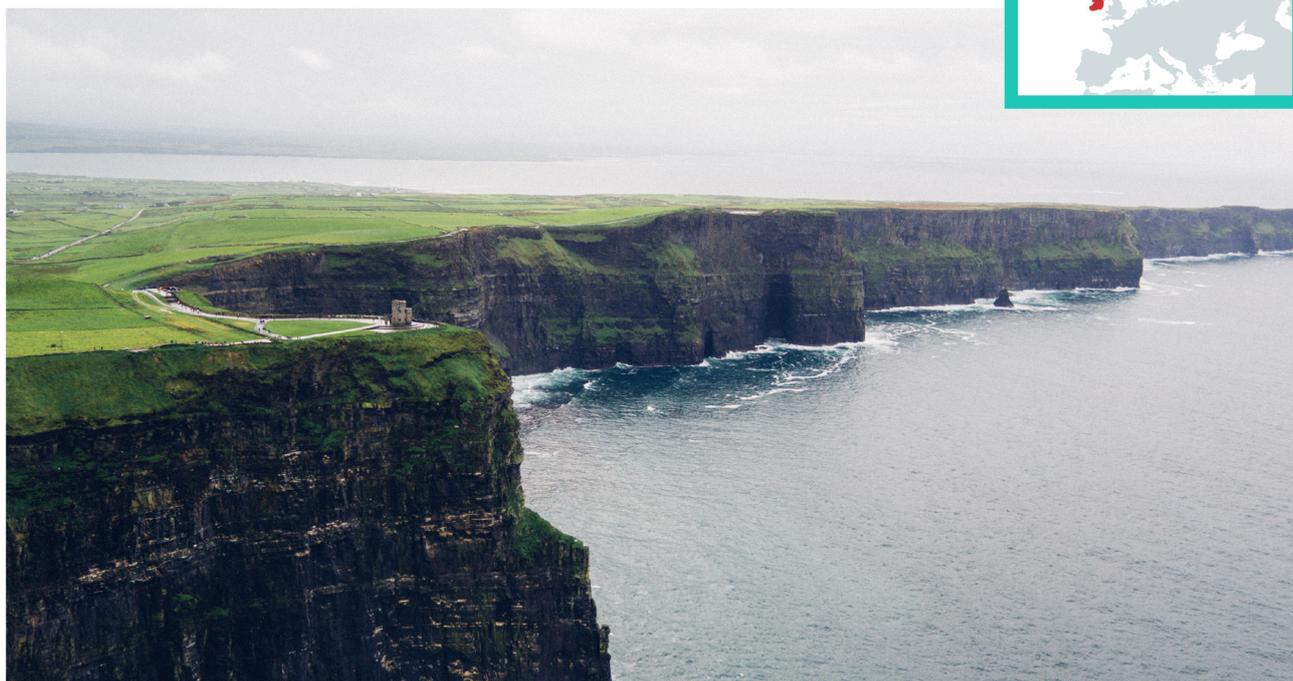
Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Vodafone Digital Prosperity Basic Package	4.74	6.35
MBB2: 1 GB mobile data with no calls	Vodafone Digital Prosperity Basic Package	4.74	7.07
MBB3: 2 GB mobile data with no calls	Vodafone TUTI+Net 3 GB	9.53	9.23
MBB4: 5 GB mobile data with no calls	Vodafone TUTI+Net 5 GB	11.93	11.99
MBB5: 20 GB mobile data with no calls	Vodafone Go Net+	38.27	19.11
I1: 0.5 GB mobile data with 30 calls	Vodafone TUTI+Net 1 GB	10.99	9.18
I2: 1 GB mobile data with 30 calls	Vodafone TUTI+Net 1 GB	10.99	10.03
I3: 2 GB mobile data with 100 calls	Vodafone Go Next	28.69	13.40
I4: 5 GB mobile data with 300 calls	Vodafone Go Next	51.34	18.47
I5: 20 GB mobile data with 300 calls	Vodafone RED Free	52.65	27.60
I6: 5 GB mobile data with 30 calls	Vodafone TUTI+Net 5 GB	17.21	14.93
I7: 20 GB mobile data with 100 calls	Vodafone RED Free	52.65	27.44



Ireland



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Country report 2020

ISPs in sample

Eircom | Sky | Virgin Media |
Vodafone at home | Imagine

MNOs in sample

Vodafone | Three | Eir Mobile

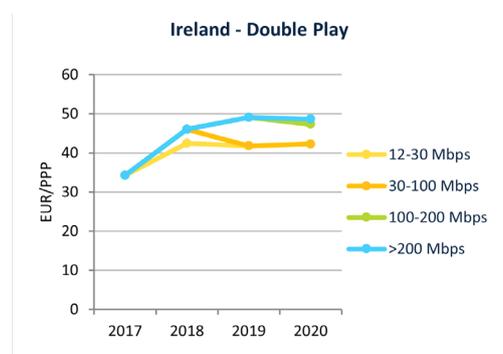
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Ireland show no clear trend compared to the previous year (2019). Prices for offers including 12-30 Mbps fixed internet with fixed phone and TV fell noticeably.



Market competition

Vodafone at home provides the majority of the least expensive offers across all service bundles on the market in Ireland (9 of 13). Eircom provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Ireland are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Ireland compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
61%	43%	55%
30-100Mbit		
Single Play	Double Play	Triple Play
54%	34%	52%
100-200 Mbit		
Single Play	Double Play	Triple Play
32%	29%	33%
>200 Mbit		
Single Play	Double Play	Triple Play
30%	34%	48%

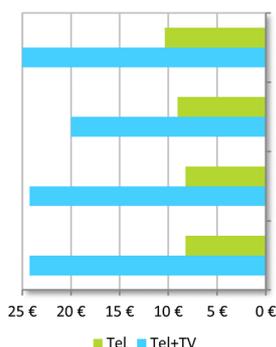
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

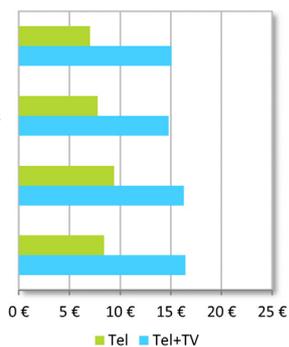
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Vodafone at home Simply Broadband	34.02	20.49
12-30 Mbps fixed internet	Vodafone at home Simply Broadband	34.02	21.13
30-100 Mbps fixed internet	Vodafone at home Simply Broadband	34.02	22.10
100-200 Mbps fixed internet	Vodafone at home 500 Fibre Broadband Eir	38.27	28.89
>200 Mbps fixed internet	Vodafone at home 500 Fibre Broadband Eir	38.27	29.37
12-30 Mbps fixed internet with fixed phone	Vodafone at home Simply Broadband	42.25	29.55
30-100 Mbps fixed internet with fixed phone	Vodafone at home Simply Broadband	42.25	31.51
100-200 Mbps fixed internet with fixed phone	Eircom Gigabit Fibre 150	47.31	36.67
>200 Mbps fixed internet with fixed phone	Vodafone at home 500 Fibre Broadband Eir	48.63	36.38
12-30 Mbps fixed internet with fixed phone and TV	Eircom Gigabit Fibre 150	58.28	37.56
30-100 Mbps fixed internet with fixed phone and TV	Eircom Gigabit Fibre 150	58.28	38.37
100-200 Mbps fixed internet with fixed phone and TV	Eircom Gigabit Fibre 150	58.28	43.67
>200 Mbps fixed internet with fixed phone and TV	Vodafone at home 500 Fibre Broadband Eir	65.64	44.43

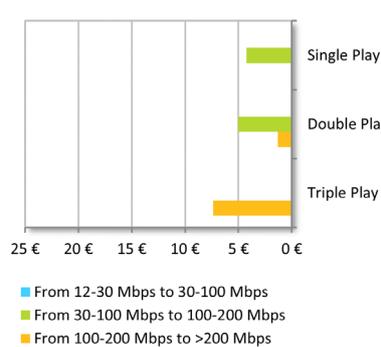
Bundle premium - Ireland



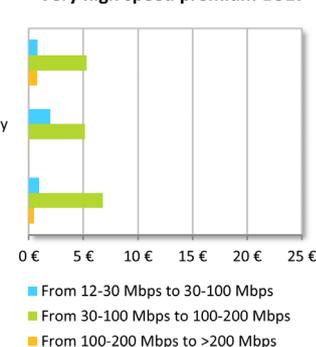
Bundle premium - EU27



Very high speed premium - Ireland



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Ireland fell strongly. The most different trend was for >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile, where prices fell noticeably (by 14%).

Market competition

Eircom provides the majority of the least expensive offers across all service bundles on the market in Ireland (5 of 9). Vodafone at home provides the remainder.

EU comparison

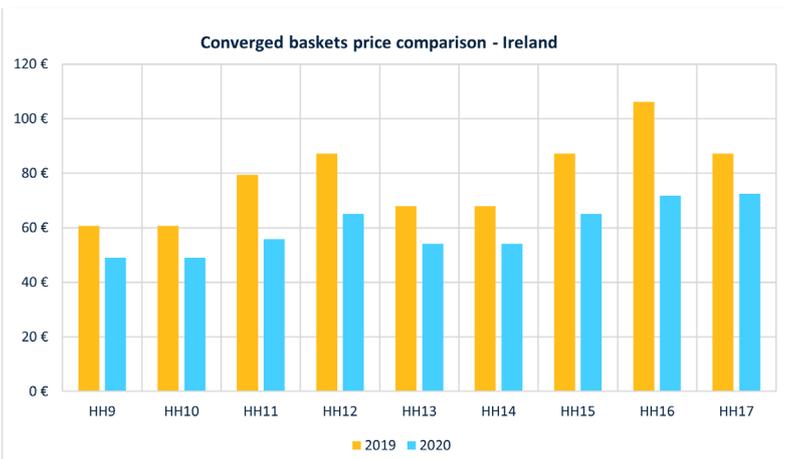
Compared to all EU27 countries, prices for household broadband baskets in Ireland are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile is slightly lower than the EU average.

Bundle premium - mobile component			Ireland		EU
30 calls 1GB mobile	Double Play 12-30 Mbps	6,79			9,43
	Double Play 30-100 Mbps	6,79			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	6,79			12,42
	Double Play 100-200 Mbps	6,79			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	6,79			18,25
	Triple Play 100-200 Mbps	6,79			18,18
	Triple Play >200 Mbps	6,79			17,20

Prices in Ireland compared with EU average*

HH9	HH10	HH11
26%	20%	-1%
HH12	HH13	HH14
28%	8%	-1%
HH15	HH16	HH17
5%	-10%	18%

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone at home / Three Simply Broadband / 48	49.05	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone at home / Three Simply Broadband / 48	49.05	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Vodafone at home / Three Simply Broadband / 48	55.84	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Eircom / Three Gigabit Fibre 150 / 48	65.08	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Eircom / Three Gigabit Fibre 150 / 48	54.10	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Eircom / Three Gigabit Fibre 150 / 48	54.10	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Eircom / Three Gigabit Fibre 150 / 48	65.08	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Eircom / Three Gigabit Fibre 150 / 48	71.87	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Vodafone at home / Three 500 Fibre Broadband Eir / 48	72.43	61.63

Mobile Broadband

Price development

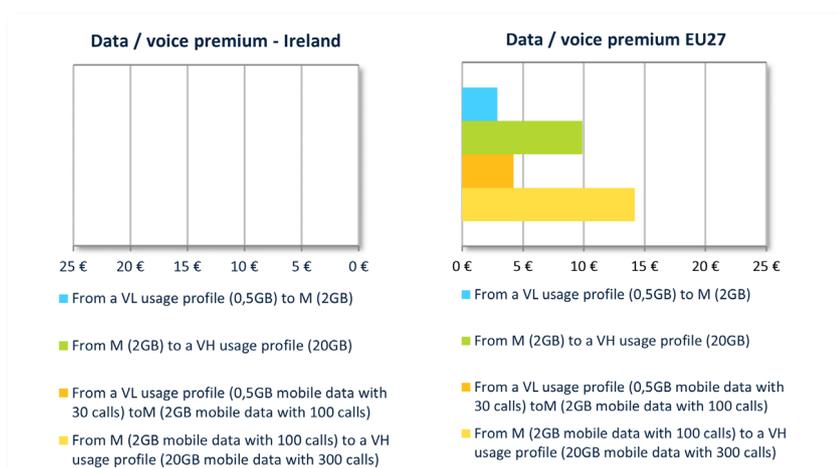
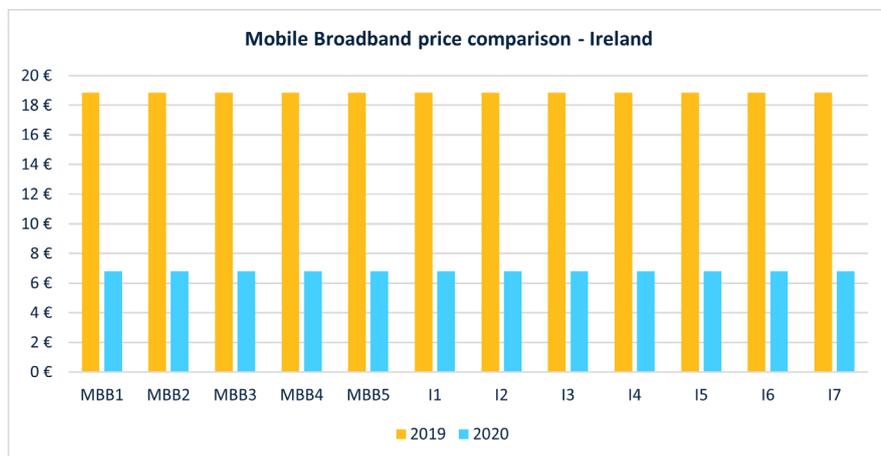
Compared to 2019, averaging over the usage baskets shown, prices in Ireland fell to much less than half. The most different trend was for 0.5 GB mobile data with no calls, where prices fell to much less than half (by 63%).

Market competition

Three provides all the least expensive offers across all service bundles on the market in Ireland.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Ireland are much lower than the EU average. However, the lowest price of offers for consumers requiring 0.5 GB mobile data with no calls is slightly higher than the EU average.



Prices in Ireland compared with EU average*

Usage Basket	Deviation (%)
MBB1	7%
MBB2	-4%
MBB3	-26%
MBB4	-43%
MBB5	-64%
I1	-26%
I2	-32%
I3	-49%
I4	-63%
I5	-75%
I6	-54%
I7	-75%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Three 48	6.79	6.35
MBB2: 1 GB mobile data with no calls	Three 48	6.79	7.07
MBB3: 2 GB mobile data with no calls	Three 48	6.79	9.23
MBB4: 5 GB mobile data with no calls	Three 48	6.79	11.99
MBB5: 20 GB mobile data with no calls	Three 48	6.79	19.11
I1: 0.5 GB mobile data with 30 calls	Three 48	6.79	9.18
I2: 1 GB mobile data with 30 calls	Three 48	6.79	10.03
I3: 2 GB mobile data with 100 calls	Three 48	6.79	13.40
I4: 5 GB mobile data with 300 calls	Three 48	6.79	18.47
I5: 20 GB mobile data with 300 calls	Three 48	6.79	27.60
I6: 5 GB mobile data with 30 calls	Three 48	6.79	14.93
I7: 20 GB mobile data with 100 calls	Three 48	6.79	27.44



Italy



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Country report 2020

ISPs in sample

Telecom Italia | WindTre | Fastweb |
Vodafone (including TeleTu)

MNOs in sample

Vodafone | Telecom Italia (TIM) | WindTre

October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

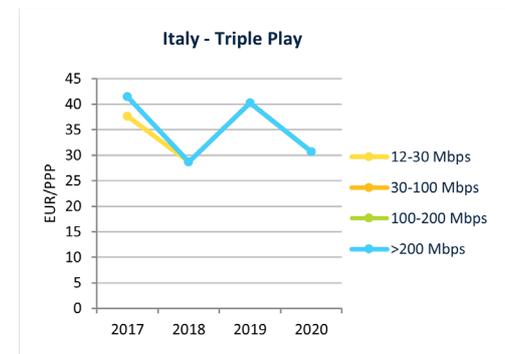
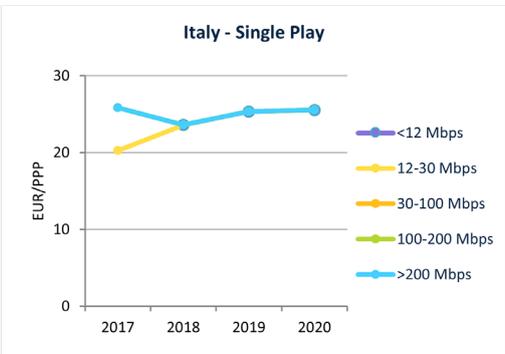
Compared to 2019, accross all baskets on average, prices in Italy fell somewhat. The most different trend was for < 12 Mbps fixed internet, where prices remained nearly unchanged.

Market competition

Telecom Italia provides all the least expensive offers across all service bundles on the market in Italy.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Italy are slightly lower than the EU average. However, the lowest price of offers for consumers requiring <12 Mbps fixed internet is somewhat higher than the EU average.



Prices in Italy compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
21%	-14%	-18%
30-100Mbit		
Single Play	Double Play	Triple Play
16%	-19%	-20%
100-200 Mbit		
Single Play	Double Play	Triple Play
-12%	-30%	-30%
>200 Mbit		
Single Play	Double Play	Triple Play
-13%	-30%	-31%

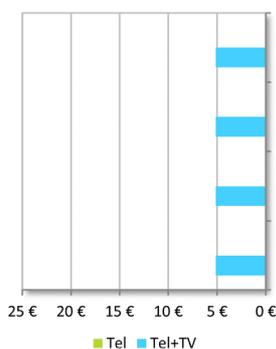
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

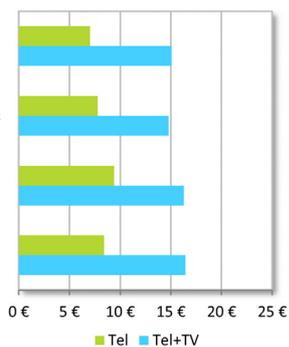
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Telecom Italia Tim Super FWA	25.56	20.49
12-30 Mbps fixed internet	Telecom Italia Tim Super FWA	25.56	21.13
30-100 Mbps fixed internet	Telecom Italia Tim Super FWA	25.56	22.10
100-200 Mbps fixed internet	Telecom Italia Tim Super FWA	25.56	28.89
>200 Mbps fixed internet	Telecom Italia Tim Super FWA	25.56	29.37
12-30 Mbps fixed internet with fixed phone	Telecom Italia Tim Super FWA	25.56	29.55
30-100 Mbps fixed internet with fixed phone	Telecom Italia Tim Super FWA	25.56	31.51
100-200 Mbps fixed internet with fixed phone	Telecom Italia Tim Super FWA	25.56	36.67
>200 Mbps fixed internet with fixed phone	Telecom Italia Tim Super FWA	25.56	36.38
12-30 Mbps fixed internet with fixed phone and TV	Telecom Italia Tim Super	30.69	37.56
30-100 Mbps fixed internet with fixed phone and TV	Telecom Italia Tim Super	30.69	38.37
100-200 Mbps fixed internet with fixed phone and TV	Telecom Italia Tim Super	30.69	43.67
>200 Mbps fixed internet with fixed phone and TV	Telecom Italia Tim Super	30.69	44.43

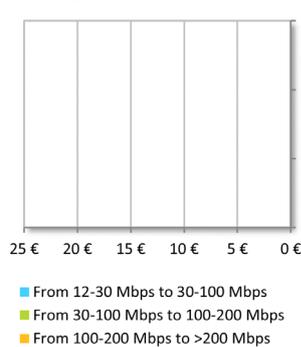
Bundle premium - Italy



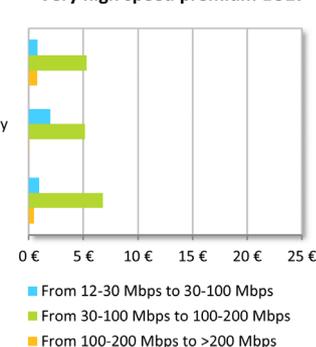
Bundle premium - EU27



Very high speed premium - Italy



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Italy fell somewhat. In contrast, for consumers requiring 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile, prices rose somewhat (by 6%).

Market competition

Telecom Italia provides most of the least expensive offers across all service bundles on the market in Italy (8 of 9). Vodafone (including TeleTu) provides the remainder.

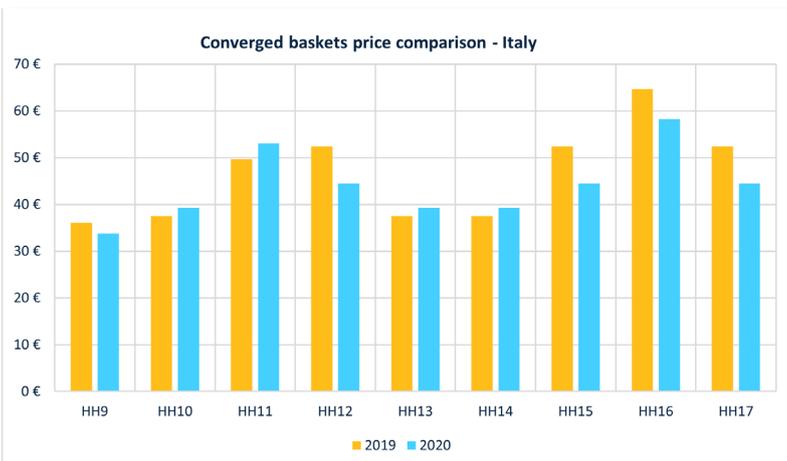
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Italy are slightly lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component				Italy	EU
30 calls 1GB mobile	Double Play 12-30 Mbps	8,21			9,43
	Double Play 30-100 Mbps	13,76			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	13,76			12,42
	Double Play 100-200 Mbps	13,76			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	13,76			18,25
	Triple Play 100-200 Mbps	13,76			18,18
	Triple Play >200 Mbps	13,76			17,20

Prices in Italy compared with EU average*			
HH9	HH10	HH11	
-13%	-4%	-6%	
HH12	HH13	HH14	
-12%	-21%	-28%	
HH15	HH16	HH17	
-28%	-27%	-28%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone (including TeleTu) Fibra	33.77	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Telecom Italia / WindTre Tim Super FWA / Medium	39.31	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Telecom Italia / WindTre Tim Super FWA / Medium	53.07	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Telecom Italia / WindTre Tim Super / Medium	44.45	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Telecom Italia / WindTre Tim Super FWA / Medium	39.31	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Telecom Italia / WindTre Tim Super FWA / Medium	39.31	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Telecom Italia / WindTre Tim Super / Medium	44.45	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Telecom Italia / WindTre Tim Super / Medium	58.21	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Telecom Italia / WindTre Tim Super / Medium	44.45	61.63

Mobile Broadband

Price development

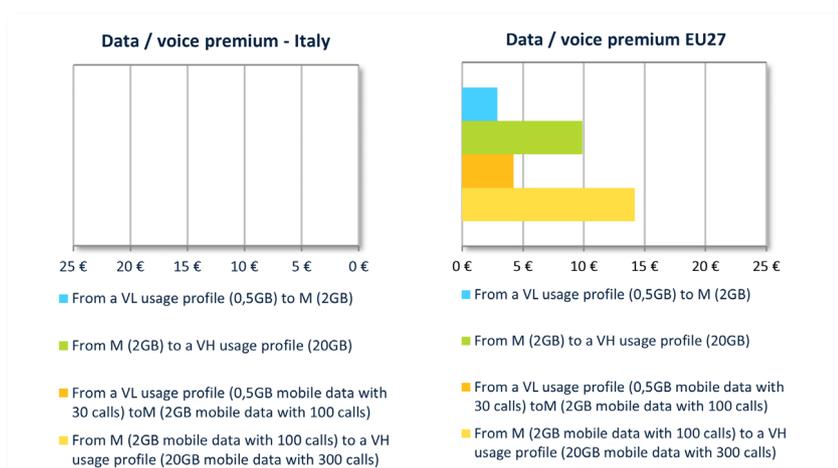
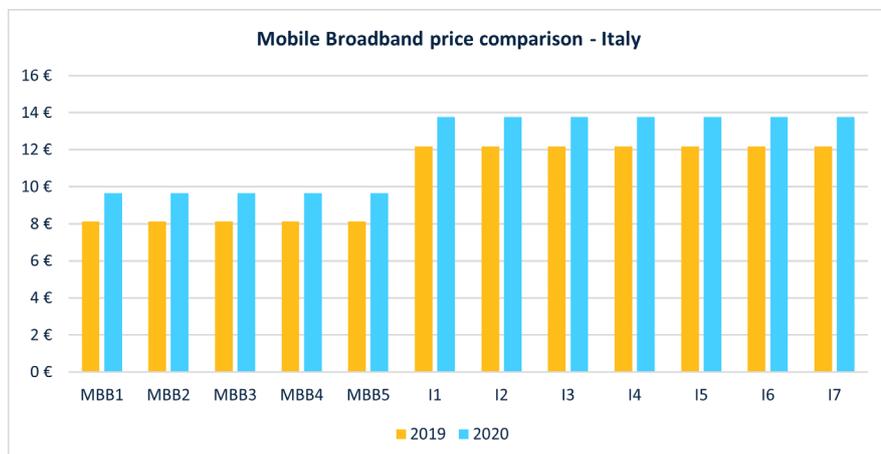
Compared to 2019, averaging over the usage baskets shown, prices in Italy rose noticeably. The most different trend was for 0.5 GB mobile data with 30 calls, where prices rose noticeably (by 12%).

Market competition

WindTre provides all the least expensive offers across all service bundles on the market in Italy.

EU comparison

Prices for mobile broadband in Italy show a different pattern compared to EU27 countries overall. Whereas consumers requiring 20 GB mobile data with 300 calls find offers half the EU average, those seeking 0.5 GB mobile data with no calls find prices much higher than the EU average.



Prices in Italy compared with EU average*

MBB1	MBB2	MBB3
52%	36%	5%
MBB4	MBB5	I1
-19%	-49%	50%
I2	I3	I4
37%	3%	-26%
I5	I6	I7
-50%	-8%	-50%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	WindTre Cube medium only sim	9.65	6.35
MBB2: 1 GB mobile data with no calls	WindTre Cube medium only sim	9.65	7.07
MBB3: 2 GB mobile data with no calls	WindTre Cube medium only sim	9.65	9.23
MBB4: 5 GB mobile data with no calls	WindTre Cube medium only sim	9.65	11.99
MBB5: 20 GB mobile data with no calls	WindTre Cube medium only sim	9.65	19.11
I1: 0.5 GB mobile data with 30 calls	WindTre Medium	13.76	9.18
I2: 1 GB mobile data with 30 calls	WindTre Medium	13.76	10.03
I3: 2 GB mobile data with 100 calls	WindTre Medium	13.76	13.40
I4: 5 GB mobile data with 300 calls	WindTre Medium	13.76	18.47
I5: 20 GB mobile data with 300 calls	WindTre Medium	13.76	27.60
I6: 5 GB mobile data with 30 calls	WindTre Medium	13.76	14.93
I7: 20 GB mobile data with 100 calls	WindTre Medium	13.76	27.44



Latvia



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Country report 2020

ISPs in sample

TET | Balticom | Baltcom | Livas KTV | Dautkom TV

MNOs in sample

Tele2 | LMT | Bite Latvia

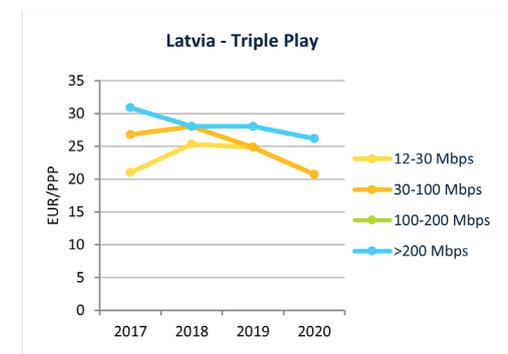
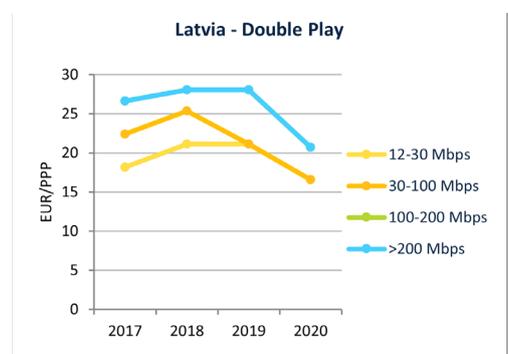
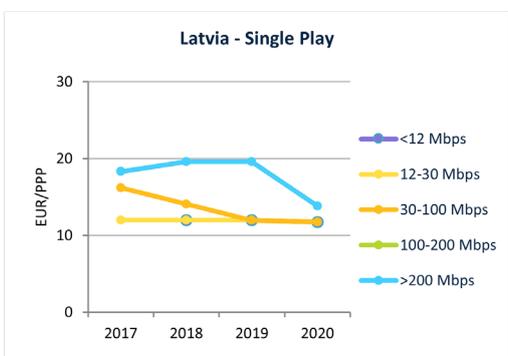
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, across all baskets on average, prices in Latvia fell noticeably. In contrast, for consumers requiring < 12 Mbps fixed internet, prices remained nearly unchanged.



Market competition

Livas KTV provides most of the least expensive offers across all service bundles on the market in Latvia (11 of 13). Baltcom provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Latvia are much lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Latvia compared with EU average*

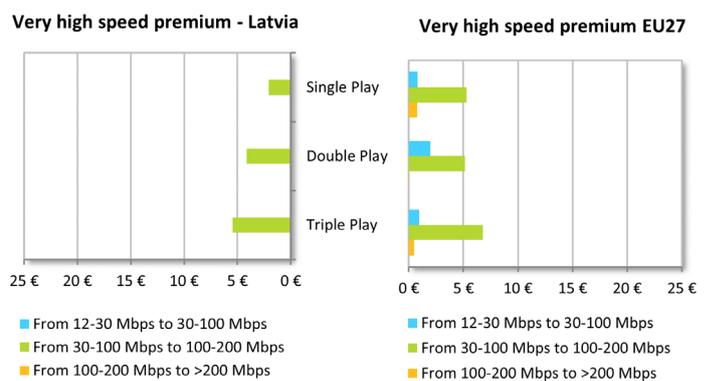
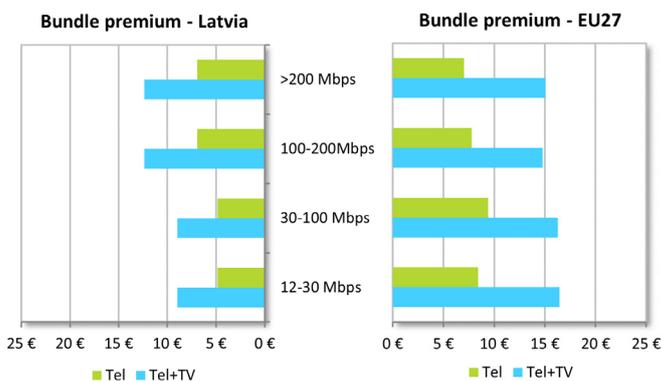
12-30Mbit		
Single Play	Double Play	Triple Play
● -44%	● -44%	● -45%
30-100Mbit		
Single Play	Double Play	Triple Play
● -47%	● -47%	● -46%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -52%	● -43%	● -40%
>200 Mbit		
Single Play	Double Play	Triple Play
● -53%	● -43%	● -41%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Livas KTV Optics 50	11.74	20.49
12-30 Mbps fixed internet	Livas KTV Optics 50	11.74	21.13
30-100 Mbps fixed internet	Livas KTV Optics 50	11.74	22.10
100-200 Mbps fixed internet	Baltcom High-speed internet with and open-ended contract	13.80	28.89
>200 Mbps fixed internet	Baltcom High-speed internet with and open-ended contract	13.80	29.37
12-30 Mbps fixed internet with fixed phone	Livas KTV Optics 50 + Phone	16.58	29.55
30-100 Mbps fixed internet with fixed phone	Livas KTV Optics 50 + Phone	16.58	31.51
100-200 Mbps fixed internet with fixed phone	Livas KTV Optics 400 + Phone	20.72	36.67
>200 Mbps fixed internet with fixed phone	Livas KTV Optics 400 + Phone	20.72	36.38
12-30 Mbps fixed internet with fixed phone and TV	Livas KTV Cable TV + Optics 50 + Phone	20.72	37.56
30-100 Mbps fixed internet with fixed phone and TV	Livas KTV Cable TV + Optics 50 + Phone	20.72	38.37
100-200 Mbps fixed internet with fixed phone and TV	Livas KTV Cable TV + Optics 400 + Phone	26.18	43.67
>200 Mbps fixed internet with fixed phone and TV	Livas KTV Cable TV + Optics 400 + Phone	26.18	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Latvia fell somewhat. The most different trend was for 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile, where prices fell somewhat (by 2%).

Market competition

Livas KTV provides all the least expensive offers across all service bundles on the market in Latvia.

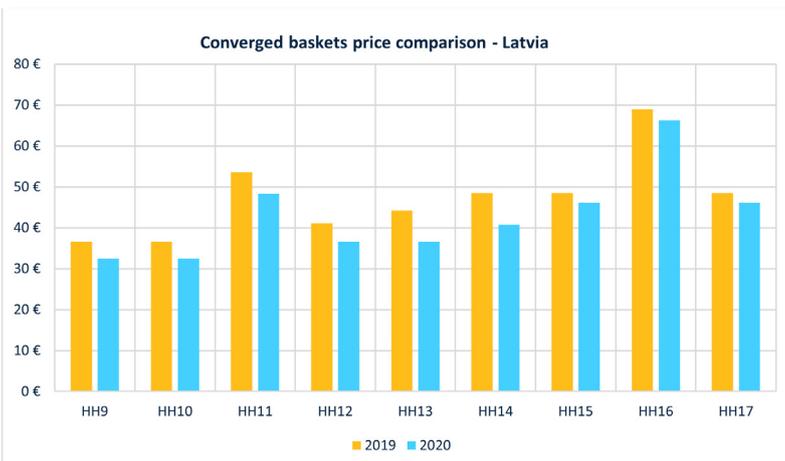
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Latvia are lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component					
			Latvia	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	15,89			9,43
	Double Play 30-100 Mbps	15,89			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	15,89			12,42
	Double Play 100-200 Mbps	15,89			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	20,03			18,25
	Triple Play 100-200 Mbps	20,03			18,18
	Triple Play >200 Mbps	20,03			17,20

Prices in Latvia compared with EU average*			
HH9	HH10	HH11	
-17%	-20%	-14%	
HH12	HH13	HH14	
-28%	-27%	-26%	
HH15	HH16	HH17	
-25%	-17%	-25%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Livas KTV / Bite Latvia Optics 50 + Phone / Bite 2 GB	32.46	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Livas KTV / Bite Latvia Optics 50 + Phone / Bite 2 GB	32.46	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Livas KTV / Bite Latvia Optics 50 + Phone / Bite 2 GB	48.35	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Livas KTV / Bite Latvia Cable TV + Optics 50 + Phone / Bite 2 GB	36.61	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Livas KTV / Bite Latvia Optics 400 + Phone / Bite 2 GB	36.61	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Livas KTV / Bite Latvia Optics 400 + Phone / Bite 5 GB	40.75	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Livas KTV / Bite Latvia Cable TV + Optics 400 + Phone / Bite 5 GB	46.21	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Livas KTV / Bite Latvia Cable TV + Optics 400 + Phone / Bite 5 GB	66.24	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Livas KTV / Bite Latvia Cable TV + Optics 400 + Phone / Bite 5 GB	46.21	61.63

Mobile Broadband

Price development

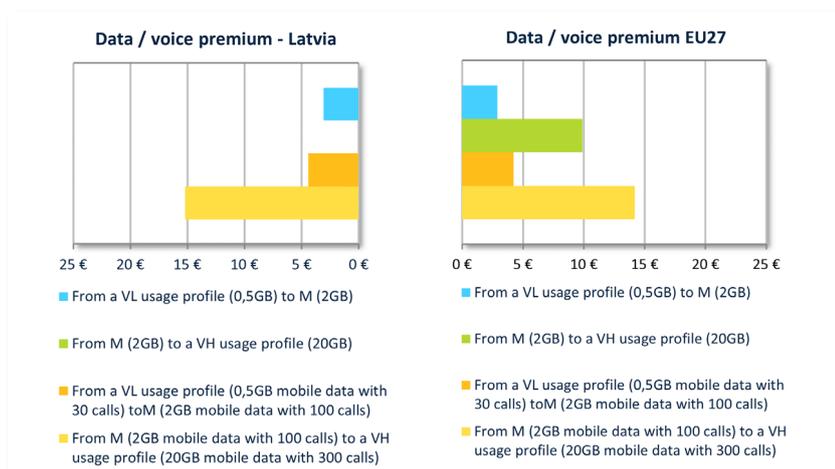
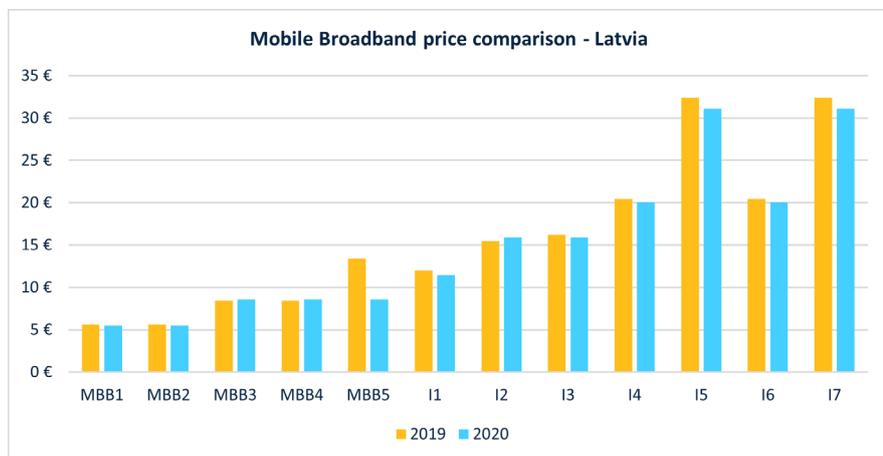
Prices for mobile broadband services in Latvia show no clear trend compared to the previous year (2019). Prices for offers including 20 GB mobile data with no calls fell strongly.

EU comparison

Prices for mobile broadband in Latvia show a different pattern compared to EU27 countries overall. Whereas consumers requiring 1 GB mobile data with 30 calls find offers much higher than the EU average, those seeking 20 GB mobile data with no calls find prices less than half the EU average.

Market competition

Bite Latvia provides most of the least expensive offers across all service bundles on the market in Latvia (10 of 12). LMT provides the remainder.



Prices in Latvia compared with EU average*

Bundle	Deviation (%)	Bundle	Deviation (%)	Bundle	Deviation (%)
MBB1	-13%	MBB2	-22%	MBB3	-7%
MBB4	-29%	MBB5	-55%	I1	25%
I2	58%	I3	19%	I4	8%
I5	13%	I6	34%	I7	13%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	LMT 1 GB	5.51	6.35
MBB2: 1 GB mobile data with no calls	LMT 1 GB	5.51	7.07
MBB3: 2 GB mobile data with no calls	Bite Latvia Bite 25 GB	8.56	9.23
MBB4: 5 GB mobile data with no calls	Bite Latvia Bite 25 GB	8.56	11.99
MBB5: 20 GB mobile data with no calls	Bite Latvia Bite 25 GB	8.56	19.11
I1: 0.5 GB mobile data with 30 calls	Bite Latvia Bite Priekšapmaksā	11.48	9.18
I2: 1 GB mobile data with 30 calls	Bite Latvia Bite 2 GB	15.89	10.03
I3: 2 GB mobile data with 100 calls	Bite Latvia Bite 2 GB	15.89	13.40
I4: 5 GB mobile data with 300 calls	Bite Latvia Bite 5 GB	20.03	18.47
I5: 20 GB mobile data with 300 calls	Bite Latvia Bite Neierobežots	31.08	27.60
I6: 5 GB mobile data with 30 calls	Bite Latvia Bite 5 GB	20.03	14.93
I7: 20 GB mobile data with 100 calls	Bite Latvia Bite Neierobežots	31.08	27.44



Lithuania



Trakai by Lukáš Lalinsky, flickr.com. CC BY-SA 2.0

Country report 2020

ISPs in sample

Telia Lietuva | Cgates | BALTICUM TV | Init | Splus

MNOs in sample

Tele2 | Bite Lietuva | Telia Lietuva

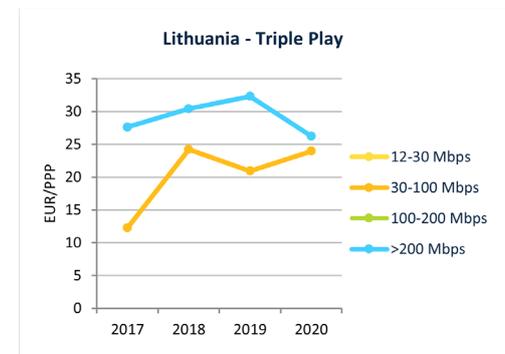
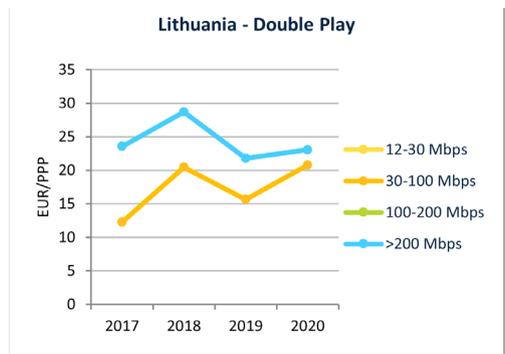
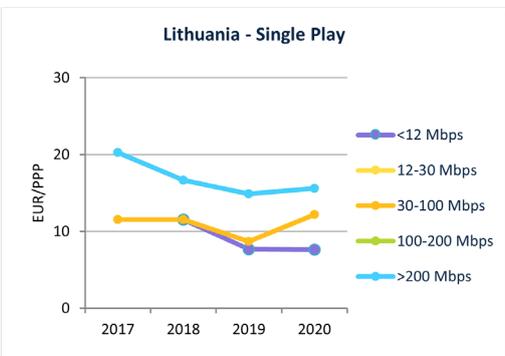
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Lithuania rose noticeably. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone and TV, prices fell noticeably (by 18%).



Market competition

Init provides a slightly higher number of the least expensive offers across all service bundles on the market in Lithuania (10 of 13) in comparison to the rest of the providers. BALTICUM TV or Splus provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Lithuania are much lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Lithuania compared with EU average*

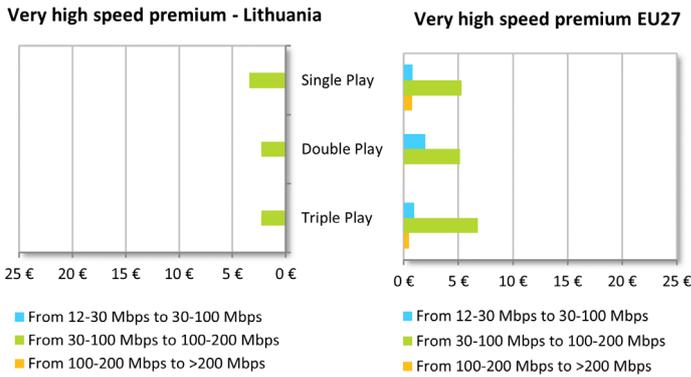
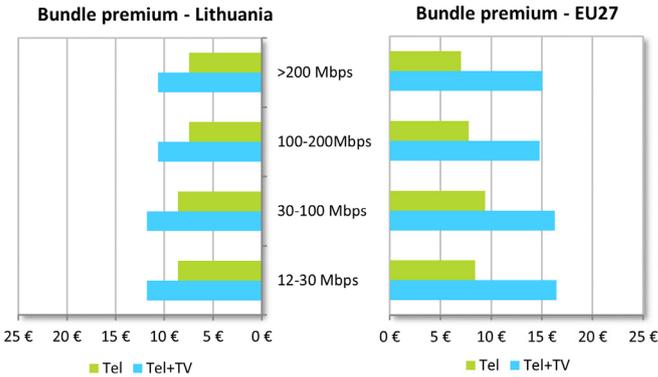
12-30Mbit		
Single Play	Double Play	Triple Play
● -42%	● -30%	● -36%
30-100Mbit		
Single Play	Double Play	Triple Play
● -45%	● -34%	● -38%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -46%	● -37%	● -40%
>200 Mbit		
Single Play	Double Play	Triple Play
● -47%	● -37%	● -41%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	BALTICUM TV Internet 5 Mbps	7.61	20.49
12-30 Mbps fixed internet	Splius EO	12.18	21.13
30-100 Mbps fixed internet	Splius EO	12.18	22.10
100-200 Mbps fixed internet	Init Internet 300 Mbps	15.60	28.89
>200 Mbps fixed internet	Init Internet 300 Mbps	15.60	29.37
12-30 Mbps fixed internet with fixed phone	Init Internet 100 Mbps	20.78	29.55
30-100 Mbps fixed internet with fixed phone	Init Internet 100 Mbps	20.78	31.51
100-200 Mbps fixed internet with fixed phone	Init Internet 300 Mbps	23.06	36.67
>200 Mbps fixed internet with fixed phone	Init Internet 300 Mbps	23.06	36.38
12-30 Mbps fixed internet with fixed phone and TV	Init Internet 100 Mbps	23.98	37.56
30-100 Mbps fixed internet with fixed phone and TV	Init Internet 100 Mbps	23.98	38.37
100-200 Mbps fixed internet with fixed phone and TV	Init Internet 300 Mbps	26.26	43.67
>200 Mbps fixed internet with fixed phone and TV	Init Internet 300 Mbps	26.26	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Lithuania rose noticeably. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile, prices fell somewhat (by 2%).

Market competition

Init provides all the least expensive offers across all service bundles on the market in Lithuania.

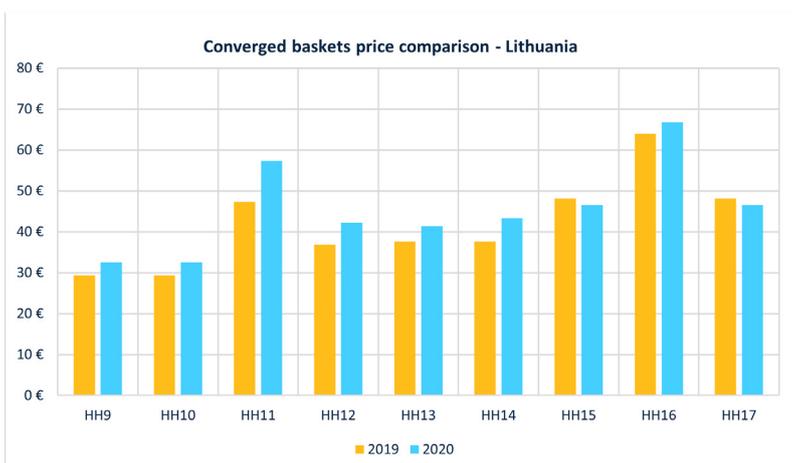
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Lithuania are slightly lower than the EU average. However, the lowest price of offers for consumers requiring 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile is slightly higher than the EU average.

Bundle premium - mobile component			Lithuania	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	11,72			9,43
	Double Play 30-100 Mbps	11,72			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	18,27			12,42
	Double Play 100-200 Mbps	18,27			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	20,25			18,25
	Triple Play 100-200 Mbps	20,25			18,18
	Triple Play >200 Mbps	20,25			17,20

Prices in Lithuania compared with EU average*			
HH9	HH10	HH11	
● -17%	● -20%	● 2%	
HH12	HH13	HH14	
● -17%	● -17%	● -21%	
HH15	HH16	HH17	
● -25%	● -16%	● -25%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Init / Tele2 Internet 100 Mbps / Tariff plan 1GB	32.50	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Init / Tele2 Internet 100 Mbps / Tariff plan 1GB	32.50	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Init / Telia Lietuva Internet 100 Mbps / Mobile flexi 4	57.32	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Init / Telia Lietuva Internet 100 Mbps / Mobile flexi 4	42.25	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Init / Telia Lietuva Internet 300 Mbps / Mobile flexi 4	41.33	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Init / Tele2 Internet 300 Mbps / Tariff plan 5GB	43.31	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Init / Tele2 Internet 300 Mbps / Tariff plan 5GB	46.51	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Init / Tele2 Internet 300 Mbps / Tariff plan 5GB	66.76	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Init / Tele2 Internet 300 Mbps / Tariff plan 5GB	46.51	61.63

Mobile Broadband

Price development

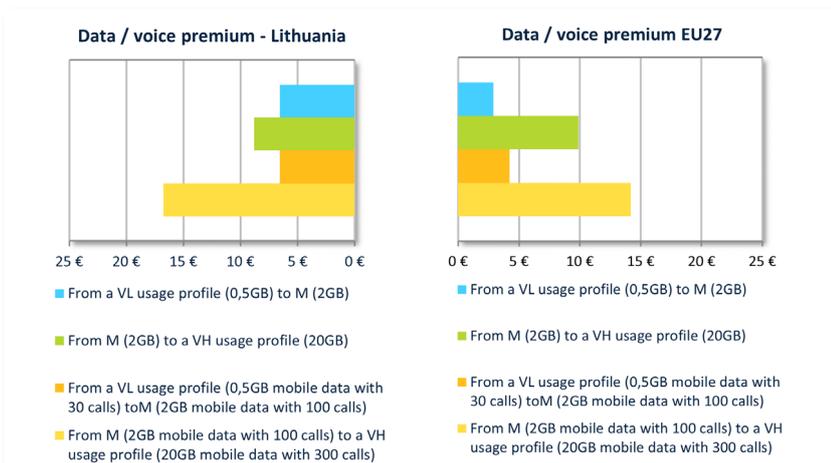
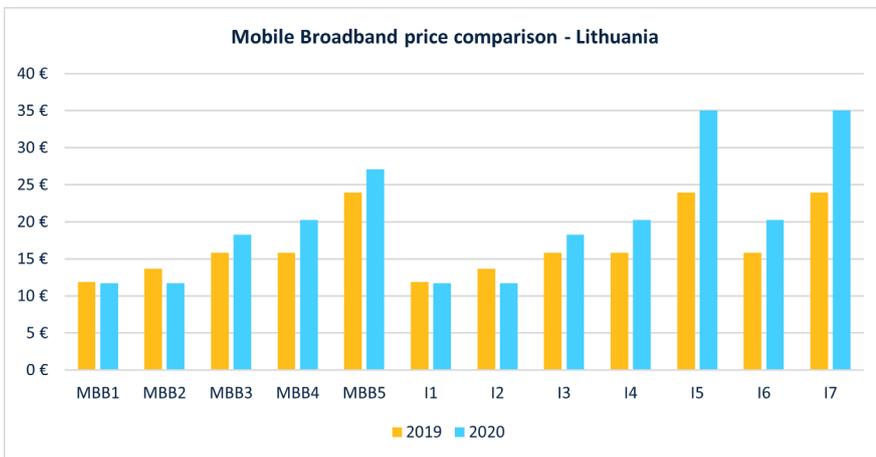
Compared to 2019, averaging over the usage baskets shown, prices in Lithuania rose noticeably. In contrast, for consumers requiring 1 GB mobile data with no calls, prices fell noticeably (by 13%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Lithuania are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Market competition

Tele2 provides a slightly higher number of the least expensive offers across all service bundles on the market in Lithuania (7 of 12) in comparison to the rest of the providers. Bite Lietuva or Telia Lietuva provide the remainder.



Prices in Lithuania compared with EU average*

Usage Basket	Deviation (%)	Usage Basket	Deviation (%)	Usage Basket	Deviation (%)
MBB1	85%	MBB2	66%	MBB3	98%
MBB4	69%	MBB5	42%	I1	28%
I2	17%	I3	36%	I4	10%
I5	27%	I6	36%	I7	28%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Tele2 Tariff plan 1GB	11.72	6.35
MBB2: 1 GB mobile data with no calls	Tele2 Tariff plan 1GB	11.72	7.07
MBB3: 2 GB mobile data with no calls	Telia Lietuva Mobile flexi 4	18.27	9.23
MBB4: 5 GB mobile data with no calls	Tele2 Tariff plan 5GB	20.25	11.99
MBB5: 20 GB mobile data with no calls	Bite Lietuva Travel internet	27.07	19.11
I1: 0.5 GB mobile data with 30 calls	Tele2 Tariff plan 1GB	11.72	9.18
I2: 1 GB mobile data with 30 calls	Tele2 Tariff plan 1GB	11.72	10.03
I3: 2 GB mobile data with 100 calls	Telia Lietuva Mobile flexi 4	18.27	13.40
I4: 5 GB mobile data with 300 calls	Tele2 Tariff plan 5GB	20.25	18.47
I5: 20 GB mobile data with 300 calls	Telia Lietuva Mobile flexi 20	35.02	27.60
I6: 5 GB mobile data with 30 calls	Tele2 Tariff plan 5GB	20.25	14.93
I7: 20 GB mobile data with 100 calls	Telia Lietuva Mobile flexi 20	35.02	27.44



Luxembourg



Sunset over Luxembourg City by laurentlux, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Eltrona | Luxembourg Online | Proximus Luxembourg (Tango) |
Orange Lux | Post Telecom Lux

MNOs in sample

Post Telecom Lux | Proximus Luxembourg (Tango)

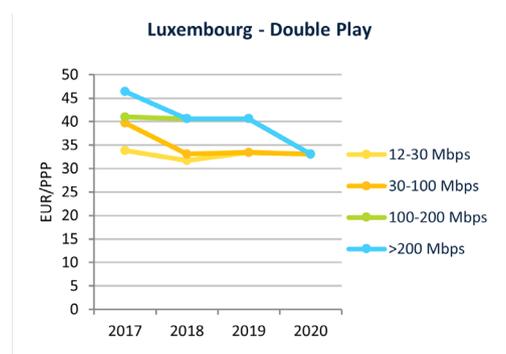
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, across all baskets on average, prices in Luxembourg rose noticeably. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone, prices fell noticeably (by 18%).



Market competition

Luxembourg Online provides a slightly higher number of the least expensive offers across all service bundles on the market in Luxembourg (9 of 13) in comparison to the rest of the providers. Eltrona or Orange Lux provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Luxembourg are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet with fixed phone is slightly lower than the EU average.

Prices in Luxembourg compared with EU average*

12-30Mbit			
Single Play	Double Play	Triple Play	
28%	12%	16%	
30-100Mbit			
Single Play	Double Play	Triple Play	
23%	5%	14%	
100-200 Mbit			
Single Play	Double Play	Triple Play	
-4%	-10%	0%	
>200 Mbit			
Single Play	Double Play	Triple Play	
13%	-9%	-2%	

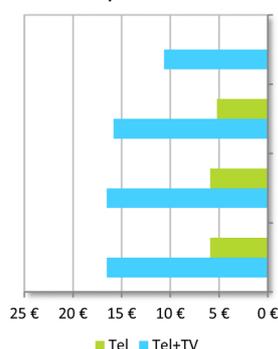
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

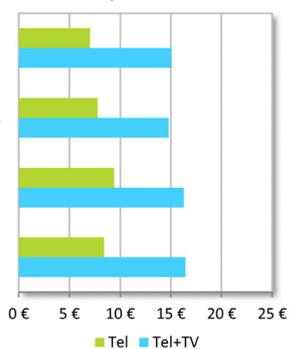
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Orange Lux Fibre Basic	27.14	20.49
12-30 Mbps fixed internet	Orange Lux Fibre Basic	27.14	21.13
30-100 Mbps fixed internet	Orange Lux Fibre Basic	27.14	22.10
100-200 Mbps fixed internet	Eltrona Cool 200	27.82	28.89
>200 Mbps fixed internet	Luxembourg Online Lol Fiber S	33.04	29.37
12-30 Mbps fixed internet with fixed phone	Luxembourg Online Lol Fiber S	33.04	29.55
30-100 Mbps fixed internet with fixed phone	Luxembourg Online Lol Fiber S	33.04	31.51
100-200 Mbps fixed internet with fixed phone	Luxembourg Online Lol Fiber S	33.04	36.67
>200 Mbps fixed internet with fixed phone	Luxembourg Online Lol Fiber S	33.04	36.38
12-30 Mbps fixed internet with fixed phone and TV	Luxembourg Online Lol Fiber S + TV	43.67	37.56
30-100 Mbps fixed internet with fixed phone and TV	Luxembourg Online Lol Fiber S + TV	43.67	38.37
100-200 Mbps fixed internet with fixed phone and TV	Luxembourg Online Lol Fiber S + TV	43.67	43.67
>200 Mbps fixed internet with fixed phone and TV	Luxembourg Online Lol Fiber S + TV	43.67	44.43

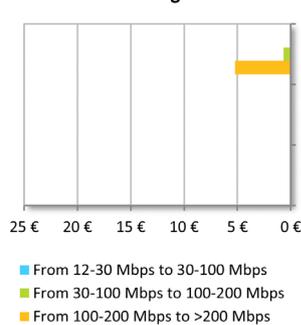
Bundle premium - Luxembourg



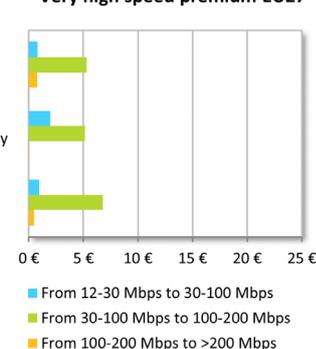
Bundle premium - EU27



Very high speed premium - Luxembourg



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Luxembourg fell somewhat. In contrast, for consumers requiring 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile, prices remained nearly unchanged.

Market competition

Luxembourg Online provides all the least expensive offers across all service bundles on the market in Luxembourg.

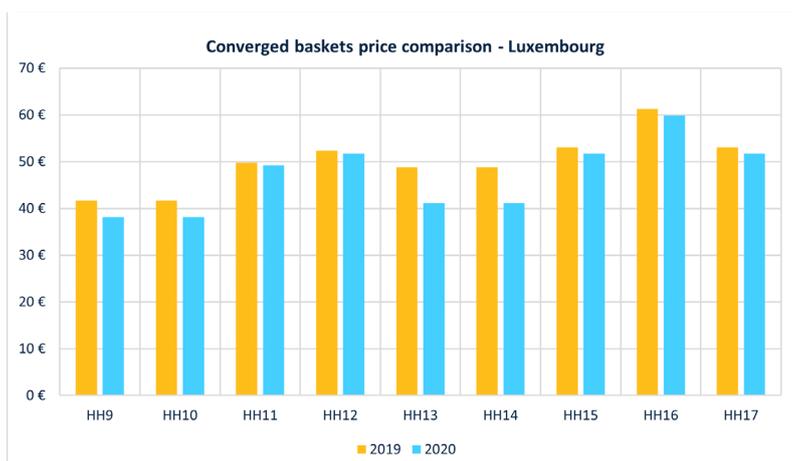
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Luxembourg are slightly lower than the EU average. However, the lowest price of offers for consumers requiring 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile is slightly higher than the EU average.

Bundle premium - mobile component			Luxembourg		EU
30 calls 1GB mobile	Double Play 12-30 Mbps	5,06			9,43
	Double Play 30-100 Mbps	5,06			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	8,09			12,42
	Double Play 100-200 Mbps	8,09			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	8,09			18,25
	Triple Play 100-200 Mbps	8,09			18,18
	Triple Play >200 Mbps	8,09			17,20

Prices in Luxembourg compared with EU average*			
HH9	HH10	HH11	
-2%	-7%	-13%	
HH12	HH13	HH14	
2%	-18%	-25%	
HH15	HH16	HH17	
-16%	-25%	-16%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Luxembourg Online / Proximus Luxembourg (Tango) Lol Fiber S / Tango Smart XS	38.10	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Luxembourg Online / Proximus Luxembourg (Tango) Lol Fiber S / Tango Smart XS	38.10	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S / Scoubidou Mini	49.23	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S + TV / Scoubidou Mini	51.77	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S / Scoubidou Mini	41.13	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S / Scoubidou Mini	41.13	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S + TV / Scoubidou Mini	51.77	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S + TV / Scoubidou Mini	59.86	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Luxembourg Online / Post Telecom Lux Lol Fiber S + TV / Scoubidou Mini	51.77	61.63

Mobile Broadband

Price development

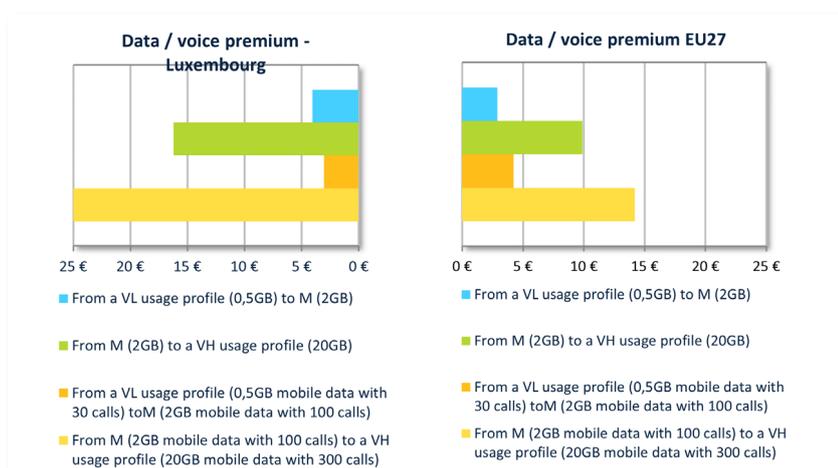
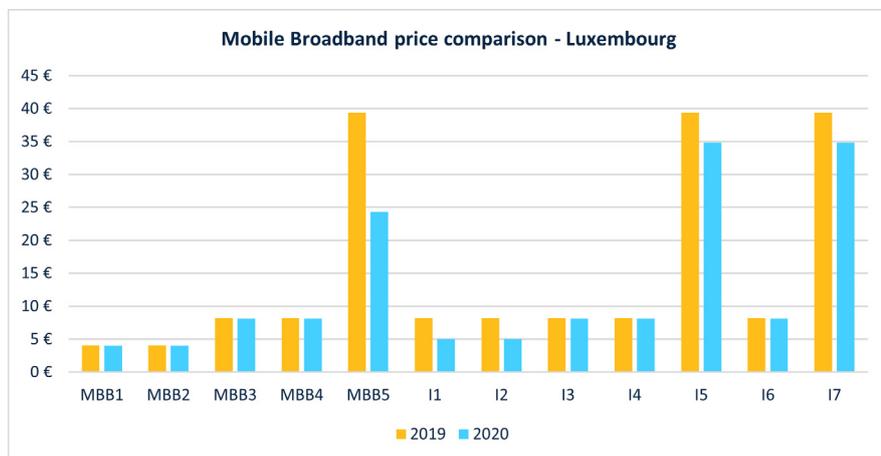
Compared to 2019, averaging over the usage baskets shown, prices in Luxembourg fell noticeably. In contrast, for consumers requiring 20 GB mobile data with no calls, prices fell strongly (by 38%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Luxembourg are lower than the EU average. However, the lowest price of offers for consumers requiring 20 GB mobile data is somewhat higher than the EU average.

Market competition

Post Telecom Lux provides most of the least expensive offers across all service bundles on the market in Luxembourg (10 of 12). Proximus Luxembourg (Tango) provides the remainder.



Prices in Luxembourg compared with EU average*

MBB1	MBB2	MBB3
-36%	-43%	-12%
MBB4	MBB5	I1
-32%	27%	-45%
I2	I3	I4
-50%	-40%	-56%
I5	I6	I7
26%	-46%	27%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Post Telecom Lux Basic + 12 months	4.04	6.35
MBB2: 1 GB mobile data with no calls	Post Telecom Lux Basic + 12 months	4.04	7.07
MBB3: 2 GB mobile data with no calls	Post Telecom Lux Scoubidou Mini	8.09	9.23
MBB4: 5 GB mobile data with no calls	Post Telecom Lux Scoubidou Mini	8.09	11.99
MBB5: 20 GB mobile data with no calls	Post Telecom Lux Data to go 20 GB	24.30	19.11
I1: 0.5 GB mobile data with 30 calls	Proximus Luxembourg (Tango) Tango Smart XS	5.06	9.18
I2: 1 GB mobile data with 30 calls	Proximus Luxembourg (Tango) Tango Smart XS	5.06	10.03
I3: 2 GB mobile data with 100 calls	Post Telecom Lux Scoubidou Mini	8.09	13.40
I4: 5 GB mobile data with 300 calls	Post Telecom Lux Scoubidou Mini	8.09	18.47
I5: 20 GB mobile data with 300 calls	Post Telecom Lux 5G power 20GB	34.83	27.60
I6: 5 GB mobile data with 30 calls	Post Telecom Lux Scoubidou Mini	8.09	14.93
I7: 20 GB mobile data with 100 calls	Post Telecom Lux 5G power 20GB	34.83	27.44



Malta



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Country report 2020

ISPs in sample

GO | Melita | Vodafone Malta

MNOs in sample

Vodafone | GO Mobile | Melita plc

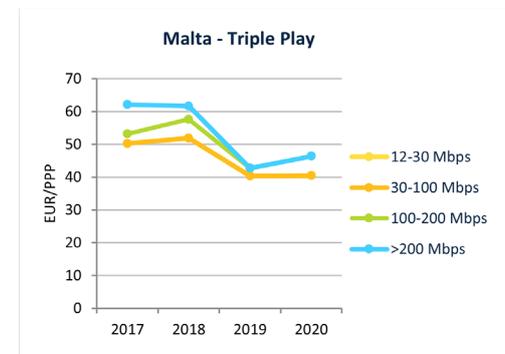
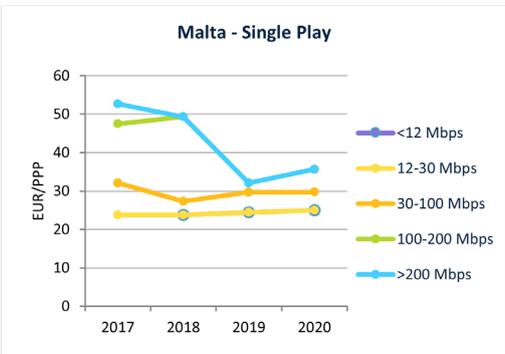
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Malta rose somewhat. In contrast, for consumers requiring 30-100 Mbps fixed internet, prices remained nearly unchanged.



Market competition

GO provides a slightly higher number of the least expensive offers across all service bundles on the market in Malta (8 of 13) in comparison to the rest of the providers. Melita or Vodafone Malta provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Malta are slightly higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Malta compared with EU average*

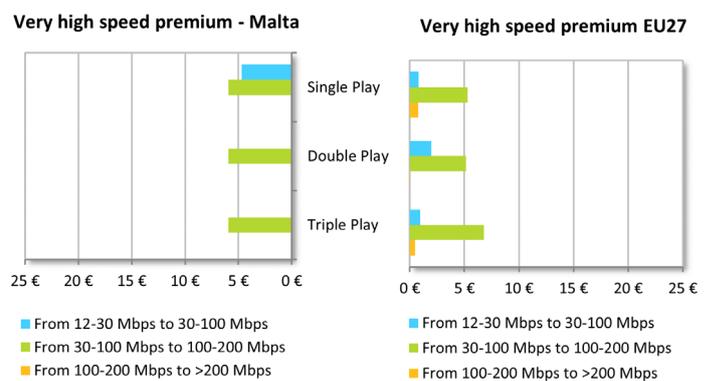
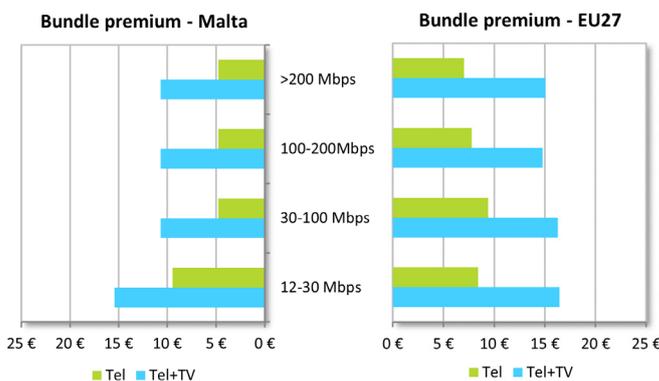
12-30Mbit		
Single Play	Double Play	Triple Play
18%	17%	8%
30-100Mbit		
Single Play	Double Play	Triple Play
35%	9%	5%
100-200 Mbit		
Single Play	Double Play	Triple Play
24%	10%	6%
>200 Mbit		
Single Play	Double Play	Triple Play
22%	11%	4%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Melita Internet Fibre Power 30	25.03	20.49
12-30 Mbps fixed internet	Melita Internet Fibre Power 30	25.03	21.13
30-100 Mbps fixed internet	Vodafone Malta 100 Mbps Fibre + Phone	29.74	22.10
100-200 Mbps fixed internet	Vodafone Malta 300 Mbps Fibre + Phone	35.69	28.89
>200 Mbps fixed internet	Vodafone Malta 300 Mbps Fibre + Phone	35.69	29.37
12-30 Mbps fixed internet with fixed phone	GO Turbo 100 + Phone unlimited calls	34.50	29.55
30-100 Mbps fixed internet with fixed phone	GO Turbo 100 + Phone unlimited calls	34.50	31.51
100-200 Mbps fixed internet with fixed phone	GO Super 300 + Phone unlimited calls	40.45	36.67
>200 Mbps fixed internet with fixed phone	GO Super 300 + Phone unlimited calls	40.45	36.38
12-30 Mbps fixed internet with fixed phone and TV	GO Turbo 100 + TV + Phone unlimited calls	40.45	37.56
30-100 Mbps fixed internet with fixed phone and TV	GO Turbo 100 + TV + Phone unlimited calls	40.45	38.37
100-200 Mbps fixed internet with fixed phone and TV	GO Super 300 + TV + Phone unlimited calls	46.40	43.67
>200 Mbps fixed internet with fixed phone and TV	GO Super 300 + TV + Phone unlimited calls	46.40	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Malta rose noticeably. In contrast, for consumers requiring 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile, prices fell noticeably (by 14%).

Market competition

GO provides most of the least expensive offers across all service bundles on the market in Malta (8 of 9). Vodafone Malta provides the remainder.

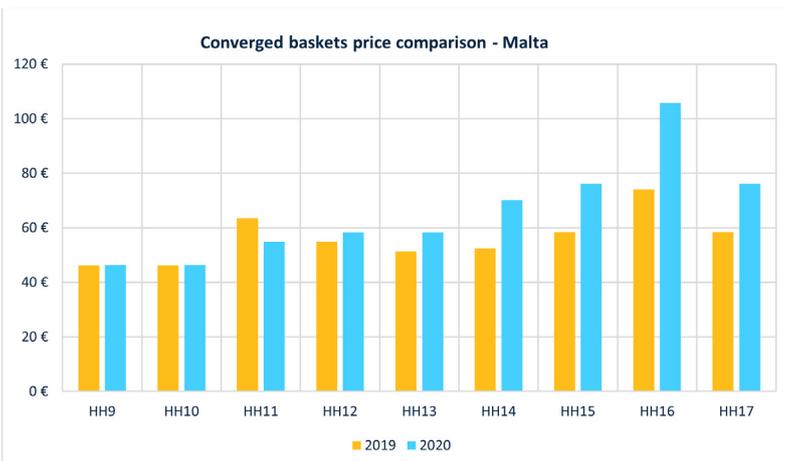
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Malta are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile is slightly lower than the EU average.

Bundle premium - mobile component					
			Malta	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	11,90			9,43
	Double Play 30-100 Mbps	11,90			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	17,85			12,42
	Double Play 100-200 Mbps	17,85			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	29,74	4		18,25
	Triple Play 100-200 Mbps	29,74	4		18,18
	Triple Play >200 Mbps	29,74	4		17,20

Prices in Malta compared with EU average*			
HH9	HH10	HH11	
19%	14%	-3%	
HH12	HH13	HH14	
15%	17%	28%	
HH15	HH16	HH17	
23%	33%	24%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	GO / Melita plc Turbo 100 + Phone unlimited calls / Pockit Pass M	46.40	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	GO / Melita plc Turbo 100 + Phone unlimited calls / Pockit Pass M	46.40	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Vodafone Malta 100 Mbps Fibre + RED Voice	54.93	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	GO / GO Mobile Turbo 100 + TV + Phone unlimited calls / Smart Plus	58.30	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	GO / GO Mobile Super 300 + Phone unlimited calls / Smart Plus	58.30	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	GO / GO Mobile Super 300 + Phone unlimited calls / 5GB	70.18	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	GO / GO Mobile Super 300 + TV + Phone unlimited calls / 5GB	76.13	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	GO / GO Mobile Super 300 + TV + Phone unlimited calls / 5GB	105.87	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	GO / GO Mobile Super 300 + TV + Phone unlimited calls / 5GB	76.13	61.63

Mobile Broadband

Price development

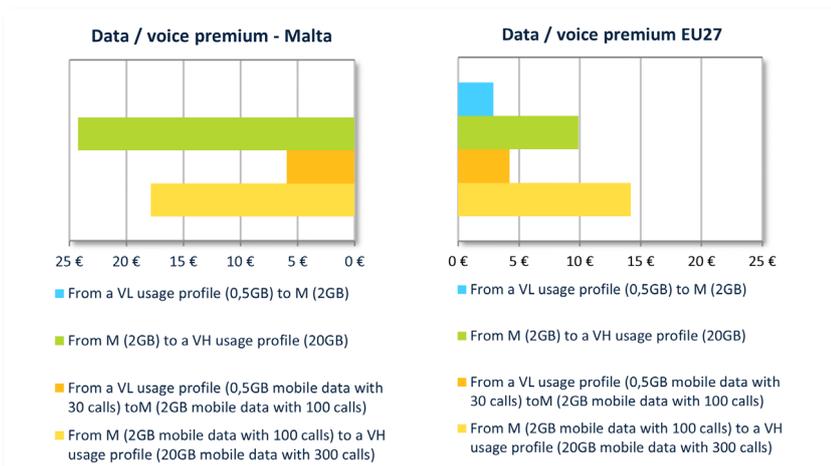
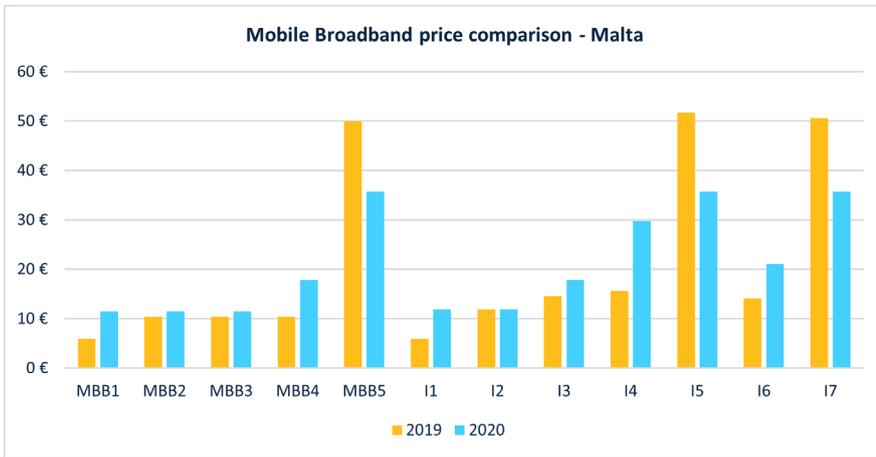
Compared to 2019, averaging over the usage baskets shown, prices in Malta rose strongly. In contrast, for consumers requiring 20 GB mobile data with 300 calls, prices fell strongly (by 31%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Malta are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Market competition

Vodafone and Melita plc each provide the majority of the least expensive offers across all service bundles on the market in Malta (5 of 12). GO Mobile provides the remainder.



Prices in Malta compared with EU average*

Bundle	Deviation (%)	Bundle	Deviation (%)	Bundle	Deviation (%)
MBB1	81%	MBB2	62%	MBB3	24%
MBB4	49%	MBB5	87%	I1	30%
I2	19%	I3	33%	I4	61%
I5	29%	I6	41%	I7	30%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Vodafone Genius 2.5GB / Mix 500	11.46	6.35
MBB2: 1 GB mobile data with no calls	Vodafone Genius 2.5GB	11.46	7.07
MBB3: 2 GB mobile data with no calls	Vodafone Genius 2.5GB	11.46	9.23
MBB4: 5 GB mobile data with no calls	Vodafone / GO Mobile Genius 5GB / 5 GB	17.84	11.99
MBB5: 20 GB mobile data with no calls	Melita plc Surfer	35.70	19.11
I1: 0.5 GB mobile data with 30 calls	Melita plc Flow 1 / Pockit Pass M	11.90	9.18
I2: 1 GB mobile data with 30 calls	Melita plc Pockit Pass M	11.90	10.03
I3: 2 GB mobile data with 100 calls	GO Mobile Smart Plus	17.85	13.40
I4: 5 GB mobile data with 300 calls	GO Mobile 5GB	29.74	18.47
I5: 20 GB mobile data with 300 calls	Melita plc Surfer	35.70	27.60
I6: 5 GB mobile data with 30 calls	Vodafone Genius 5GB	21.10	14.93
I7: 20 GB mobile data with 100 calls	Melita plc Surfer	35.70	27.44



Netherlands



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Country report 2020

ISPs in sample

VodafoneZiggo | T-Mobile | KPN

MNOs in sample

KPN | VodafoneZiggo | T-Mobile | Tele2

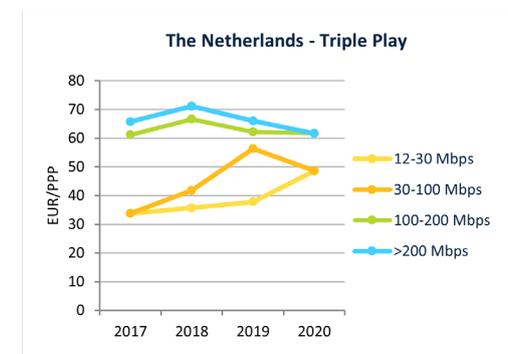
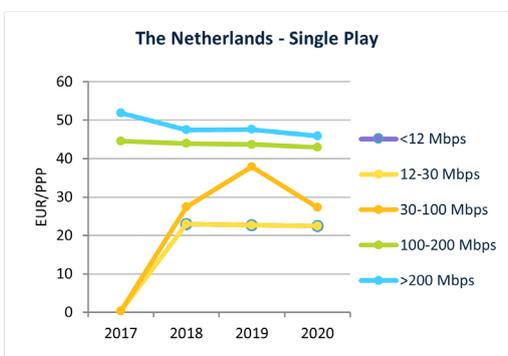
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in the Netherlands show no clear trend compared to the previous year (2019). Prices for offers including 30-100 Mbps fixed internet fell strongly.



Market competition

T-Mobile provides a slightly higher number of the least expensive offers across all service bundles on the market in the Netherlands (10 of 13) in comparison to the rest of the providers. VodafoneZiggo or KPN provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in the Netherlands are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in the Netherlands compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
6%	5%	29%
30-100Mbit		
Single Play	Double Play	Triple Play
24%	54%	27%
100-200 Mbit		
Single Play	Double Play	Triple Play
49%	65%	41%
>200 Mbit		
Single Play	Double Play	Triple Play
56%	69%	39%

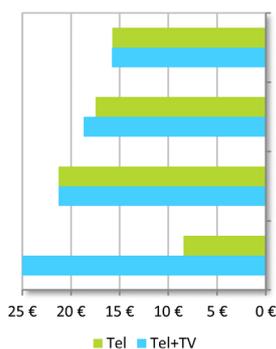
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

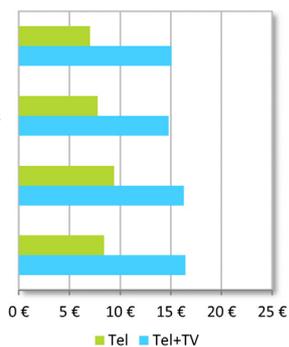
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	T-Mobile Internet Light ADSL	22.49	20.49
12-30 Mbps fixed internet	T-Mobile Internet Light ADSL	22.49	21.13
30-100 Mbps fixed internet	T-Mobile Internet Basic	27.30	22.10
100-200 Mbps fixed internet	KPN Internet 200 Mbit / s	42.95	28.89
>200 Mbps fixed internet	T-Mobile Thuis Premium	45.86	29.37
12-30 Mbps fixed internet with fixed phone	T-Mobile Internet Light ADSL	30.95	29.55
30-100 Mbps fixed internet with fixed phone	T-Mobile Thuis Internet + Unlimited Mobiel	48.57	31.51
100-200 Mbps fixed internet with fixed phone	KPN Internet 200 Mbit / s + Telephone	60.42	36.67
>200 Mbps fixed internet with fixed phone	VodafoneZiggo All-in-1 Complete	61.62	36.38
12-30 Mbps fixed internet with fixed phone and TV	T-Mobile Thuis Internet + Unlimited Mobiel	48.57	37.56
30-100 Mbps fixed internet with fixed phone and TV	T-Mobile Thuis Internet + Unlimited Mobiel	48.57	38.37
100-200 Mbps fixed internet with fixed phone and TV	T-Mobile Premium - 1000Mbit/s	61.67	43.67
>200 Mbps fixed internet with fixed phone and TV	T-Mobile Premium - 1000Mbit/s	61.67	44.43

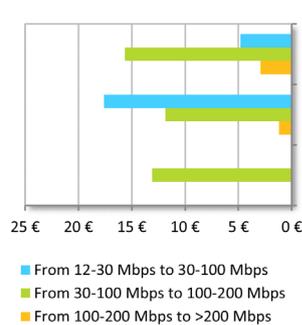
Bundle premium - The Netherlands



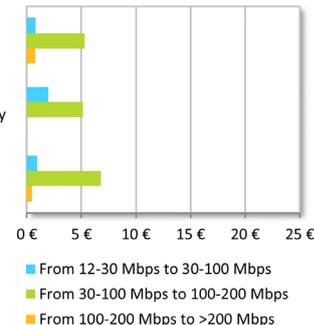
Bundle premium - EU27



Very high speed premium - The Netherlands



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in the Netherlands fell somewhat. In contrast, for consumers requiring 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile, prices rose somewhat (by 8%).

Market competition

T-Mobile provides the majority of the least expensive offers across all service bundles on the market in the Netherlands (7 of 9). KPN provides the remainder.

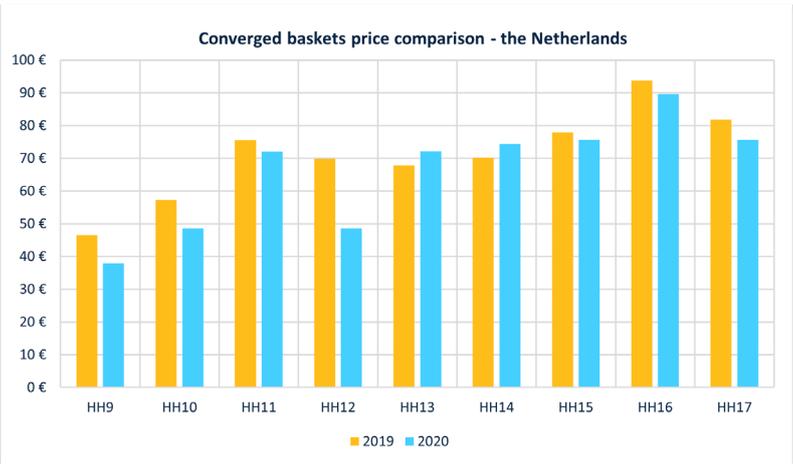
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in the Netherlands are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile is slightly lower than the EU average.

Bundle premium - mobile component		The Netherlands		EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	6,99			9,43
	Double Play 30-100 Mbps	0,00			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	0,00			12,42
	Double Play 100-200 Mbps	11,71			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	13,98			18,25
	Triple Play 100-200 Mbps	13,98			18,18
	Triple Play >200 Mbps	13,98			17,20

Prices in the Netherlands compared with EU average*			
HH9	HH10	HH11	
-3%	19%	28%	
HH12	HH13	HH14	
-4%	44%	35%	
HH15	HH16	HH17	
22%	12%	23%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	T-Mobile / Tele2 Internet Light ADSL / 1 GB data + 200 min	37.94	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	T-Mobile Thuis Internet + Unlimited Mobiel	48.57	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	T-Mobile / Tele2 Thuis Internet + Unlimited Mobiel / 7 GB data + 200 min	71.99	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	T-Mobile Thuis Internet + Unlimited Mobiel	48.57	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	KPN / Tele2 Internet 200 Mbit / s + Telephone / 7 GB data + 200 min	72.13	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	KPN / Tele2 Internet 200 Mbit / s + Telephone / 7 GB data + Unlimited calls	74.39	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	T-Mobile / Tele2 Premium - 1000Mbit/s / 7 GB data + Unlimited calls	75.64	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	T-Mobile / Tele2 Premium - 1000Mbit/s / 7 GB data + Unlimited calls	89.62	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	T-Mobile / Tele2 Premium - 1000Mbit/s / 7 GB data + Unlimited calls	75.64	61.63

Mobile Broadband

Price development

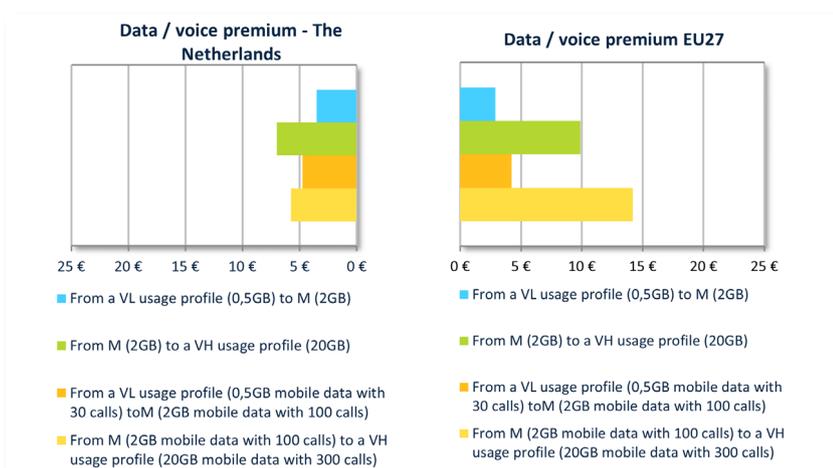
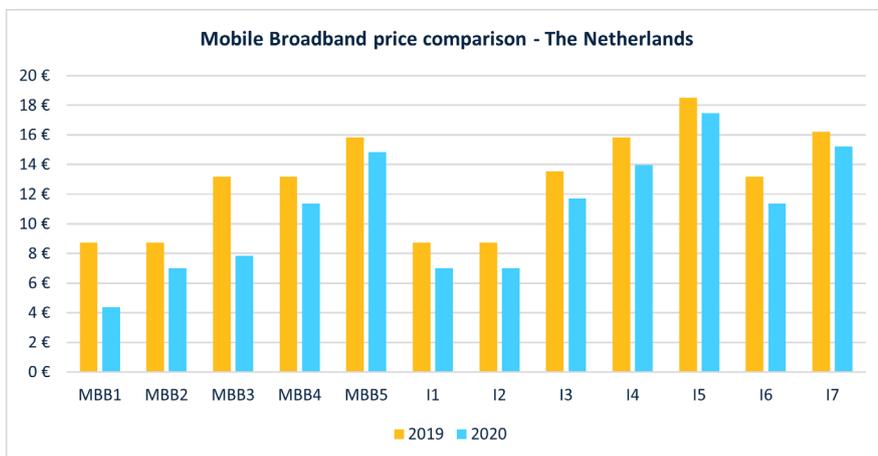
Compared to 2019, averaging over the usage baskets shown, prices in the Netherlands fell noticeably. The most different trend was for 20 GB mobile data with 300 calls, where prices fell somewhat (by 4%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in the Netherlands are lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Tele2 provides most of the least expensive offers across all service bundles on the market in the Netherlands (10 of 12). Vodafone-Ziggo provides the remainder.



Prices in the Netherlands compared with EU average*

Usage Basket	Deviation (%)
MBB1	-31%
MBB2	-1%
MBB3	-15%
MBB4	-5%
MBB5	-22%
I1	-24%
I2	-30%
I3	-13%
I4	-24%
I5	-37%
I6	-24%
I7	-45%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	VodafoneZiggo Gratis simkaart + 500 MB maandbundel	4.37	6.35
MBB2: 1 GB mobile data with no calls	Tele2 1 GB data + 200 min	6.99	7.07
MBB3: 2 GB mobile data with no calls	VodafoneZiggo Gratis simkaart + 2 GB maandbundel	7.86	9.23
MBB4: 5 GB mobile data with no calls	Tele2 7 GB data + 200 min	11.36	11.99
MBB5: 20 GB mobile data with no calls	Tele2 20 GB data + 200 min	14.85	19.11
I1: 0.5 GB mobile data with 30 calls	Tele2 1 GB data + 200 min	6.99	9.18
I2: 1 GB mobile data with 30 calls	Tele2 1 GB data + 200 min	6.99	10.03
I3: 2 GB mobile data with 100 calls	Tele2 7 GB data + 200 min	11.71	13.40
I4: 5 GB mobile data with 300 calls	Tele2 7 GB data + Unlimited calls	13.98	18.47
I5: 20 GB mobile data with 300 calls	Tele2 20 GB data + Unlimited calls	17.47	27.60
I6: 5 GB mobile data with 30 calls	Tele2 7 GB data + 200 min	11.36	14.93
I7: 20 GB mobile data with 100 calls	Tele2 20 GB data + 200 min	15.21	27.44



Poland



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Country report 2020

ISPs in sample

UPC Polska | Netia | Vectra |
MultiMedia Polska | Orange

MNOs in sample

Orange | P4 | Polkomtel

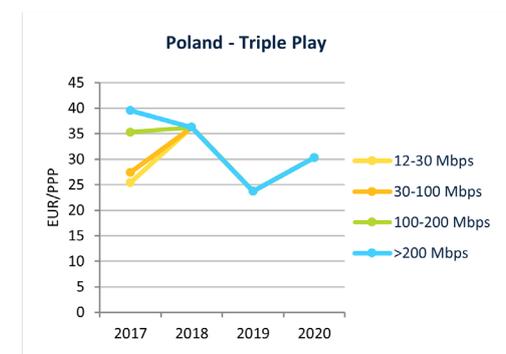
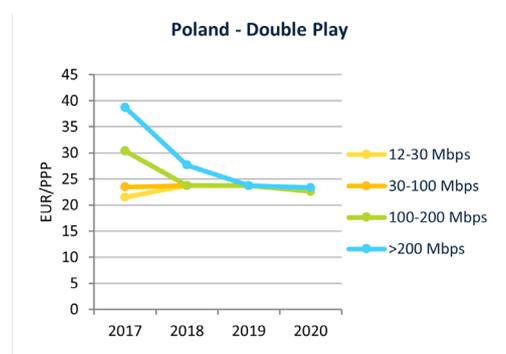
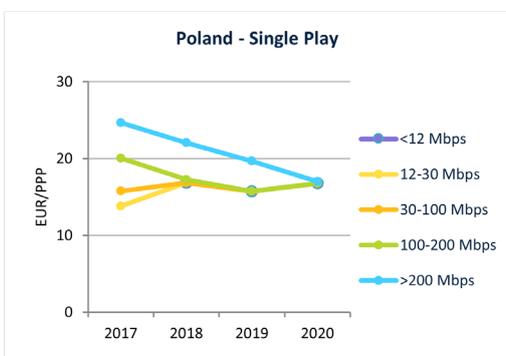
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, across all baskets on average, prices in Poland rose noticeably. In contrast, for consumers requiring >200 Mbps fixed internet, prices fell noticeably (by 12%).



Market competition

Vectra provides the majority of the least expensive offers across all service bundles on the market in Poland (8 of 13). Netia provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Poland are lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Poland compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● -20%	● -23%	● -19%
30-100Mbit		
Single Play	Double Play	Triple Play
● -24%	● -28%	● -21%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -42%	● -38%	● -31%
>200 Mbit		
Single Play	Double Play	Triple Play
● -42%	● -36%	● -32%

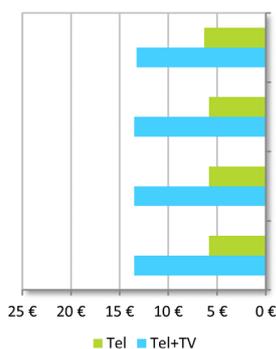
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

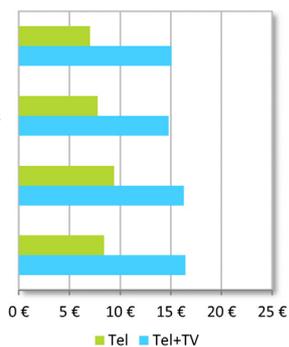
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Vectra Internet 150	16.80	20.49
12-30 Mbps fixed internet	Vectra Internet 150	16.80	21.13
30-100 Mbps fixed internet	Vectra Internet 150	16.80	22.10
100-200 Mbps fixed internet	Vectra Internet 150	16.80	28.89
>200 Mbps fixed internet	Netia Internet 300	17.01	29.37
12-30 Mbps fixed internet with fixed phone	Vectra Internet 150	22.63	29.55
30-100 Mbps fixed internet with fixed phone	Vectra Internet 150	22.63	31.51
100-200 Mbps fixed internet with fixed phone	Vectra Internet 150	22.63	36.67
>200 Mbps fixed internet with fixed phone	Vectra Internet 300	23.34	36.38
12-30 Mbps fixed internet with fixed phone and TV	Netia Internet 300	30.30	37.56
30-100 Mbps fixed internet with fixed phone and TV	Netia Internet 300	30.30	38.37
100-200 Mbps fixed internet with fixed phone and TV	Netia Internet 300	30.30	43.67
>200 Mbps fixed internet with fixed phone and TV	Netia Internet 300	30.30	44.43

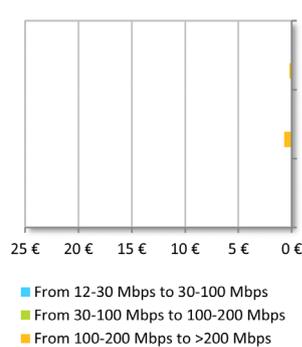
Bundle premium - Poland



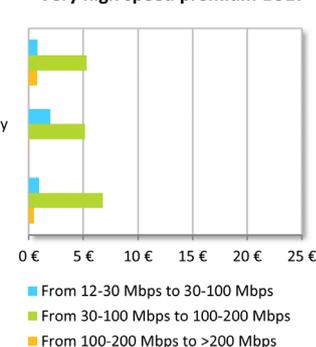
Bundle premium - EU27



Very high speed premium - Poland



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Poland fell somewhat. In contrast, for consumers requiring 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile, prices rose somewhat (by 6%).

Market competition

Vectra provides the majority of the least expensive offers across all service bundles on the market in Poland (5 of 9). Netia provides the remainder.

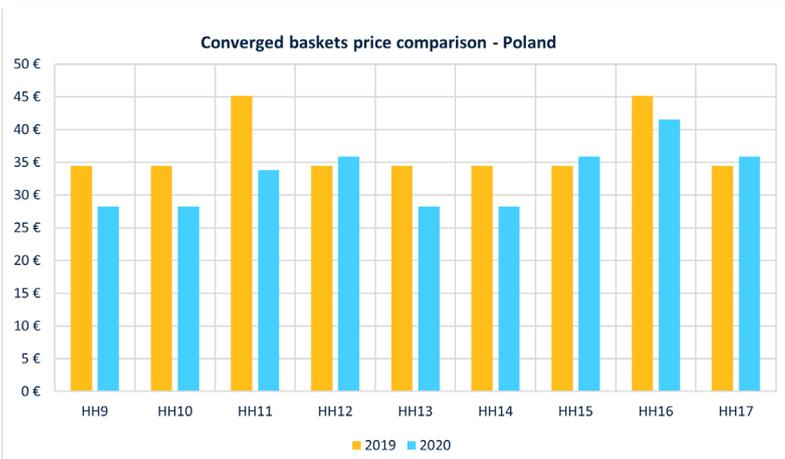
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Poland are lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component				Poland		EU
30 calls 1GB mobile	Double Play 12-30 Mbps	5,61			9,43	
	Double Play 30-100 Mbps	5,61			9,30	
100 calls 2GB mobile	Triple Play 30-100 Mbps	5,61			12,42	
	Double Play 100-200 Mbps	5,61			13,29	
300 calls 5GB mobile	Double Play 100-200Mbps	5,61			18,25	
	Triple Play 100-200 Mbps	5,61			18,18	
	Triple Play >200 Mbps	5,61			17,20	

Prices in Poland compared with EU average*			
HH9	HH10	HH11	
-28%	-31%	-40%	
HH12	HH13	HH14	
-29%	-43%	-49%	
HH15	HH16	HH17	
-42%	-48%	-42%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vectra / Orange Internet 150 / Flex 15	28.24	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vectra / Orange Internet 150 / Flex 15	28.24	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Vectra / Orange Internet 150 / Flex 15	33.84	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Netia / Orange Internet 300 / Flex 15	35.91	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Vectra / Orange Internet 150 / Flex 15	28.24	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Vectra / Orange Internet 150 / Flex 15	28.24	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Netia / Orange Internet 300 / Flex 15	35.91	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Netia / Orange Internet 300 / Flex 15	41.51	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Netia / Orange Internet 300 / Flex 15	35.91	61.63

Mobile Broadband

Price development

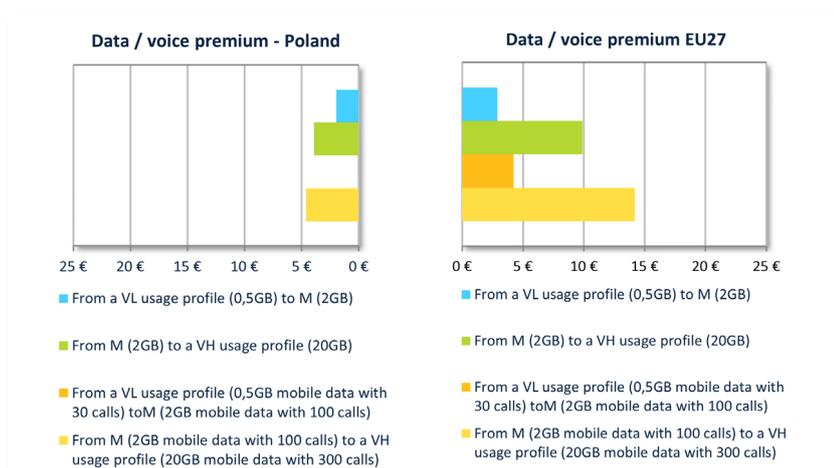
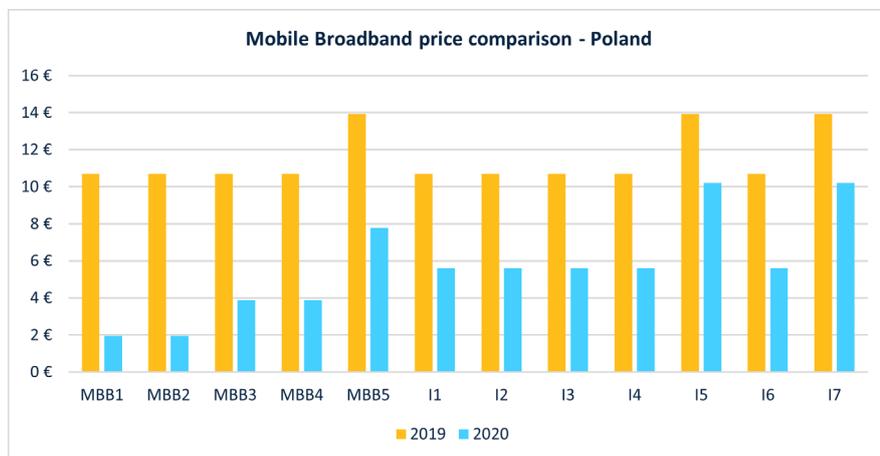
Compared to 2019, averaging over the usage baskets shown, prices in Poland fell very strongly. The most different trend was for 20 GB mobile data with 300 calls, where prices fell strongly (by 25%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Poland are very much lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Orange provides a slightly higher number of the least expensive offers across all service bundles on the market in Poland (8 of 12) in comparison to the rest of the providers. P4 or Polkomtel provide the remainder.



Prices in Poland compared with EU average*

MBB1	MBB2	MBB3
-69%	-73%	-58%
MBB4	MBB5	I1
-68%	-59%	-39%
I2	I3	I4
-44%	-58%	-70%
I5	I6	I7
-63%	-62%	-63%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	P4 Play 24 1GB	1.94	6.35
MBB2: 1 GB mobile data with no calls	P4 Play 24 1GB	1.94	7.07
MBB3: 2 GB mobile data with no calls	Orange Internet Mobily Podstawowy	3.88	9.23
MBB4: 5 GB mobile data with no calls	Orange Internet Mobily Podstawowy	3.88	11.99
MBB5: 20 GB mobile data with no calls	Orange Internet Mobily Podstawowy	7.77	19.11
I1: 0.5 GB mobile data with 30 calls	Orange Flex 15	5.61	9.18
I2: 1 GB mobile data with 30 calls	Orange Flex 15	5.61	10.03
I3: 2 GB mobile data with 100 calls	Orange Flex 15	5.61	13.40
I4: 5 GB mobile data with 300 calls	Orange Flex 15	5.61	18.47
I5: 20 GB mobile data with 300 calls	Polkomtel 30 (na kartę)	10.21	27.60
I6: 5 GB mobile data with 30 calls	Orange Flex 15	5.61	14.93
I7: 20 GB mobile data with 100 calls	Polkomtel 30 (na kartę)	10.21	27.44



Portugal



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Country report 2020

ISPs in sample

MEO (PT Comunicações) | NOS | Vodafone Portugal

MNOs in sample

MEO | Vodafone | NOS

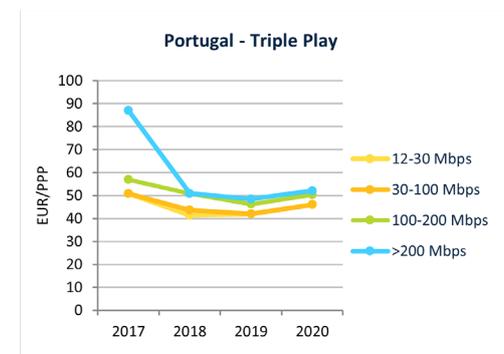
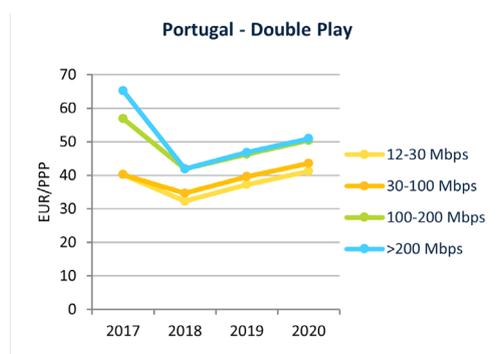
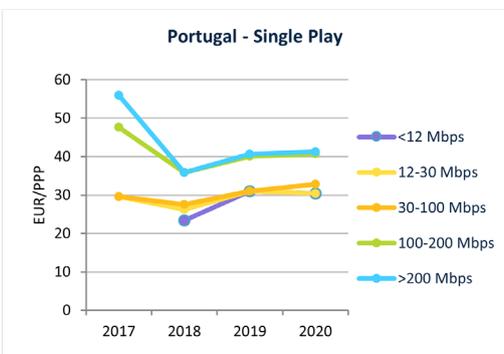
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Portugal rose somewhat. In contrast, for consumers requiring < 12 Mbps fixed internet, prices fell somewhat (by 3%).



Market competition

Vodafone Portugal provides a slightly higher number of the least expensive offers across all service bundles on the market in Portugal (10 of 13) in comparison to the rest of the providers. MEO (PT Comunicações) or NOS provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Portugal are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Portugal compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● 44%	● 39%	● 23%
30-100Mbit		
Single Play	Double Play	Triple Play
● 49%	● 38%	● 20%
100-200 Mbit		
Single Play	Double Play	Triple Play
● 41%	● 37%	● 15%
>200 Mbit		
Single Play	Double Play	Triple Play
● 40%	● 40%	● 17%

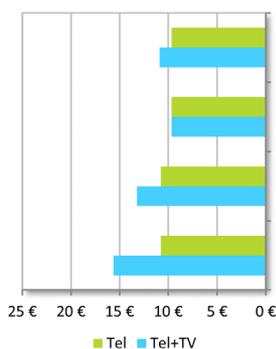
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

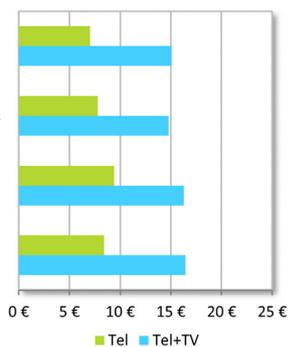
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	MEO (PT Comunicações) M1 Net 30 Mbps	30.40	20.49
12-30 Mbps fixed internet	MEO (PT Comunicações) M1 Net 30 Mbps	30.40	21.13
30-100 Mbps fixed internet	NOS 100Mbps	32.83	22.10
100-200 Mbps fixed internet	Vodafone Portugal Fibra 3 Plus (200 Mbps)	40.68	28.89
>200 Mbps fixed internet	Vodafone Portugal Fibra 2 Gold (400 Mbps)	41.23	29.37
12-30 Mbps fixed internet with fixed phone	Vodafone Portugal Fibra 2 Plus (30 Mbps)	41.17	29.55
30-100 Mbps fixed internet with fixed phone	Vodafone Portugal Fibra 2 Gold (100 Mbps)	43.61	31.51
100-200 Mbps fixed internet with fixed phone	Vodafone Portugal Fibra 3 Plus (200 Mbps)	50.35	36.67
>200 Mbps fixed internet with fixed phone	Vodafone Portugal Fibra 2 Gold (400 Mbps)	50.90	36.38
12-30 Mbps fixed internet with fixed phone and TV	Vodafone Portugal Fibra 3 Light (100 Mbps)	46.04	37.56
30-100 Mbps fixed internet with fixed phone and TV	Vodafone Portugal Fibra 3 Light (100 Mbps)	46.04	38.37
100-200 Mbps fixed internet with fixed phone and TV	Vodafone Portugal Fibra 3 Plus (200 Mbps)	50.35	43.67
>200 Mbps fixed internet with fixed phone and TV	Vodafone Portugal Fibra 3 Gold (500 Mbps)	52.12	44.43

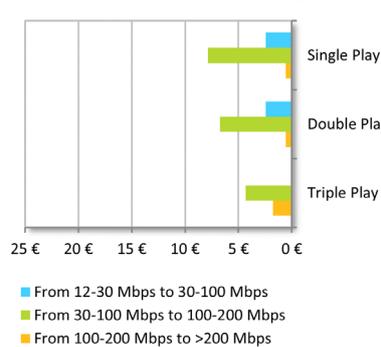
Bundle premium - Portugal



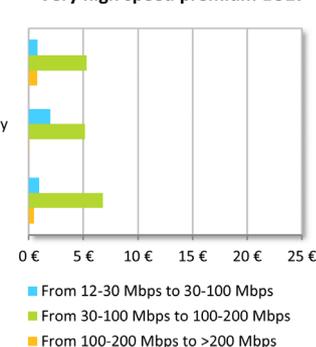
Bundle premium - EU27



Very high speed premium - Portugal



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Prices for household broadband services in Portugal show no clear trend compared to the previous year (2019). Prices for offers including 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile fell noticeably.

Market competition

Vodafone Portugal provides all the least expensive offers across all service bundles on the market in Portugal.

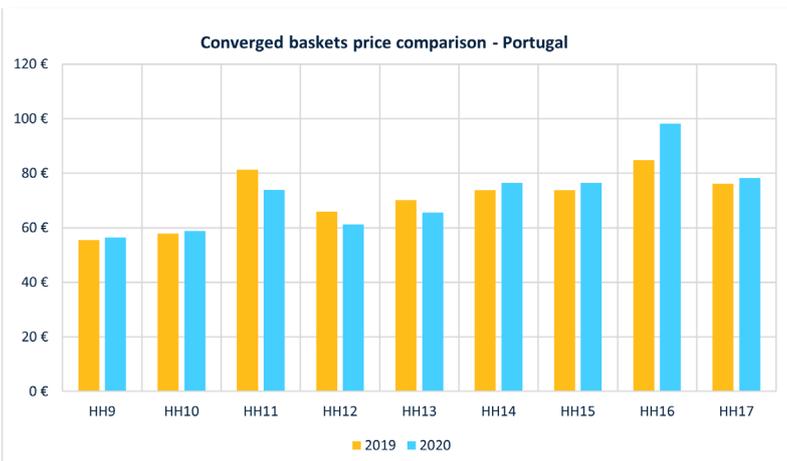
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Portugal are somewhat higher than the EU average. No offers were found to be less expensive than the EU average.

Bundle premium - mobile component					
			Portugal	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	15,20			9,43
	Double Play 30-100 Mbps	15,20			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	15,20			12,42
	Double Play 100-200 Mbps	15,20			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	26,14			18,25
	Triple Play 100-200 Mbps	26,14			18,18
	Triple Play >200 Mbps	26,14			17,20

Prices in Portugal compared with EU average*			
HH9	HH10	HH11	
● 45%	● 44%	● 31%	
HH12	HH13	HH14	
● 21%	● 31%	● 39%	
HH15	HH16	HH17	
● 24%	● 23%	● 27%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone Portugal / MEO Fibra 2 Plus (30 Mbps) / UZO 3GB	56.38	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Vodafone Portugal / MEO Fibra 2 Gold (100 Mbps) / UZO 3GB	58.81	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Vodafone Portugal / MEO Fibra 2 Gold (100 Mbps) / UZO 3GB	74.01	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Vodafone Portugal / MEO Fibra 3 Light (100 Mbps) / UZO 3GB	61.24	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Vodafone Portugal / MEO Fibra 3 Plus (200 Mbps) / UZO 3GB	65.55	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Vodafone Portugal / MEO Fibra 3 Plus (200 Mbps) / M Móvel 5 GB + 1000	76.49	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Vodafone Portugal / MEO Fibra 3 Plus (200 Mbps) / M Móvel 5 GB + 1000	76.49	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Vodafone Portugal Fibra 4 Plus (200 Mbps)	98.22	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Vodafone Portugal / MEO Fibra 3 Gold (500 Mbps) / M Móvel 5 GB + 1000	78.26	61.63

Mobile Broadband

Price development

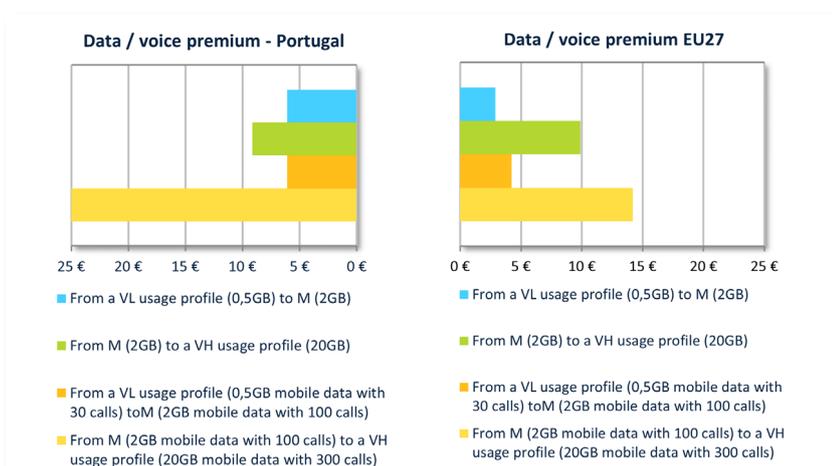
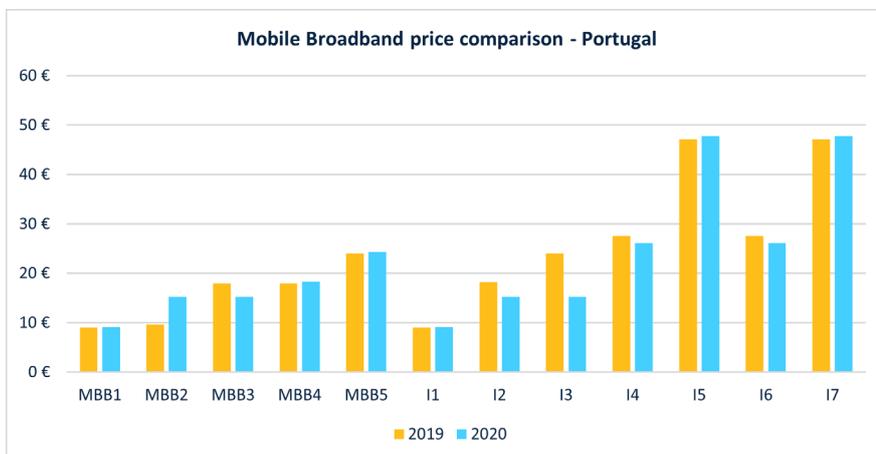
Prices for mobile broadband services in Portugal show no clear trend compared to the previous year (2019). Prices for offers including 2 GB mobile data with 100 calls fell strongly.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Portugal are much higher than the EU average. However, the lowest price of offers for consumers requiring 0.5 GB mobile data with 30 calls is slightly lower than the EU average.

Market competition

MEO provides most of the least expensive offers across all service bundles on the market in Portugal (10 of 12). Vodafone provides the remainder.



Prices in Portugal compared with EU average*

MBB1	MBB2	MBB3
● 44%	● 115%	● 65%
MBB4	MBB5	I1
● 52%	● 27%	● -1%
I2	I3	I4
● 52%	● 13%	● 42%
I5	I6	I7
● 73%	● 75%	● 74%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	MEO UZO Sempre	9.12	6.35
MBB2: 1 GB mobile data with no calls	MEO UZO 3GB	15.20	7.07
MBB3: 2 GB mobile data with no calls	MEO UZO 3GB	15.20	9.23
MBB4: 5 GB mobile data with no calls	MEO Data only 15GB	18.24	11.99
MBB5: 20 GB mobile data with no calls	MEO Data only 30GB	24.33	19.11
I1: 0.5 GB mobile data with 30 calls	MEO UZO Sempre	9.12	9.18
I2: 1 GB mobile data with 30 calls	MEO UZO 3GB	15.20	10.03
I3: 2 GB mobile data with 100 calls	MEO UZO 3GB	15.20	13.40
I4: 5 GB mobile data with 300 calls	MEO M Móvel 5 GB + 1000	26.14	18.47
I5: 20 GB mobile data with 300 calls	Vodafone Red Infinity	47.77	27.60
I6: 5 GB mobile data with 30 calls	MEO M Móvel 5 GB + 1000	26.14	14.93
I7: 20 GB mobile data with 100 calls	Vodafone Red Infinity	47.77	27.44



Romania



2.0

Country report 2020

ISPs in sample

Telekom Romania Communications | Orange Romania |
Nextgen Communications | RCS & RDS | Vodafone Romania

MNOs in sample

Orange | RCS & RDS | Vodafone

October 2020 data

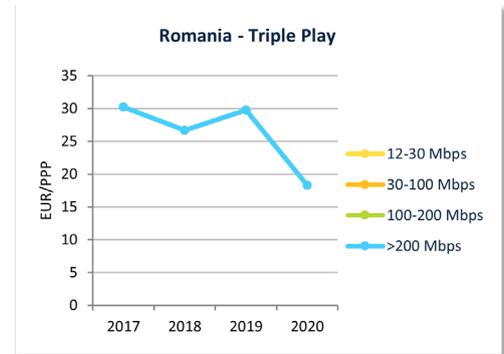
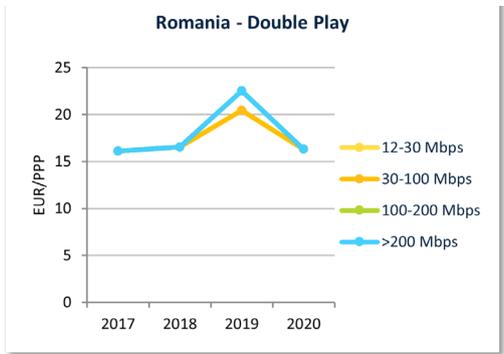
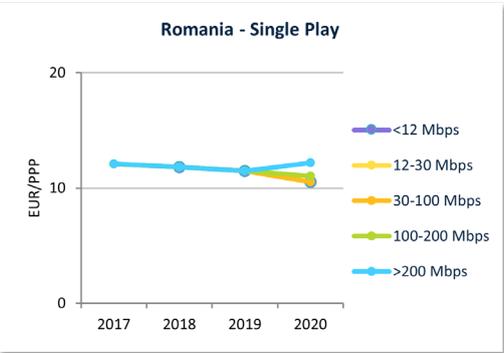
2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.



Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Romania fell strongly. In contrast, for consumers requiring >200 Mbps fixed internet, prices rose somewhat (by 6%).



Market competition

Orange Romania provides a slightly higher number of the least expensive offers across all service bundles on the market in Romania (8 of 13) in comparison to the rest of the providers. Telekom Romania Communications, Nextgen Communications or RCS & RDS provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Romania are about half the EU average. No offers were found to be more expensive than the EU average.

Prices in Romania compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● -50%	● -45%	● -51%
30-100Mbit		
Single Play	Double Play	Triple Play
● -52%	● -48%	● -52%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -62%	● -56%	● -58%
>200 Mbit		
Single Play	Double Play	Triple Play
● -59%	● -55%	● -59%

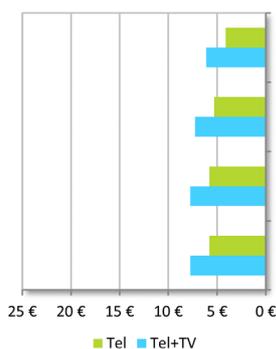
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

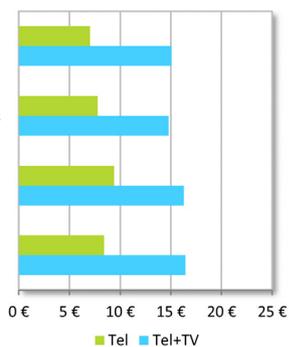
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Nextgen Communications Internet NextMedium	10.54	20.49
12-30 Mbps fixed internet	Nextgen Communications Internet NextMedium	10.54	21.13
30-100 Mbps fixed internet	Nextgen Communications Internet NextMedium	10.54	22.10
100-200 Mbps fixed internet	Telekom Romania Communications Smart Wifi	11.03	28.89
>200 Mbps fixed internet	RCS & RDS FiberLink 300	12.18	29.37
12-30 Mbps fixed internet with fixed phone	Orange Romania Home Net 500 + Home fix	16.31	29.55
30-100 Mbps fixed internet with fixed phone	Orange Romania Home Net 500 + Home fix	16.31	31.51
100-200 Mbps fixed internet with fixed phone	Orange Romania Home Net 500 + Home fix	16.31	36.67
>200 Mbps fixed internet with fixed phone	Orange Romania Home Net 500 + Home fix	16.31	36.38
12-30 Mbps fixed internet with fixed phone and TV	Orange Romania Home Net 4G 8 + Home fix	18.29	37.56
30-100 Mbps fixed internet with fixed phone and TV	Orange Romania Home Net 4G 8 + Home fix	18.29	38.37
100-200 Mbps fixed internet with fixed phone and TV	Orange Romania Home Net 4G 8 + Home fix	18.29	43.67
>200 Mbps fixed internet with fixed phone and TV	Orange Romania Home Net 4G 8 + Home fix	18.29	44.43

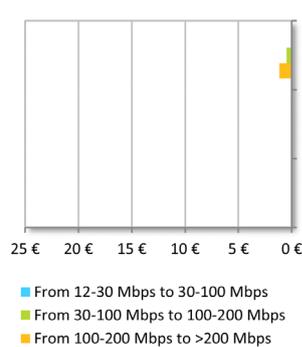
Bundle premium - Romania



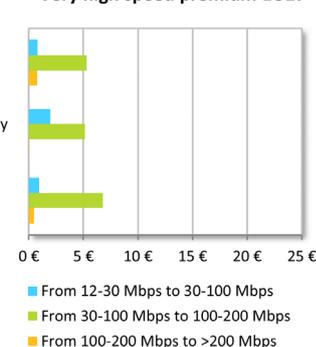
Bundle premium - EU27



Very high speed premium - Romania



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Market competition

Orange Romania provides all the least expensive offers across all service bundles on the market in Romania.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Romania fell strongly. The most different trend was for 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile, where prices fell noticeably (by 14%).

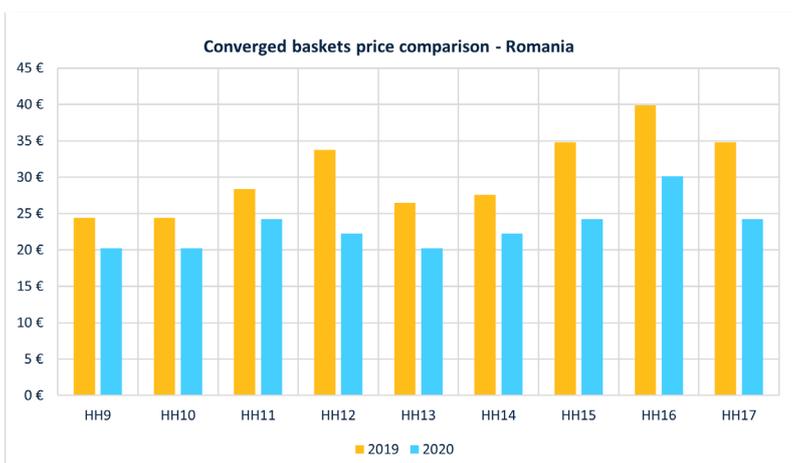
EU comparison

Compared to all EU27 countries, prices for household broadband baskets in Romania are less than half the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component				Romania		EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	3,95			9,43		
	Double Play 30-100 Mbps	3,95			9,30		
100 calls 2GB mobile	Triple Play 30-100 Mbps	3,95			12,42		
	Double Play 100-200 Mbps	3,95			13,29		
300 calls 5GB mobile	Double Play 100-200Mbps	5,93			18,25		
	Triple Play 100-200 Mbps	5,93			18,18		
	Triple Play >200 Mbps	5,93			17,20		

Prices in Romania compared with EU average*			
HH9	HH10	HH11	
-48%	-50%	-57%	
HH12	HH13	HH14	
-56%	-59%	-59%	
HH15	HH16	HH17	
-61%	-62%	-61%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Orange Romania / RCS & RDS Home Net 500 + Home fix / Digi Mobil Optim 2	20.27	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Orange Romania / RCS & RDS Home Net 500 + Home fix / Digi Mobil Optim 2	20.27	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Orange Romania / RCS & RDS Home Net 500 + Home fix / Digi Mobil Optim 2	24.22	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Orange Romania / RCS & RDS Home Net 4G 8 + Home fix / Digi Mobil Optim 2	22.25	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Orange Romania / RCS & RDS Home Net 500 + Home fix / Digi Mobil Optim 2	20.27	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Orange Romania / RCS & RDS Home Net 500 + Home fix / Digi Mobil Optim 3	22.25	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Orange Romania / RCS & RDS Home Net 4G 8 + Home fix / Digi Mobil Optim 3	24.22	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Orange Romania / RCS & RDS Home Net 4G 8 + Home fix / Digi Mobil Optim 3	30.16	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Orange Romania / RCS & RDS Home Net 4G 8 + Home fix / Digi Mobil Optim 3	24.22	61.63

Mobile Broadband

Price development

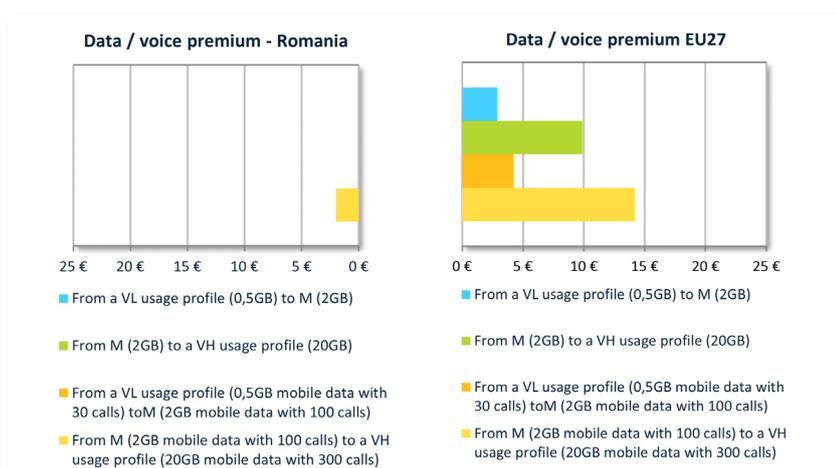
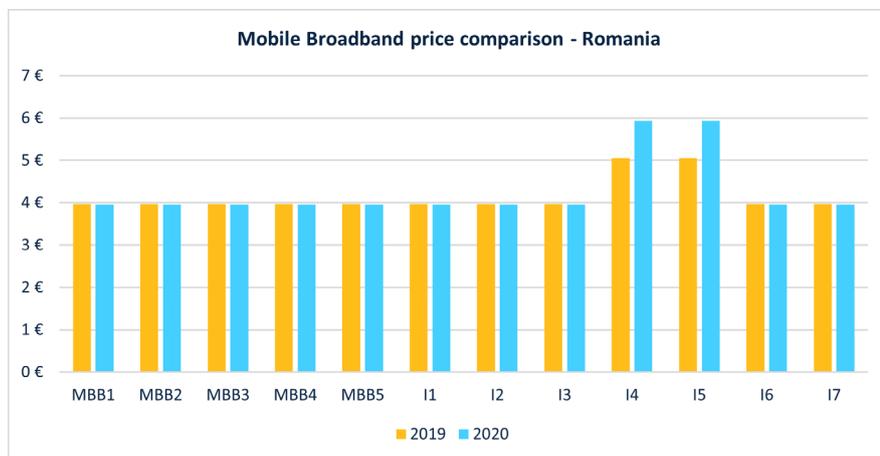
Prices for mobile broadband services in Romania show no clear trend compared to the previous year (2019). The most different trend was for 0.5 GB mobile data with no calls, where prices remained nearly unchanged.

Market competition

RCS & RDS provides all the least expensive offers across all service bundles on the market in Romania.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Romania are very much lower than the EU average. No offers were found to be more expensive than the EU average.



Prices in Romania compared with EU average*

Bundle	Deviation (%)	Bundle	Deviation (%)	Bundle	Deviation (%)
MBB1	-38%	MBB2	-44%	MBB3	-57%
MBB4	-67%	MBB5	-79%	I1	-57%
I2	-61%	I3	-70%	I4	-68%
I5	-79%	I6	-74%	I7	-86%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	RCS & RDS Digi Mobil Optim 2	3.95	6.35
MBB2: 1 GB mobile data with no calls	RCS & RDS Digi Mobil Optim 2	3.95	7.07
MBB3: 2 GB mobile data with no calls	RCS & RDS Digi Mobil Optim 2	3.95	9.23
MBB4: 5 GB mobile data with no calls	RCS & RDS Digi Mobil Optim 2	3.95	11.99
MBB5: 20 GB mobile data with no calls	RCS & RDS Digi Mobil Optim 2	3.95	19.11
I1: 0.5 GB mobile data with 30 calls	RCS & RDS Digi Mobil Optim 2	3.95	9.18
I2: 1 GB mobile data with 30 calls	RCS & RDS Digi Mobil Optim 2	3.95	10.03
I3: 2 GB mobile data with 100 calls	RCS & RDS Digi Mobil Optim 2	3.95	13.40
I4: 5 GB mobile data with 300 calls	RCS & RDS Digi Mobil Optim 3	5.93	18.47
I5: 20 GB mobile data with 300 calls	RCS & RDS Digi Mobil Optim 3	5.93	27.60
I6: 5 GB mobile data with 30 calls	RCS & RDS Digi Mobil Optim 2	3.95	14.93
I7: 20 GB mobile data with 100 calls	RCS & RDS Digi Mobil Optim 2	3.95	27.44



Slovakia



Bratislava castle by Pixabay, pexels.com. CC0

Country report 2020

ISPs in sample

Slovak Telekom | UPC Broadband Slovakia |
O2 Slovakia | ANTIK Telekom | Orange Slovensko

MNOs in sample

Orange | Slovak Telekom | O2 Slovakia

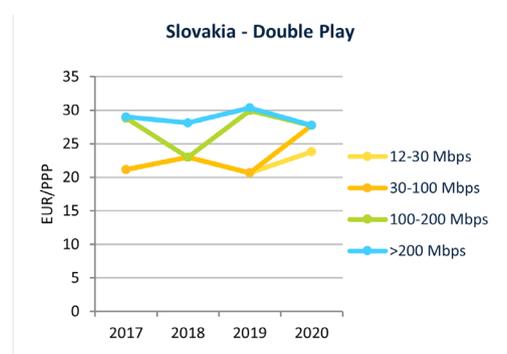
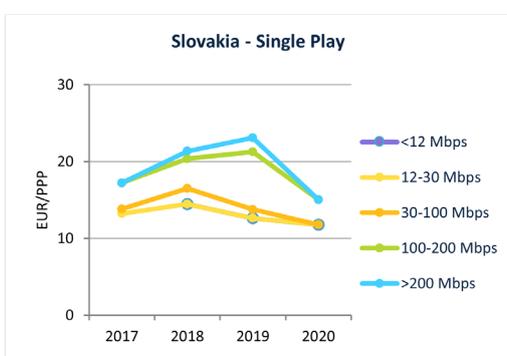
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Slovakia show no clear trend compared to the previous year (2019). Prices for offers including 30-100 Mbps fixed internet with fixed phone rose strongly.



Market competition

Slovak Telekom provides the majority of the least expensive offers across all service bundles on the market in Slovakia (8 of 13). UPC Broadband Slovakia provides the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Slovakia are lower than the EU average. No offers were found to be more expensive than the EU average.

Prices in Slovakia compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
● -44%	● -19%	● -17%
30-100Mbit		
Single Play	Double Play	Triple Play
● -47%	● -12%	● -12%
100-200 Mbit		
Single Play	Double Play	Triple Play
● -48%	● -24%	● -23%
>200 Mbit		
Single Play	Double Play	Triple Play
● -49%	● -24%	● -24%

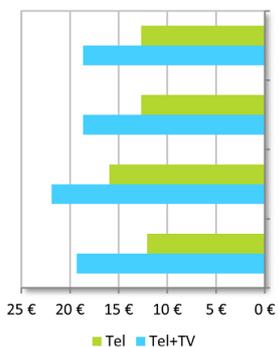
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

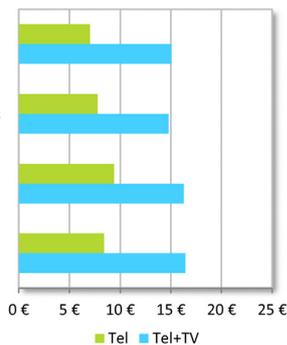
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	UPC Broadband Slovakia Internet 50	11.76	20.49
12-30 Mbps fixed internet	UPC Broadband Slovakia Internet 50	11.76	21.13
30-100 Mbps fixed internet	UPC Broadband Slovakia Internet 50	11.76	22.10
100-200 Mbps fixed internet	UPC Broadband Slovakia Internet 300	15.01	28.89
>200 Mbps fixed internet	UPC Broadband Slovakia Internet 300	15.01	29.37
12-30 Mbps fixed internet with fixed phone	Slovak Telekom Magio internet M + PEVNÁ LINKA M	23.83	29.55
30-100 Mbps fixed internet with fixed phone	Slovak Telekom Magio internet L + PEVNÁ LINKA M	27.72	31.51
100-200 Mbps fixed internet with fixed phone	Slovak Telekom Magio internet L + PEVNÁ LINKA M	27.72	36.67
>200 Mbps fixed internet with fixed phone	Slovak Telekom Magio internet L + PEVNÁ LINKA M	27.72	36.38
12-30 Mbps fixed internet with fixed phone and TV	Slovak Telekom Magio internet M + PEVNÁ LINKA M + Magio televízia M	31.07	37.56
30-100 Mbps fixed internet with fixed phone and TV	Slovak Telekom Magio internet L + PEVNÁ LINKA M + Magio televízia M	33.67	38.37
100-200 Mbps fixed internet with fixed phone and TV	Slovak Telekom Magio internet L + PEVNÁ LINKA M + Magio televízia M	33.67	43.67
>200 Mbps fixed internet with fixed phone and TV	Slovak Telekom Magio internet L + PEVNÁ LINKA M + Magio televízia M	33.67	44.43

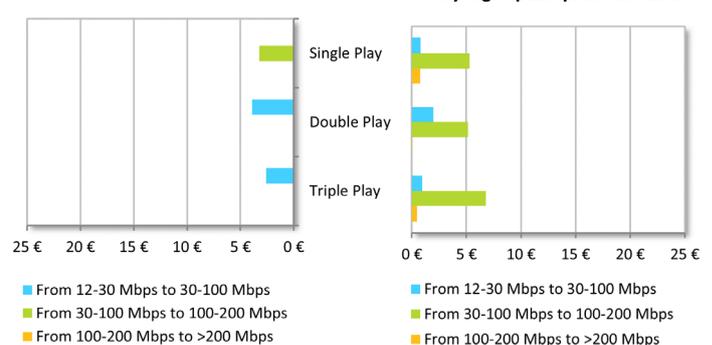
Bundle premium - Slovakia



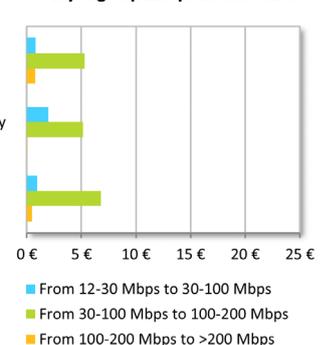
Bundle premium - EU27



Very high speed premium - Slovakia



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Slovakia fell noticeably. In contrast, for consumers requiring 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile, prices rose somewhat (by 7%).

Market competition

Slovak Telekom provides all the least expensive offers across all service bundles on the market in Slovakia.

EU comparison

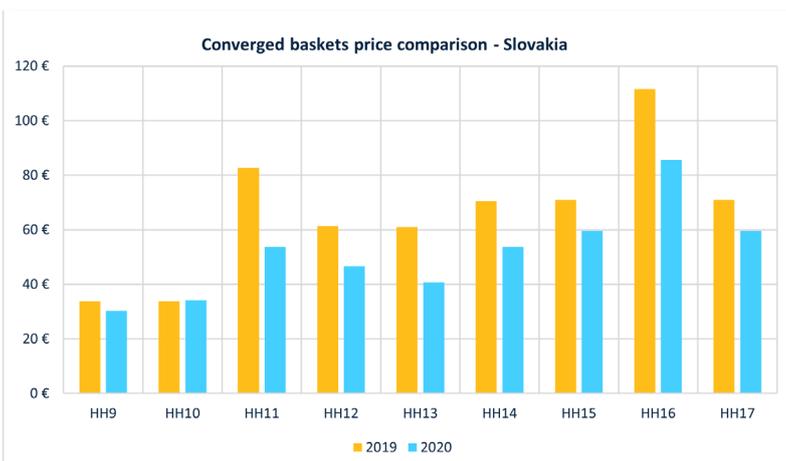
Compared to all EU27 countries, prices for household broadband baskets in Slovakia are slightly lower than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile is slightly higher than the EU average.

Bundle premium - mobile component					
			Slovakia	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	6,49			9,43
	Double Play 30-100 Mbps	6,49			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	13,01			12,42
	Double Play 100-200 Mbps	13,01			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	25,95			18,25
	Triple Play 100-200 Mbps	25,95			18,18
	Triple Play >200 Mbps	25,95			17,20

Prices in Slovakia compared with EU average*

HH9	HH10	HH11
-22%	-16%	-5%
HH12	HH13	HH14
-8%	-18%	-2%
HH15	HH16	HH17
-4%	7%	-3%

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Slovak Telekom / O2 Slovakia Magio internet M + PEVNÁ LINKA M / Malá Radosť	30.32	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M / Malá Radosť	34.21	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M / Malá Radosť	53.74	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M + Magio televízia M / Malá Radosť	46.67	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M / Malá Radosť	40.73	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M / Nekonečná Radosť	53.67	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M + Magio televízia M / Nekonečná Radosť	59.62	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M + Magio televízia M / Nekonečná Radosť	85.57	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Slovak Telekom / O2 Slovakia Magio internet L + PEVNÁ LINKA M + Magio televízia M / Nekonečná Radosť	59.62	61.63

Mobile Broadband

Price development

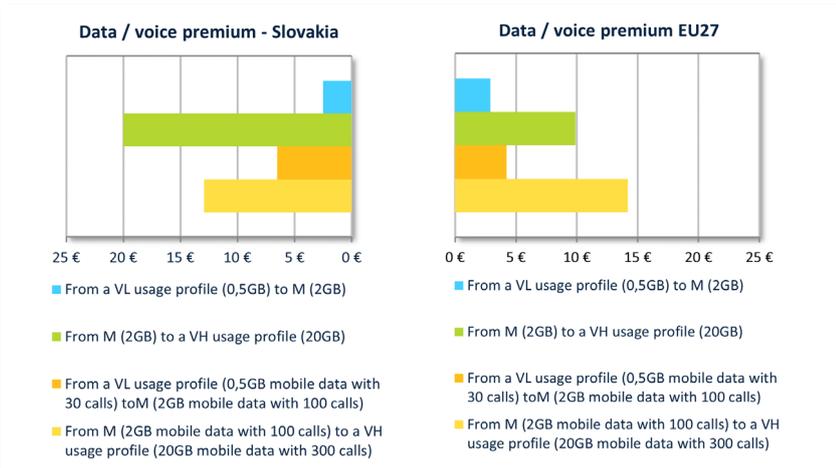
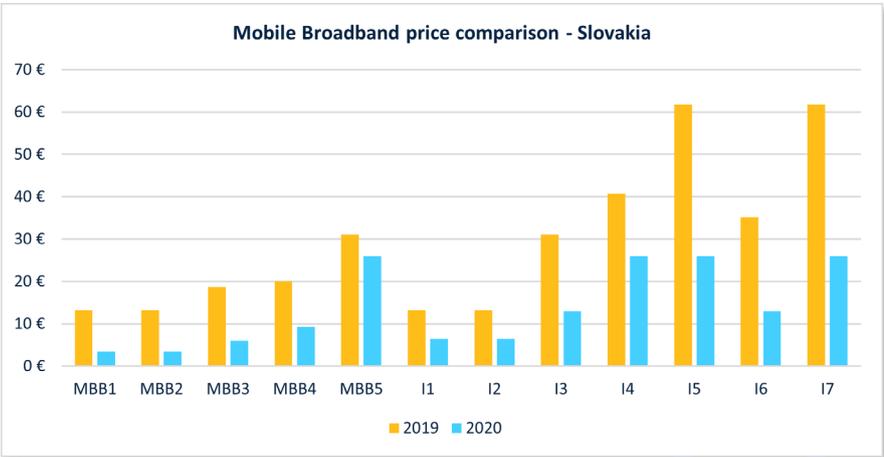
Compared to 2019, averaging over the usage baskets shown, prices in Slovakia fell very strongly. The most different trend was for 20 GB mobile data with no calls, where prices fell noticeably (by 11%).

Market competition

O2 Slovakia provides a slightly higher number of the least expensive offers across all service bundles on the market in Slovakia (8 of 12) in comparison to the rest of the providers. Orange or Slovak Telekom provide the remainder.

EU comparison

Prices for mobile broadband in Slovakia show a different pattern compared to EU27 countries overall. Whereas consumers requiring 1 GB mobile data with no calls find offers about half the EU average, those seeking 5 GB mobile data with 300 calls find prices somewhat higher than the EU average.



Bundle	Deviation (%)
MBB1	-45%
MBB2	-51%
MBB3	-36%
MBB4	-23%
MBB5	36%
I1	-29%
I2	-35%
I3	-3%
I4	40%
I5	-6%
I6	-13%
I7	-5%

*deviation in percent from the EU average in the respective basket/bundle combination

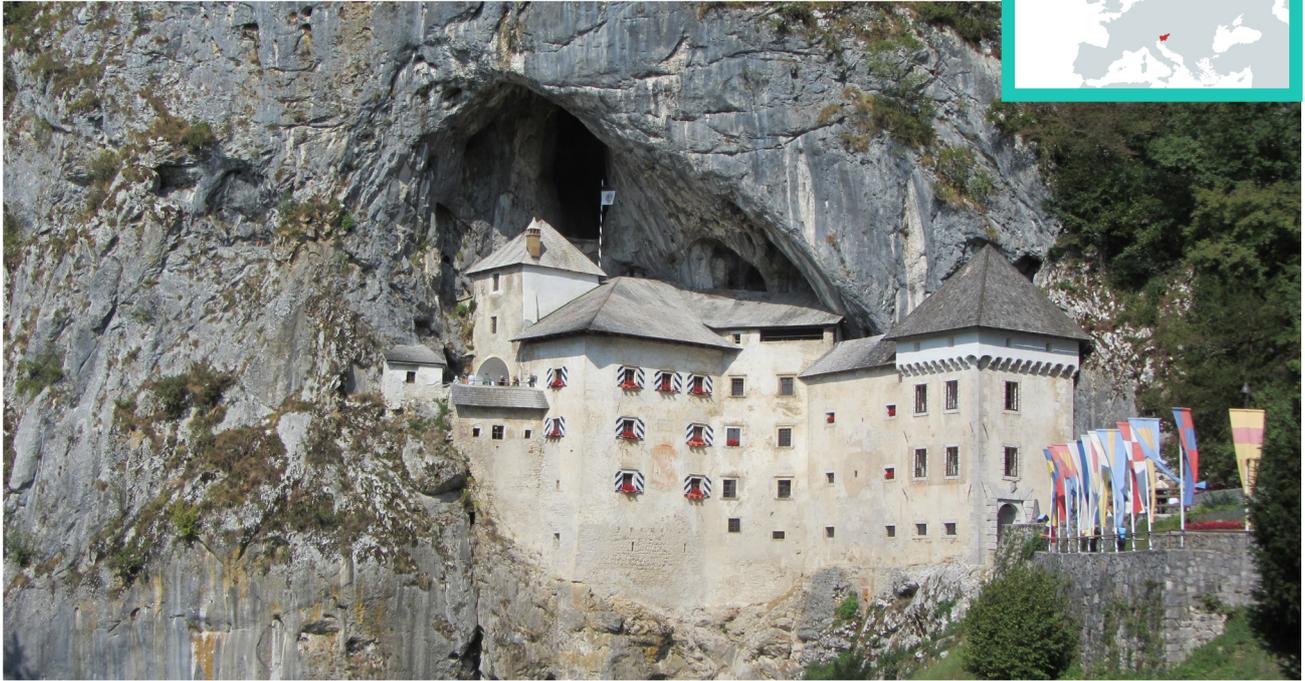
Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Slovak Telekom Predplatenka 1 GB	3.46	6.35
MBB2: 1 GB mobile data with no calls	Slovak Telekom Predplatenka 1 GB	3.46	7.07
MBB3: 2 GB mobile data with no calls	Orange Data Basic	5.95	9.23
MBB4: 5 GB mobile data with no calls	Orange Data Optimal	9.19	11.99
MBB5: 20 GB mobile data with no calls	O2 Slovakia Nekonečná Radosť	25.95	19.11
I1: 0.5 GB mobile data with 30 calls	O2 Slovakia Malá Radosť	6.49	9.18
I2: 1 GB mobile data with 30 calls	O2 Slovakia Malá Radosť	6.49	10.03
I3: 2 GB mobile data with 100 calls	O2 Slovakia Malá Radosť	13.01	13.40
I4: 5 GB mobile data with 300 calls	O2 Slovakia Nekonečná Radosť	25.95	18.47
I5: 20 GB mobile data with 300 calls	O2 Slovakia Nekonečná Radosť	25.95	27.60
I6: 5 GB mobile data with 30 calls	O2 Slovakia Veľká Radosť	12.98	14.93
I7: 20 GB mobile data with 100 calls	O2 Slovakia Nekonečná Radosť	25.95	27.44



Slovenia



Predjama, Slovenia by Stephen Colebourne, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Telekom Slovenije | Telemach | A1 Slovenija | T-2

MNOs in sample

Telekom Slovenije | Telemach | A1 Slovenija

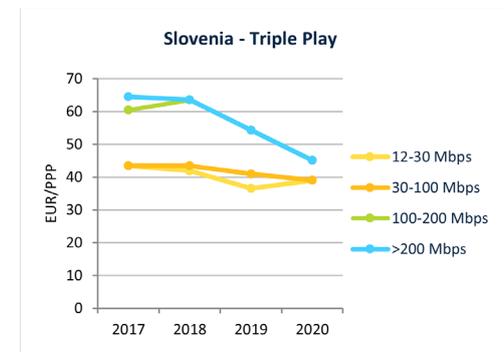
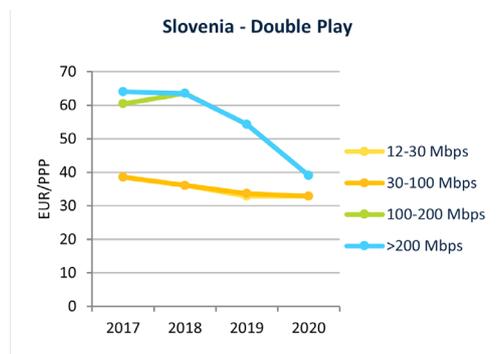
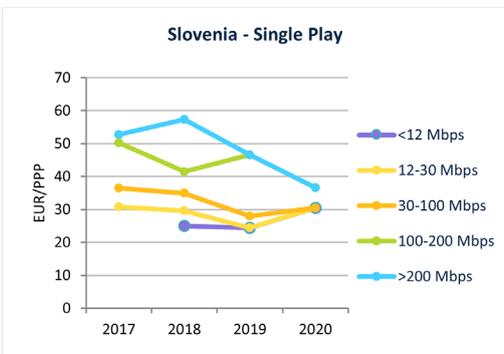
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in Slovenia show no clear trend compared to the previous year (2019). Prices for offers including < 12 Mbps fixed internet rose strongly.



Market competition

A1 Slovenija provides all the least expensive offers across all service bundles on the market in Slovenia.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Slovenia are slightly higher than the EU average. No offers were found to be less expensive than the EU average.

Prices in Slovenia compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
44%	11%	4%
30-100Mbit		
Single Play	Double Play	Triple Play
38%	4%	2%
100-200 Mbit		
Single Play	Double Play	Triple Play
27%	6%	3%
>200 Mbit		
Single Play	Double Play	Triple Play
25%	7%	2%

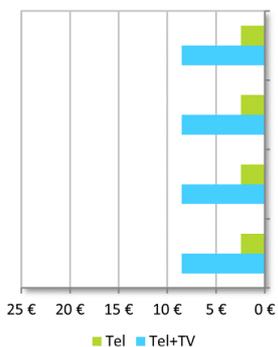
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

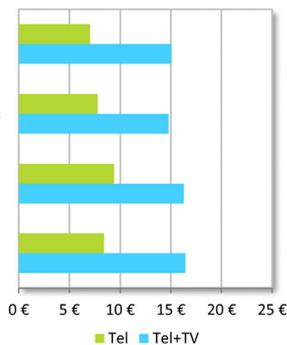
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	A1 Slovenija Fix Net	30.48	20.49
12-30 Mbps fixed internet	A1 Slovenija Fix Net	30.48	21.13
30-100 Mbps fixed internet	A1 Slovenija Fix Net	30.48	22.10
100-200 Mbps fixed internet	A1 Slovenija Fix Net 500	36.58	28.89
>200 Mbps fixed internet	A1 Slovenija Fix Net 500	36.58	29.37
12-30 Mbps fixed internet with fixed phone	A1 Slovenija Fix Net	32.92	29.55
30-100 Mbps fixed internet with fixed phone	A1 Slovenija Fix Net	32.92	31.51
100-200 Mbps fixed internet with fixed phone	A1 Slovenija Fix Net 500	39.02	36.67
>200 Mbps fixed internet with fixed phone	A1 Slovenija Fix Net 500	39.02	36.38
12-30 Mbps fixed internet with fixed phone and TV	A1 Slovenija Net	39.02	37.56
30-100 Mbps fixed internet with fixed phone and TV	A1 Slovenija Net	39.02	38.37
100-200 Mbps fixed internet with fixed phone and TV	A1 Slovenija Net 500	45.12	43.67
>200 Mbps fixed internet with fixed phone and TV	A1 Slovenija Net 500	45.12	44.43

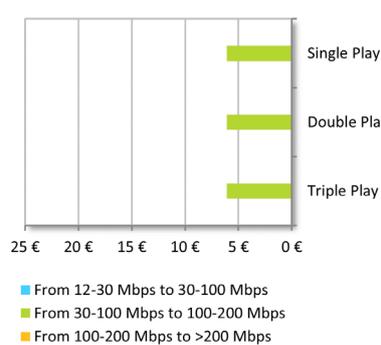
Bundle premium - Slovenia



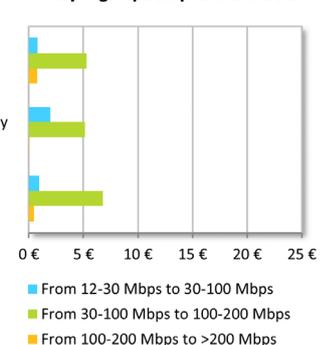
Bundle premium - EU27



Very high speed premium - Slovenia



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Slovenia fell noticeably. The most different trend was for 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile, where prices fell somewhat (by 2%).

Market competition

A1 Slovenija provides all the least expensive offers across all service bundles on the market in Slovenia.

EU comparison

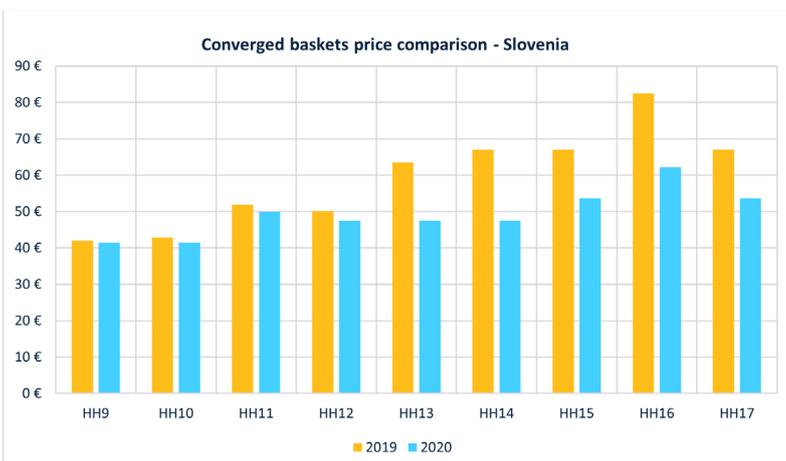
Compared to all EU27 countries, prices for household broadband baskets in Slovenia are slightly lower than the EU average. However, the lowest price of offers for consumers requiring 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile is slightly higher than the EU average.

Bundle premium - mobile component				Slovenia		EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	8,53			9,43		
	Double Play 30-100 Mbps	8,53			9,30		
100 calls 2GB mobile	Triple Play 30-100 Mbps	8,53			12,42		
	Double Play 100-200 Mbps	8,53			13,29		
300 calls 5GB mobile	Double Play 100-200Mbps	8,53			18,25		
	Triple Play 100-200 Mbps	8,53			18,18		
	Triple Play >200 Mbps	8,53			17,20		

Prices in Slovenia compared with EU average*

HH9	HH10	HH11
6%	2%	-11%
HH12	HH13	HH14
-6%	-5%	-13%
HH15	HH16	HH17
-13%	-22%	-13%

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	A1 Slovenija / Telemach Fix Net / FREE2GO revolucija 1GB	41.45	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	A1 Slovenija / Telemach Fix Net / FREE2GO revolucija 1GB	41.45	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	A1 Slovenija / Telemach Fix Net / FREE2GO revolucija 2GB	49.97	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	A1 Slovenija / Telemach Net / FREE-2GO revolucija 2GB	47.55	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	A1 Slovenija / Telemach Fix Net 500 / FREE2GO revolucija 2GB	47.55	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	A1 Slovenija / Telemach Fix Net 500 / FREE2GO revolucija 5GB	47.55	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	A1 Slovenija / Telemach Net 500 / FREE2GO revolucija 5GB	53.64	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	A1 Slovenija / Telemach Net 500 / FREE2GO revolucija 5GB	62.17	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	A1 Slovenija / Telemach Net 500 / FREE2GO revolucija 5GB	53.64	61.63

Mobile Broadband

Price development

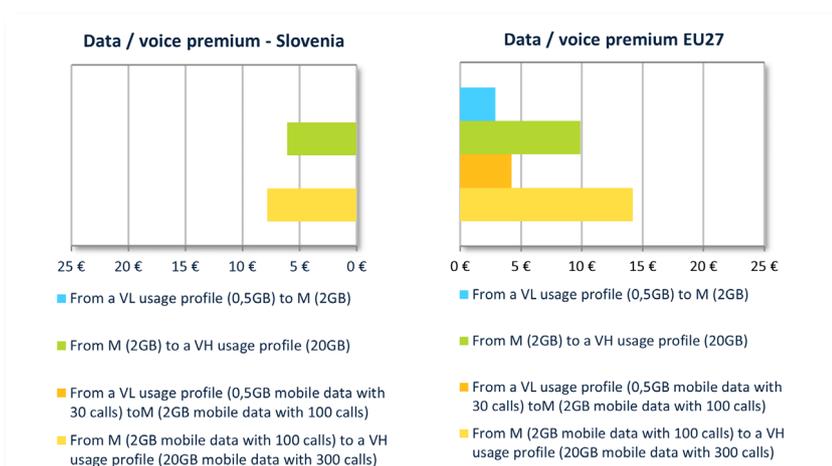
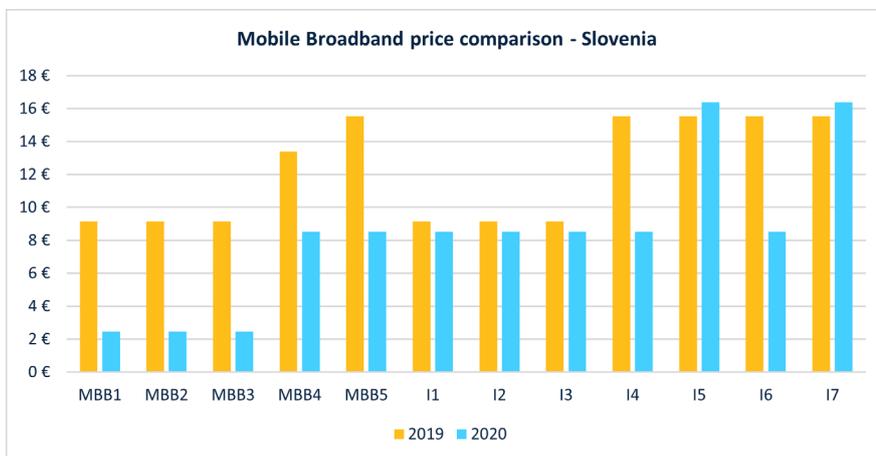
Compared to 2019, averaging over the usage baskets shown, prices in Slovenia fell strongly. In contrast, for consumers requiring 20 GB mobile data with 300 calls, prices rose somewhat (by 5%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Slovenia are much lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Telemach provides the majority of the least expensive offers across all service bundles on the market in Slovenia (9 of 12). A1 Slovenija provides the remainder.



Prices in Slovenia compared with EU average*

Usage Basket	Deviation (%)
MBB1	-62%
MBB2	-66%
MBB3	-74%
MBB4	-29%
MBB5	-55%
I1	-7%
I2	-15%
I3	-36%
I4	-54%
I5	-41%
I6	-43%
I7	-40%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	A1 Slovenija Simpl + 2GB	2.44	6.35
MBB2: 1 GB mobile data with no calls	A1 Slovenija Simpl + 2GB	2.44	7.07
MBB3: 2 GB mobile data with no calls	A1 Slovenija Simpl + 2GB	2.44	9.23
MBB4: 5 GB mobile data with no calls	Telemach FREE2GO revolucija 5GB	8.53	11.99
MBB5: 20 GB mobile data with no calls	Telemach FREE2GO revolucija 20GB	8.53	19.11
I1: 0.5 GB mobile data with 30 calls	Telemach FREE2GO revolucija 500MB	8.53	9.18
I2: 1 GB mobile data with 30 calls	Telemach FREE2GO revolucija 1GB	8.53	10.03
I3: 2 GB mobile data with 100 calls	Telemach FREE2GO revolucija 2GB	8.53	13.40
I4: 5 GB mobile data with 300 calls	Telemach FREE2GO revolucija 5GB	8.53	18.47
I5: 20 GB mobile data with 300 calls	Telemach ŠE VE?	16.37	27.60
I6: 5 GB mobile data with 30 calls	Telemach FREE2GO revolucija 5GB	8.53	14.93
I7: 20 GB mobile data with 100 calls	Telemach ŠE VE?	16.37	27.44



Spain



Plaza Mayor by Dennis Jarvis, flickr.com. CC BY 2.0

Country report 2020

ISPs in sample

Telefonica Spain (Movistar) | Orange Spain (including Jazztel) | Vodafone Spain (including Ono) | Grupo MASMOVIL

MNOs in sample

Movistar | Vodafone | Orange

October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Compared to 2019, across all baskets on average, prices in Spain fell noticeably. The most different trend was for 12-30 Mbps fixed internet with fixed phone, where prices fell somewhat (by 3%).



Market competition

Grupo MASMOV!L provides a slightly higher number of the least expensive offers across all service bundles on the market in Spain (8 of 13) in comparison to the rest of the providers. Orange Spain (including Jazztel) or Vodafone Spain (including Ono) provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in Spain are slightly higher than the EU average. However, the lowest price of offers for consumers requiring > 100 Mbps fixed internet with fixed phone is slightly lower than the EU average.

Prices in Spain compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
38%	11%	5%
30-100Mbit		
Single Play	Double Play	Triple Play
32%	4%	3%
100-200 Mbit		
Single Play	Double Play	Triple Play
10%	-7%	23%
>200 Mbit		
Single Play	Double Play	Triple Play
8%	-7%	21%

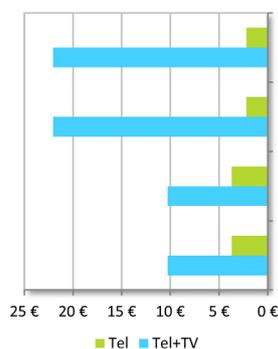
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

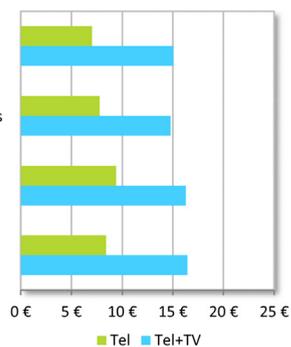
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Orange Spain (including Jazztel) simyo Fibra100	29.17	20.49
12-30 Mbps fixed internet	Orange Spain (including Jazztel) simyo Fibra100	29.17	21.13
30-100 Mbps fixed internet	Orange Spain (including Jazztel) simyo Fibra100	29.17	22.10
100-200 Mbps fixed internet	Grupo MASMOVIL Fibra 300	31.78	28.89
>200 Mbps fixed internet	Grupo MASMOVIL Fibra 300	31.78	29.37
12-30 Mbps fixed internet with fixed phone	Grupo MASMOVIL Fibra 100	32.87	29.55
30-100 Mbps fixed internet with fixed phone	Grupo MASMOVIL Fibra 100	32.87	31.51
100-200 Mbps fixed internet with fixed phone	Vodafone Spain (including Ono) 300 Mbps Fibr�a �ptica	33.96	36.67
>200 Mbps fixed internet with fixed phone	Vodafone Spain (including Ono) 300 Mbps Fibr�a �ptica	33.96	36.38
12-30 Mbps fixed internet with fixed phone and TV	Grupo MASMOVIL Fibra 100	39.44	37.56
30-100 Mbps fixed internet with fixed phone and TV	Grupo MASMOVIL Fibra 100	39.44	38.37
100-200 Mbps fixed internet with fixed phone and TV	Grupo MASMOVIL Fibra 600	53.83	43.67
>200 Mbps fixed internet with fixed phone and TV	Grupo MASMOVIL Fibra 600	53.83	44.43

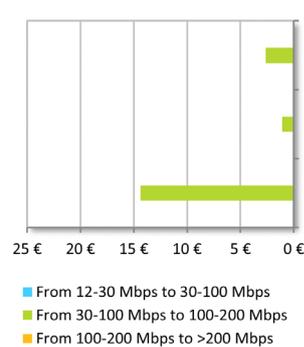
Bundle premium - Spain



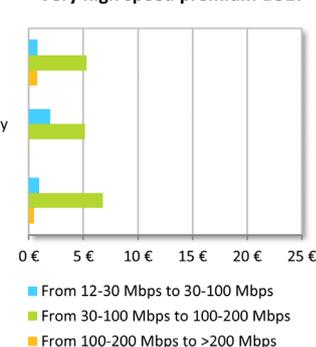
Bundle premium - EU27



Very high speed premium - Spain



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Spain fell strongly. The most different trend was for 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile, where prices fell noticeably (by 17%).

Market competition

Grupo MASMOV!L provides the majority of the least expensive offers across all service bundles on the market in Spain (7 of 9). Vodafone Spain (including Ono) provides the remainder.

EU comparison

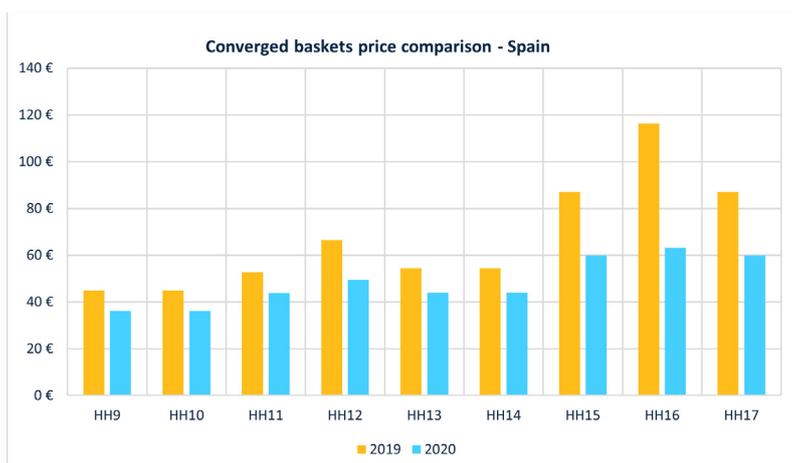
Compared to all EU27 countries, prices for household broadband baskets in Spain are slightly lower than the EU average. No offers were found to be more expensive than the EU average.

Bundle premium - mobile component					
			Spain	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	3,29			9,43
	Double Play 30-100 Mbps	3,29			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	9,96			12,42
	Double Play 100-200 Mbps	9,96			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	9,96			18,25
	Triple Play 100-200 Mbps	6,07			18,18
	Triple Play >200 Mbps	6,07			17,20

Prices in Spain compared with EU average*

HH9	HH10	HH11
-7%	-11%	-22%
HH12	HH13	HH14
-3%	-12%	-20%
HH15	HH16	HH17
-3%	-21%	-3%

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Grupo MASMOVIL Fibra 100	36.16	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Grupo MASMOVIL Fibra 100	36.16	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Grupo MASMOVIL Fibra 100	43.73	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Grupo MASMOVIL / Orange Fibra 100 / Simyo 5GB + ilimitadas	49.40	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Vodafone Spain (including Ono) / Orange 300 Mbps Fibra óptica / Simyo 5GB + ilimitadas	43.92	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Vodafone Spain (including Ono) / Orange 300 Mbps Fibra óptica / Simyo 5GB + ilimitadas	43.92	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Grupo MASMOVIL Fibra 600	59.90	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Grupo MASMOVIL Fibra 600	63.18	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Grupo MASMOVIL Fibra 600	59.90	61.63

Mobile Broadband

Price development

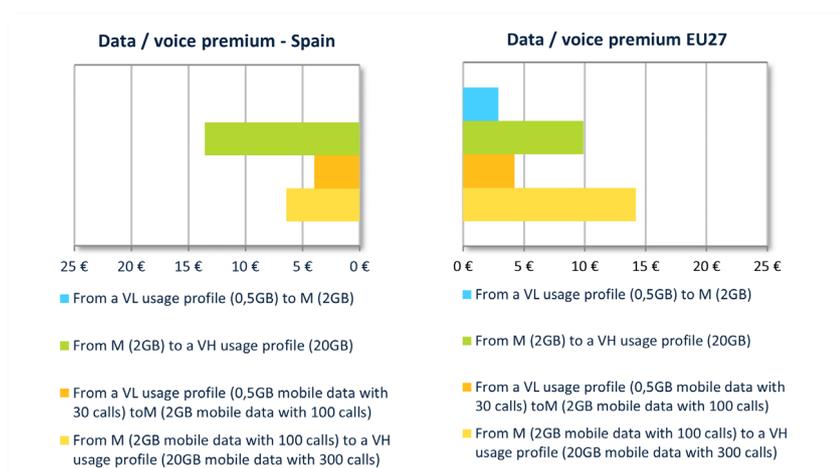
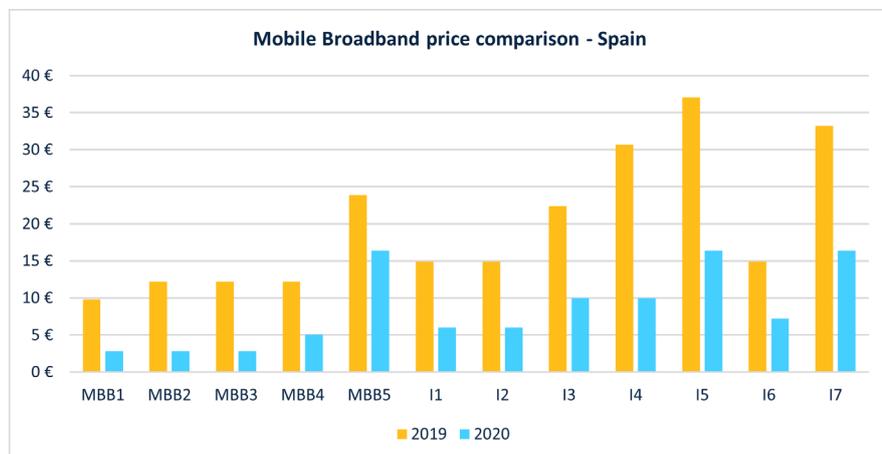
Compared to 2019, averaging over the usage baskets shown, prices in Spain fell to less than half. The most different trend was for 20 GB mobile data with no calls, where prices fell strongly (by 32%).

Market competition

Orange provides the majority of the least expensive offers across all service bundles on the market in Spain (9 of 12). Vodafone provides the remainder.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Spain are much lower than the EU average. No offers were found to be more expensive than the EU average.



Prices in Spain compared with EU average*

MBB1	MBB2	MBB3
-55%	-60%	-69%
MBB4	MBB5	I1
-58%	-14%	-35%
I2	I3	I4
-40%	-26%	-46%
I5	I6	I7
-41%	-52%	-40%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Orange Simyo 2GB + 0 min	2.83	6.35
MBB2: 1 GB mobile data with no calls	Orange Simyo 2GB + 0 min	2.83	7.07
MBB3: 2 GB mobile data with no calls	Orange Simyo 2GB + 0 min	2.83	9.23
MBB4: 5 GB mobile data with no calls	Orange Simyo 5GB + 0 min	5.02	11.99
MBB5: 20 GB mobile data with no calls	Vodafone Lowi 20GB	16.39	19.11
I1: 0.5 GB mobile data with 30 calls	Orange Simyo 2GB + 50 min	5.99	9.18
I2: 1 GB mobile data with 30 calls	Orange Simyo 2GB + 50 min	5.99	10.03
I3: 2 GB mobile data with 100 calls	Orange Simyo 5GB + ilimitadas	9.96	13.40
I4: 5 GB mobile data with 300 calls	Orange Simyo 5GB + ilimitadas	9.96	18.47
I5: 20 GB mobile data with 300 calls	Vodafone Lowi 20GB	16.39	27.60
I6: 5 GB mobile data with 30 calls	Orange Simyo 5GB + 100 min	7.22	14.93
I7: 20 GB mobile data with 100 calls	Vodafone Lowi 20GB	16.39	27.44



Sweden



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Country report 2020

ISPs in sample

Telia Company | Telenor Sverige | Bredband 2 |
Tele2 | Bahnhof

MNOs in sample

Telia Company | Tele2 | Telenor

October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

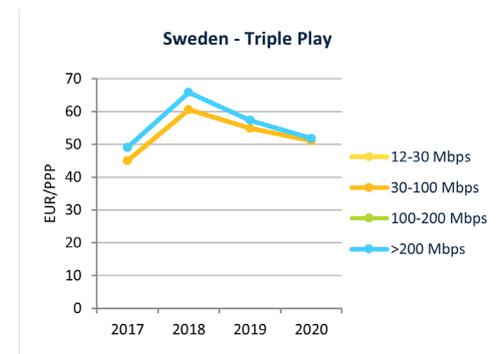
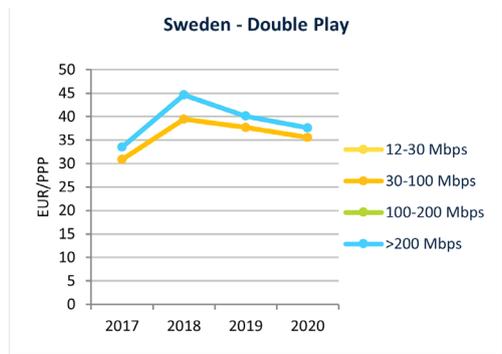
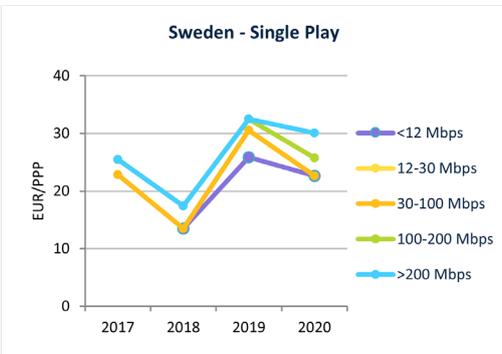
Fixed Broadband

Price development

Compared to 2019, accross all baskets on average, prices in Sweden fell noticeably. The most different trend was for 12-30 Mbps fixed internet with fixed phone, where prices fell somewhat (by 4%).

Market competition

Tele2 provides the majority of the least expensive offers across all service bundles on the market in Sweden (8 of 13). Telenor Sverige provides the remainder.



EU comparison

Compared to all EU27 countries, prices for fixed broadband in Sweden are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 100-200 Mbps fixed internet is slightly lower than the EU average.

Prices in Sweden compared with EU average*

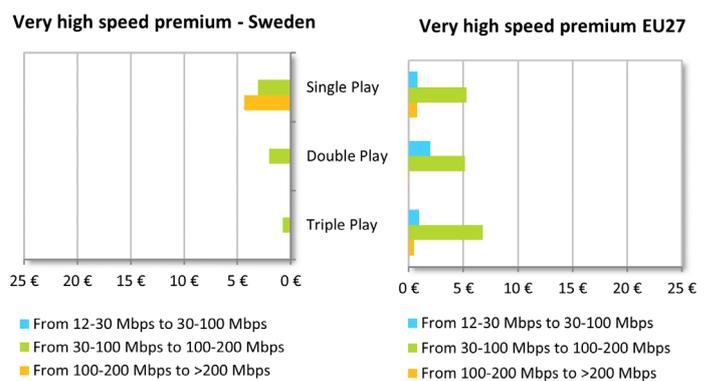
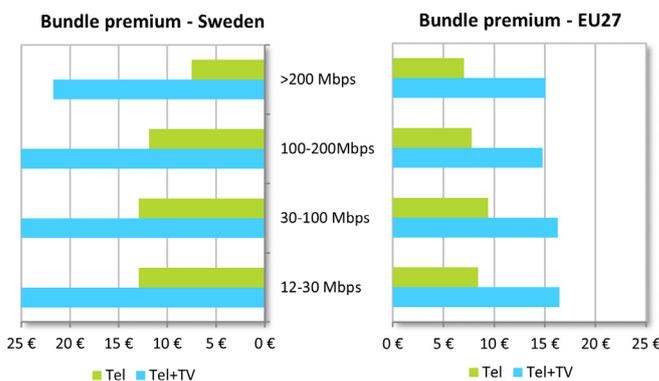
12-30Mbit		
Single Play	Double Play	Triple Play
7%	20%	36%
30-100Mbit		
Single Play	Double Play	Triple Play
2%	13%	33%
100-200 Mbit		
Single Play	Double Play	Triple Play
-11%	3%	19%
>200 Mbit		
Single Play	Double Play	Triple Play
2%	3%	17%

*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	Tele2 Bredband 50 kampanj	22.63	20.49
12-30 Mbps fixed internet	Tele2 Bredband 50 kampanj	22.63	21.13
30-100 Mbps fixed internet	Tele2 Bredband 50 kampanj	22.63	22.10
100-200 Mbps fixed internet	Tele2 Bredband 150 kampanj	25.72	28.89
>200 Mbps fixed internet	Telenor Sverige Bredband 250 kampanj	30.07	29.37
12-30 Mbps fixed internet with fixed phone	Tele2 Bredband 50 & Telefoni Max Fastpris	35.58	29.55
30-100 Mbps fixed internet with fixed phone	Tele2 Bredband 50 & Telefoni Max Fastpris	35.58	31.51
100-200 Mbps fixed internet with fixed phone	Telenor Sverige Bredband 250 & Telefoni Mini	37.59	36.67
>200 Mbps fixed internet with fixed phone	Telenor Sverige Bredband 250 & Telefoni Mini	37.59	36.38
12-30 Mbps fixed internet with fixed phone and TV	Tele2 Bredband 50 & Telefoni Max Fastpris & TV Bas	51.05	37.56
30-100 Mbps fixed internet with fixed phone and TV	Tele2 Bredband 50 & Telefoni Max Fastpris & TV Bas	51.05	38.37
100-200 Mbps fixed internet with fixed phone and TV	Telenor Sverige Bredband 250 & Telefoni Mini & Tv Bas	51.81	43.67
>200 Mbps fixed internet with fixed phone and TV	Telenor Sverige Bredband 250 & Telefoni Mini & Tv Bas	51.81	44.43



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in Sweden fell somewhat. The most different trend was for 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile, where prices fell somewhat (by 1%).

Market competition

Telenor Sverige provides the majority of the least expensive offers across all service bundles on the market in Sweden (5 of 9). Tele2 provides the remainder.

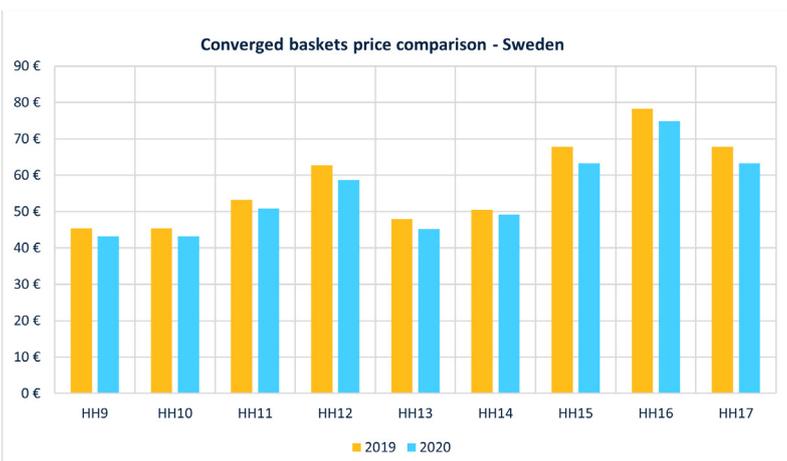
EU comparison

Prices for household broadband baskets in Sweden show a different pattern compared to EU27 countries overall. Whereas consumers requiring 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile find offers slightly higher than the EU average, those seeking 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile find prices slightly lower than the EU average.

Bundle premium - mobile component					
			Sweden	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	7,65			9,43
	Double Play 30-100 Mbps	7,65			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	7,65			12,42
	Double Play 100-200 Mbps	7,65			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	11,52			18,25
	Triple Play 100-200 Mbps	11,52			18,18
	Triple Play >200 Mbps	11,52			17,20

Prices in Sweden compared with EU average*			
HH9	HH10	HH11	
	11%		6%
			-10%
HH12	HH13	HH14	
	16%		-9%
			-11%
HH15	HH16	HH17	
	2%		-6%
			3%

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Tele2 / Telenor Bredband 50 & Telefoni Max Fastpris / Fastpris 2 GB	43.23	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	Tele2 / Telenor Bredband 50 & Telefoni Max Fastpris / Fastpris 2 GB	43.23	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	Tele2 / Telenor Bredband 50 & Telefoni Max Fastpris / Fastpris 2 GB	50.88	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	Tele2 / Telenor Bredband 50 & Telefoni Max Fastpris & TV Bas / Fastpris 2 GB	58.70	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	Telenor Sverige / Telenor Bredband 250 & Telefoni Mini / Fastpris 2 GB	45.24	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	Telenor Sverige / Telenor Bredband 250 & Telefoni Mini / Fastpris 5 GB	49.11	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Telenor Sverige / Telenor Bredband 250 & Telefoni Mini & Tv Bas / Fastpris 5 GB	63.33	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Telenor Sverige / Telenor Bredband 250 & Telefoni Mini & Tv Bas / Fastpris 5 GB	74.84	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Telenor Sverige / Telenor Bredband 250 & Telefoni Mini & Tv Bas / Fastpris 5 GB	63.33	61.63

Mobile Broadband

Price development

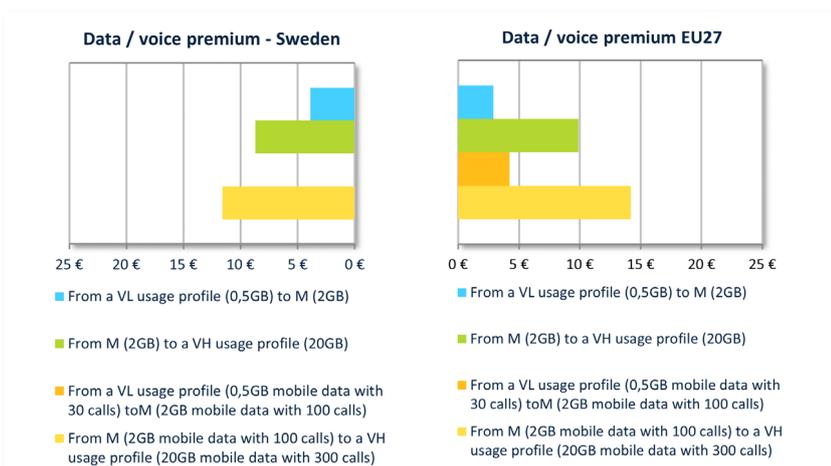
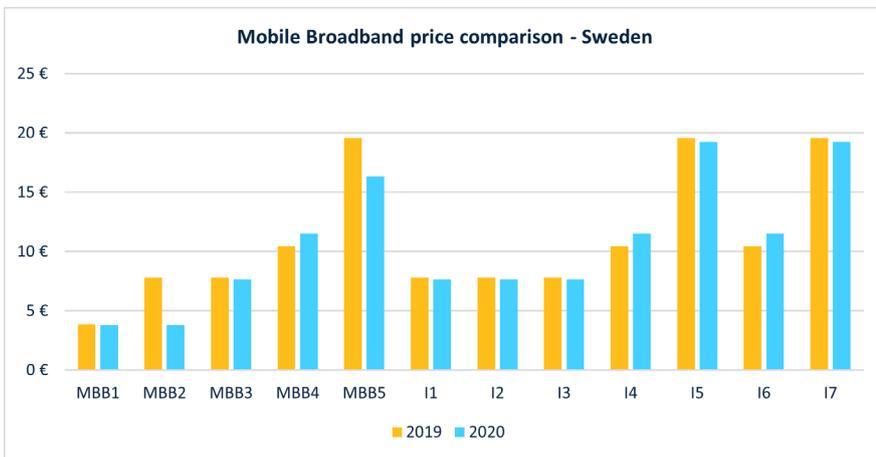
Prices for mobile broadband services in Sweden show no clear trend compared to the previous year (2019). Prices for offers including 1 GB mobile data with no calls fell very strongly.

EU comparison

Compared to all EU27 countries, prices for mobile broadband in Sweden are lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Telenor provides a slightly higher number of the least expensive offers across all service bundles on the market in Sweden (8 of 12) in comparison to the rest of the providers. Telia Company or Tele2 provide the remainder.



Prices in Sweden compared with EU average*

MBB1	MBB2	MBB3
-40%	-46%	-17%
MBB4	MBB5	I1
-4%	-14%	-17%
I2	I3	I4
-24%	-43%	-38%
I5	I6	I7
-30%	-23%	-30%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Telia Company Telia Kontantkort Surf 0.5 GB	3.79	6.35
MBB2: 1 GB mobile data with no calls	Telenor Surf 1 GB	3.79	7.07
MBB3: 2 GB mobile data with no calls	Telenor Fastpris 2 GB	7.65	9.23
MBB4: 5 GB mobile data with no calls	Telenor Fastpris 5 GB	11.52	11.99
MBB5: 20 GB mobile data with no calls	Telia Company Mobilbroadband 30 GB	16.34	19.11
I1: 0.5 GB mobile data with 30 calls	Telenor Fastpris 2 GB	7.65	9.18
I2: 1 GB mobile data with 30 calls	Telenor Fastpris 2 GB	7.65	10.03
I3: 2 GB mobile data with 100 calls	Telenor Fastpris 2 GB	7.65	13.40
I4: 5 GB mobile data with 300 calls	Telenor Fastpris 5 GB	11.52	18.47
I5: 20 GB mobile data with 300 calls	Tele2 Mobilabonnemang 25 GB	19.24	27.60
I6: 5 GB mobile data with 30 calls	Telenor Fastpris 5 GB	11.52	14.93
I7: 20 GB mobile data with 100 calls	Tele2 Mobilabonnemang 25 GB	19.24	27.44



The UK



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Country report 2020

ISPs in sample

BT | Sky | Virgin Media | EE | TalkTalk

MNOs in sample

Vodafone | Three | EE | Telefonica

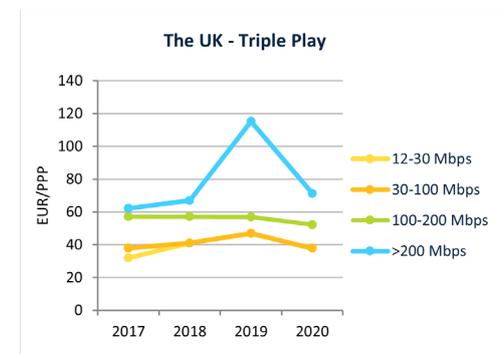
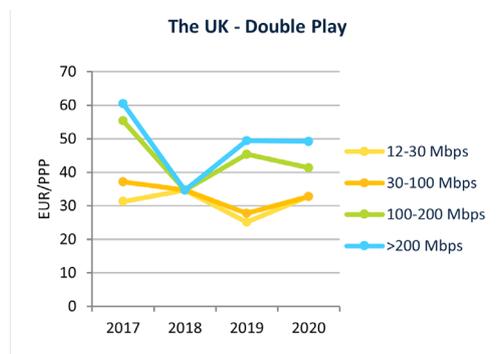
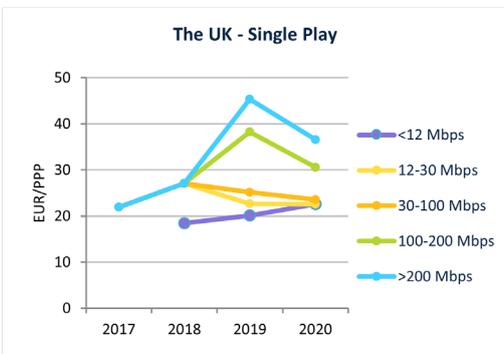
October 2020 data

2016, 2017, 2018 data was recalculated to sustain comparability with updated basket definitions. Figures may thus deviate from previously published data.

Fixed Broadband

Price development

Prices for fixed broadband services in the UK show no clear trend compared to the previous year (2019). Prices for offers including 12-30 Mbps fixed internet with fixed phone rose strongly.



Market competition

TalkTalk provides a slightly higher number of the least expensive offers across all service bundles on the market in the UK (6 of 13) in comparison to the rest of the providers. Virgin Media or EE provide the remainder.

EU comparison

Compared to all EU27 countries, prices for fixed broadband in the UK are slightly higher than the EU average. However, the lowest price of offers for consumers requiring 30-100 Mbps fixed internet with fixed phone and TV is slightly lower than the EU average.

Prices in the UK compared with EU average*

12-30Mbit		
Single Play	Double Play	Triple Play
7%	11%	1%
30-100Mbit		
Single Play	Double Play	Triple Play
7%	4%	-1%
100-200 Mbit		
Single Play	Double Play	Triple Play
6%	13%	20%
>200 Mbit		
Single Play	Double Play	Triple Play
25%	35%	60%

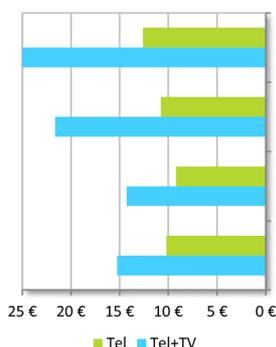
*deviation in percent from the EU average in the respective basket/bundle combination

Fixed Broadband

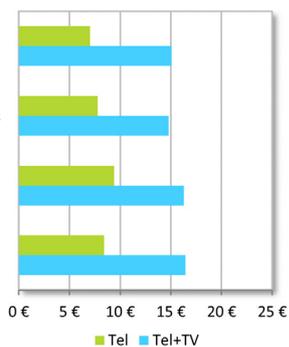
Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
<12 Mbps fixed internet	EE Standard Broadband with landline	22.57	20.49
12-30 Mbps fixed internet	EE Standard Broadband with landline	22.57	21.13
30-100 Mbps fixed internet	TalkTalk Faster Fibre	23.57	22.10
100-200 Mbps fixed internet	Virgin Media M 100	30.55	28.89
>200 Mbps fixed internet	Virgin Media M 200	36.57	29.37
12-30 Mbps fixed internet with fixed phone	TalkTalk Faster Fibre + Unlimited UK Calls	32.79	29.55
30-100 Mbps fixed internet with fixed phone	TalkTalk Faster Fibre + Unlimited UK Calls	32.79	31.51
100-200 Mbps fixed internet with fixed phone	TalkTalk Faster 150 Fibre	41.32	36.67
>200 Mbps fixed internet with fixed phone	Virgin Media M 200	49.18	36.38
12-30 Mbps fixed internet with fixed phone and TV	TalkTalk Faster Fibre + TalkTalk TV + Unlimited UK Calls	37.85	37.56
30-100 Mbps fixed internet with fixed phone and TV	TalkTalk Faster Fibre + TalkTalk TV + Unlimited UK Calls	37.85	38.37
100-200 Mbps fixed internet with fixed phone and TV	Virgin Media Big bundle + Drama & Docs	52.18	43.67
>200 Mbps fixed internet with fixed phone and TV	Virgin Media Bigger bundle + Movies	71.25	44.43

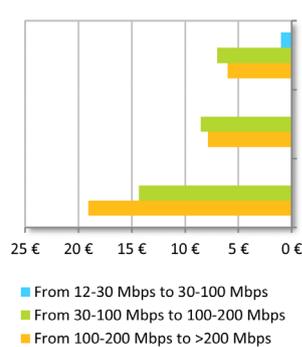
Bundle premium - The UK



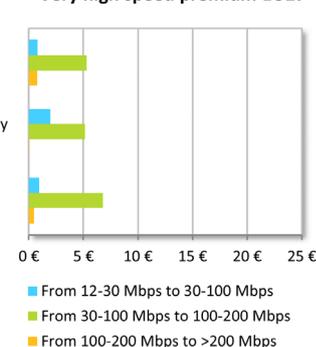
Bundle premium - EU27



Very high speed premium - The UK



Very high speed premium EU27



Converged Offers

The fixed – mobile (converged) offers reported here combine the relevant mobile component (bundled or not) with the relevant fixed broadband bundle, which represent the lowest price in the market for that representative household. The offer reported is not necessarily from the same provider, but is the least expensive offer in the country.

Price development

Compared to 2019, averaging over the usage baskets shown, prices in the UK fell somewhat. In contrast, for consumers requiring 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile, prices rose noticeably (by 11%).

Market competition

TalkTalk provides the majority of the least expensive offers across all service bundles on the market in the UK (6 of 9). Virgin Media provides the remainder.

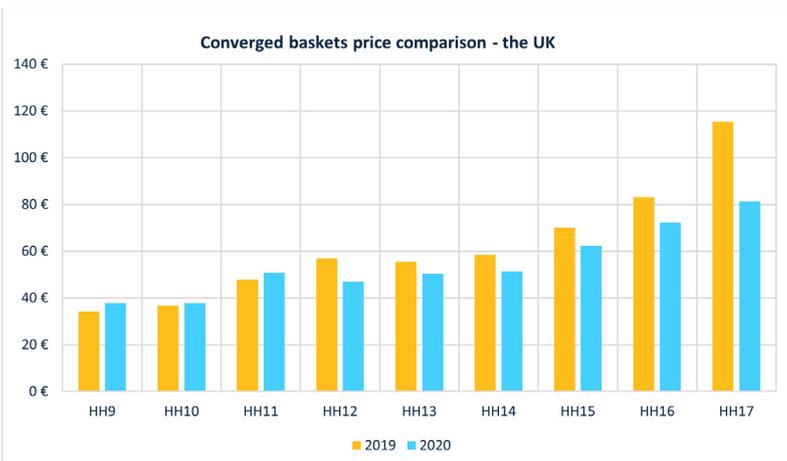
EU comparison

Prices for household broadband baskets in the UK show a different pattern compared to EU27 countries overall. Whereas consumers requiring 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile find offers slightly lower than the EU average, those seeking >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile find prices somewhat higher than the EU average.

Bundle premium - mobile component					
			The UK	EU	
30 calls 1GB mobile	Double Play 12-30 Mbps	5,02			9,43
	Double Play 30-100 Mbps	5,02			9,30
100 calls 2GB mobile	Triple Play 30-100 Mbps	9,03			12,42
	Double Play 100-200 Mbps	9,03			13,29
300 calls 5GB mobile	Double Play 100-200Mbps	10,03			18,25
	Triple Play 100-200 Mbps	10,03			18,18
	Triple Play >200 Mbps	10,03			17,20

Prices in the UK compared with EU average*			
HH9	HH10	HH11	
-3%	-7%	-10%	
HH12	HH13	HH14	
-8%	1%	-7%	
HH15	HH16	HH17	
1%	-9%	32%	

*deviation in percent from the EU average in the respective basket/bundle combination



Converged Offers

Least Expensive Offers

Usage basket	Provider and offer	EUR/PPP	EU27 average
HH9: 12-30 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	TalkTalk / Three Faster Fibre + Unlimited UK Calls / 1GB data	37.81	38.98
HH10: 30-100 Mbps fixed internet with fixed phone with 1-SIM, 30 calls 1 GB mobile	TalkTalk / Three Faster Fibre + Unlimited UK Calls / 1GB data	37.81	40.81
HH11: 30-100 Mbps fixed internet with fixed phone with 2-SIM, 100 calls 2 GB mobile	TalkTalk / Three Faster Fibre + Unlimited UK Calls / 4GB data	50.85	56.39
HH12: 30-100 Mbps fixed internet with fixed phone and TV with 1-SIM, 100 calls 2 GB mobile	TalkTalk / Three Faster Fibre + TalkTalk TV + Unlimited UK Calls / 4GB data	46.88	50.79
HH13: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 100 calls 2 GB mobile	TalkTalk / Three Faster 150 Fibre / 4GB data	50.35	49.97
HH14: 100-200 Mbps fixed internet with fixed phone with 1-SIM, 300 calls 5 GB mobile	TalkTalk / Three Faster 150 Fibre / 8GB data	51.35	54.92
HH15: 100-200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Virgin Media / Three Big bundle + Drama & Docs / 8GB data	62.21	61.84
HH16: 100-200 Mbps fixed internet with fixed phone and TV with 2-SIM, 300 calls 5 GB mobile	Virgin Media / Three Big bundle + Drama & Docs / 8GB data	72.25	79.81
HH17: >200 Mbps fixed internet with fixed phone and TV with 1-SIM, 300 calls 5 GB mobile	Virgin Media / Three Bigger bundle + Movies / 8GB data	81.28	61.63

Mobile Broadband

Price development

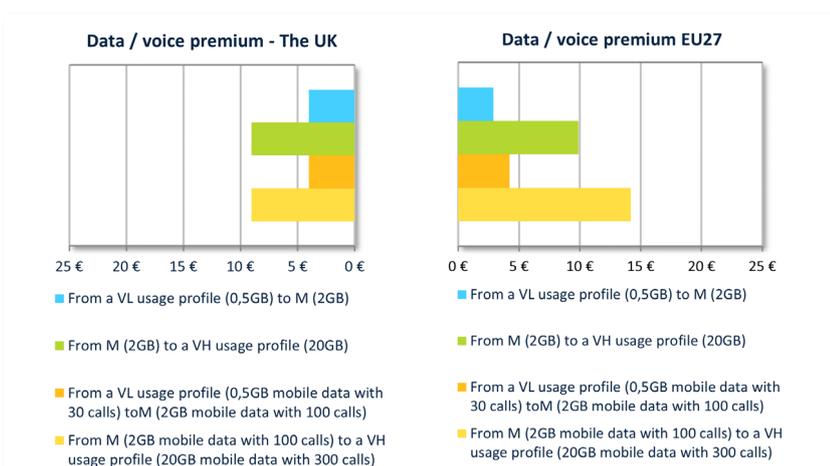
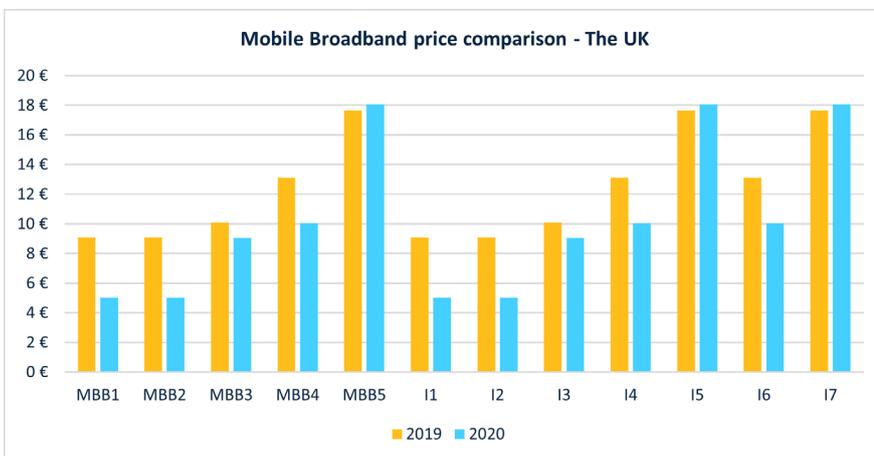
Compared to 2019, averaging over the usage baskets shown, prices in the UK fell strongly. In contrast, for consumers requiring 20 GB mobile data with no calls, prices rose somewhat (by 3%).

EU comparison

Compared to all EU27 countries, prices for mobile broadband in the UK are lower than the EU average. No offers were found to be more expensive than the EU average.

Market competition

Three provides all the least expensive offers across all service bundles on the market in the UK.



Prices in the UK compared with EU average*

MBB1	MBB2	MBB3
-21%	-29%	-2%
MBB4	MBB5	I1
-16%	-5%	-45%
I2	I3	I4
-50%	-33%	-46%
I5	I6	I7
-35%	-33%	-34%

*deviation in percent from the EU average in the respective basket/bundle combination

Mobile Broadband

Least Expensive Offers

Usage basket	Provider and offer	EUR/ PPP	EU27 average
MBB1: 0.5 GB mobile data with no calls	Three 1GB data	5.02	6.35
MBB2: 1 GB mobile data with no calls	Three 1GB data	5.02	7.07
MBB3: 2 GB mobile data with no calls	Three 4GB data	9.03	9.23
MBB4: 5 GB mobile data with no calls	Three 8GB data	10.03	11.99
MBB5: 20 GB mobile data with no calls	Three 30GB data	18.06	19.11
I1: 0.5 GB mobile data with 30 calls	Three 1GB data	5.02	9.18
I2: 1 GB mobile data with 30 calls	Three 1GB data	5.02	10.03
I3: 2 GB mobile data with 100 calls	Three 4GB data	9.03	13.40
I4: 5 GB mobile data with 300 calls	Three 8GB data	10.03	18.47
I5: 20 GB mobile data with 300 calls	Three 30GB data	18.06	27.60
I6: 5 GB mobile data with 30 calls	Three 8GB data	10.03	14.93
I7: 20 GB mobile data with 100 calls	Three 30GB data	18.06	27.44

European Commission

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