



Communications Market Review

July to December 2018

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1. Reporting parameters

This is the latest report in a series of Communications Market Review (CMR) publications from the Malta Communications Authority (MCA). The report draws on quarterly and half-yearly data compiled by the MCA from network operators and service providers involved in the provision of electronic communications and postal services in Malta. This data is then utilised to develop key performance indicators (KPIs) for the relevant sectors.

Figure 1 below lists the network operators and service providers that submitted data to the MCA.

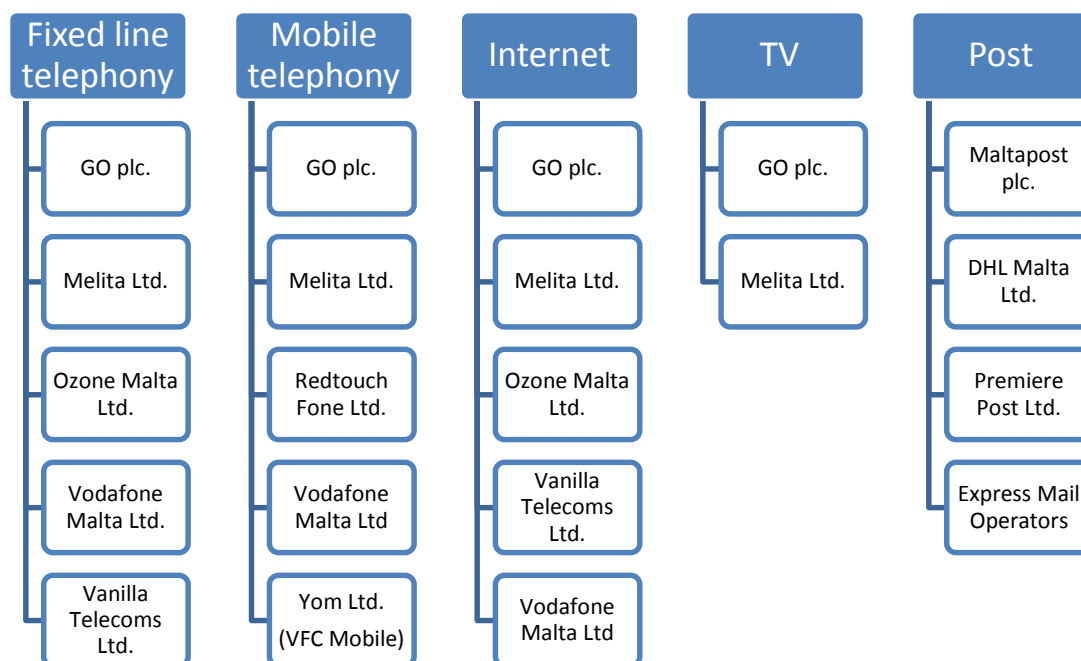


Figure 1: Operators providing quarterly data in 2018

This report also refers to findings extracted from publications of third parties in the areas of interest¹.

1.1. The reporting period and data cut-off date

The current review presents data and KPIs on a quarterly and half-yearly basis for the period starting Q1 2014 and ending Q4 2018.

The data cut-off date for implementing changes and updates in the data has been set at the 14th March 2019. Any data revised and updated by the sources after the cut-off date has been incorporated in the Data Report Sheet (DRS) published in 29th March 2019.²

¹ References to information contained in other websites and quotes from third party sources, such as reference to Deutsche Post's postal rate figures in Malta and the EU, should not be interpreted as constituting endorsement, accuracy and/or responsibility by the MCA.

² The MCA publishes a DRS on a regular basis, the latest of which can be found on: <https://www.mca.org.mt/articles/key-market-indicators-electronic-communications-and-post-q1-2014-q4-2018>

1.2. The KPIs in this report

This report is composed of five sections dealing with trends observed for fixed telephony, mobile telephony, Internet, pay-TV and post. A list of indicators covered in this review is highlighted below.

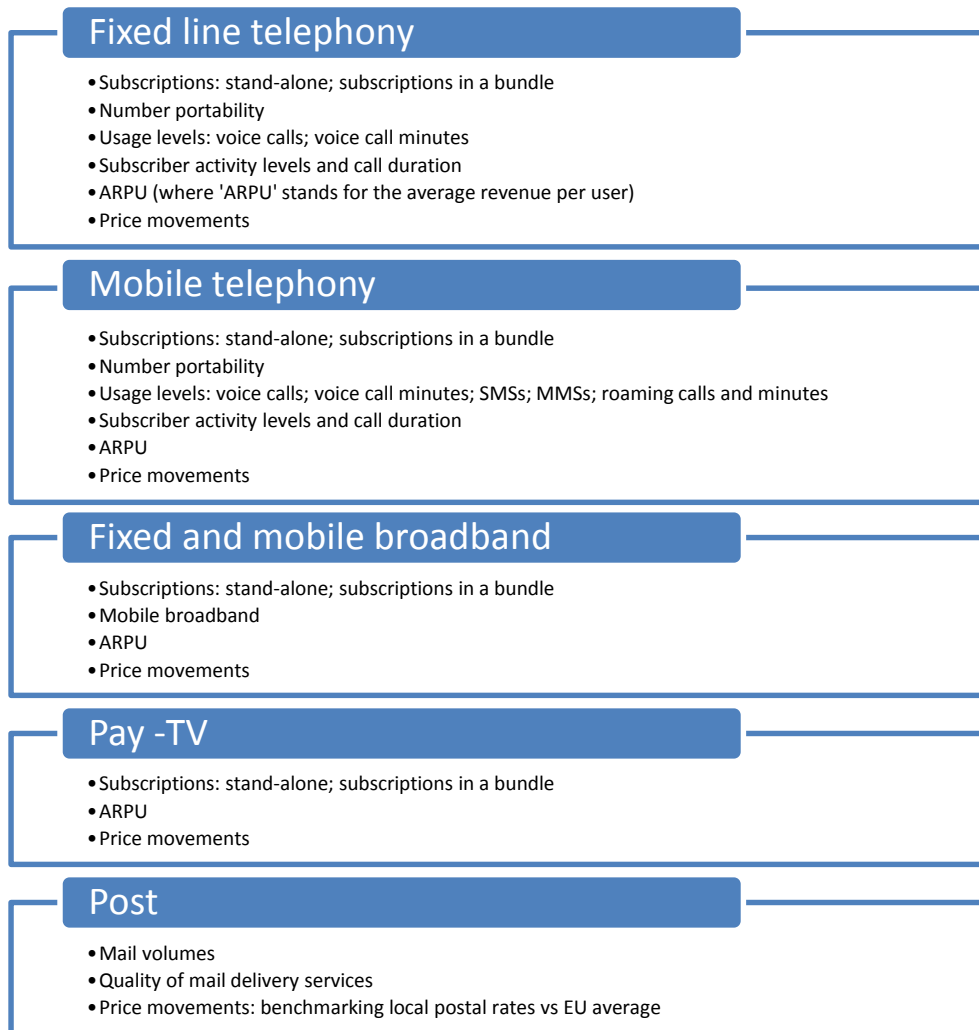


Figure 2: Key market indicators for electronic communications and post

2. Key market outcomes

During the second half of 2018 the telecoms sector in Malta once again registered encouraging results across all sectors in terms of subscriber growth. Of significance, is that during this period operators successfully added a substantial number of new customers on bundle packages featuring ultra-fast fixed broadband download speeds and premium TV content. The number of clients with stand-alone subscriptions declined further as service providers reduced choice in this product category and offered better prices for their bundle packages compared to those charged for stand-alone products.

Subscriptions in the fixed broadband increased up by a further 5.8% to reach a total of 191,833 by end of year, with take-up increasingly geared for fast and ultra-fast connections. Significantly, take-up of ultra-fast broadband surged by 76% year-on-year, with 63,799 subscriptions recorded at the end of the current reporting period. This change translated into improved revenue streams for operators as evidenced by the reported 4.4% increase in ARPU, from €112.99 in the second half of 2017 to €117.92 in the second half of 2018. Notwithstanding the higher access fees that apply for ultra-fast connections, the rate per Mbit of download dropped further in the second half of 2018.

Mobile telephony subscriptions were up by 1.8% year-on-year to 615,843 by the end of 2018. The uptick in subscription numbers brought about increased usage of both voice and data services, as end-users increasingly make use of the mobile telephony service to communicate with others. Significantly, the number of mobile voice traffic minutes were up by 37.9% year-on-year to 619.1 million in the second half of 2018 (excluding roaming minutes). During this period, pre-paid plans lost ground by 0.7% but still accounted for the majority of subscriptions at 62.5%. Conversely, the post-paid sector was up by 6.6% year-on-year. Also of significance, is the continued rise in usage of mobile data services, with the mobile handset now serving as an essential medium to carry out a myriad of online activities. Mobile data usage has grown rapidly in recent years with the second half of 2018 exhibiting a similar trend. Indeed, at the end of the second half of 2018, 74% of all mobile telephony subscriptions accessed mobile data services, up by 1 percentage point year-on-year. Over 3.2 million GBs of data were consumed in the second half 2018, up by 0.8 million GBs (or up by 30%) when compared to mobile data consumption recorded in the same period a year earlier. Higher mobile data usage is enhancing the revenue stream of local operators, which have seen their ARPU going up from €88.86 in the second half of 2017 to €92.40 in the second half of 2018.

The number of fixed telephony subscriptions was also up during the period under review, reaching 255,437 by end of year, up by 15,157 (or by 6.3%) from 240,280 a year earlier. Despite the increase in subscription numbers, end users are relegating the fixed telephony service for a less significant role in their daily communication activities. In fact, fixed voice minute volumes in the second half of 2018 were down by 5.7% compared to the same period a year earlier. Bundling continues to be one of the main reasons why this service remains strongly present in local households and businesses, with almost 75% of all post-paid subscriptions recorded at the end of December 2018 being purchased in a bundle. This means that the popularity of the fixed telephony generally stems not from its utility as a service but from the accomplishment by service providers to combine fixed telephony with the other more sought services such as pay-tv and fixed broadband.

The pay-TV sector saw a 6.2% jump in subscriptions year-on-year, with a total of 165,289 subscriptions recorded at the end of the current reporting period. Bundling is also getting

increasingly prevalent in this segment, with 72.2% of all pay-tv subscriptions being bundled with other services at the end of the year, which is up by 6.3 percentage points over a 12-month period. Growth in the pay-tv subscriber base comes alongside observed developments in premium content, particularly with the observed jump in subscriptions to the TSN Sports channel packages launched in June 2018. The increased take-up of premium content reinvigorated not only the subscriber base of the pay TV segment but also the revenue streams of local operators. In fact, the ARPU for this sector was up by 2.2% from €44.27 at the end of 2017 to €45.23 at the end of 2018.

As for the postal sector, mail volumes were down albeit marginally when compared to previous years. This drop is in line with long-term trends considering the continued developments of online applications and their increased usage. More specifically, single piece and bulk letter mail segments accounted for the registered drop whilst gains were noted for registered mail items and parcel mail segments. However, gains in the latter did not outweigh losses in the former seeing that total mail volume was down 0.2 million mail items or by 1.3%.

More detailed information on the main market outcomes for the electronic communications and postal sectors is provided in Sections 4 to 8 of this document.

i. Mobile telephony

- The number of mobile telephony subscriptions was up by 11,084 (or by 1.8%) year-on-year, to 615,843 at the end of December 2018. The mobile penetration rate at the end of the current reporting period stood at 126.27%, down from 127.13% a year earlier.
- The number of post-paid subscriptions was up by 13,987 (or by 6.6%) year-on-year and the number of pre-paid subscriptions was down by 2,903 (or by 0.7%).
- The proportion of the subscriber base on a post-paid plan was up from 34.8% at the end of December 2017 to 36.4% at the end of December 2018.
- 9.5% of all mobile subscriptions recorded at the end of December 2018 were bundled with some other electronic communications service.
- The number of mobile inward portings totalled 13,979 in the second half of 2018, down by 3,166 (or by 18.5%) from 17,145 inward portings recorded in the same period a year earlier.
- The number of mobile voice call minutes recorded in the second half of 2018 totalled 474.2 million, which is up by 25.2 million (or by 5.6%) from 449.0 million recorded in the second half of 2017. The number of mobile voice calls was also up, by 8.1 million (or by 3.5%) from 233.4 million to 241.5 million.
- Voice usage levels per subscription were down in terms of voice calls but up in terms of voice call minutes. Table 1 below outlines these contrasting trends and the continued decline in usage levels per subscription noted in the case of SMSs.

Mobile telephony	SH 2016	SH 2017	SH 2018
Subscriptions (end of period)	585,470	604,759	615,843
Activity levels per subscription			
Number of voice calls	435	387	392
Number of voice call minutes	711	745	770
Number of SMSs	340	279	225
ARPM (overall)	€0.072	€0.062	€0.060
Average rate per SMS (overall)	€0.032	€0.034	€0.041
ARPU	€90.64	€88.86	€92.40

Table 1: Take-up, activity levels and pricing for the mobile sector

- In line with long-term market trends, mobile telephony maintains the drive towards more competitively priced voice call offers. In fact, the average rate per minute (ARPM) of mobile communications in the second half of 2018 was down by 3.2% to €0.060 from €0.062 in the second half of the previous year.

ii. Fixed line telephony

- The number of fixed line subscriptions totalled 255,437 by the end of December 2018, up by 15,157 subscriptions (or by 6.3%) from 240,280 a year earlier.
- Year-on-year, the number of post-paid subscriptions and 'enhanced' subscriptions was up by 16,280 and 302 respectively. In contrast, the number of pre-paid subscriptions was down by 1,425.
- As for the proportion of the local subscriber base by type of subscription, 94.4% were on a post-paid contract at the end of the current reporting period, 4.2% were on a pre-paid plan and 1.5% were on an 'enhanced' plan.
- 70.4% of all fixed line telephony subscriptions at the end of the current reporting period were purchased in a bundle with other electronic communications services.
- There were 935 fixed line inward portings in the second half of 2018, marginally down from 1,335 inward portings recorded a year earlier.
- Fixed line traffic volumes were down in the second half of 2018 when compared to the same period a year earlier. The number of outgoing voice calls was down by 4.0 million (or by 6.4%) and the number of outgoing voice call minutes was down by 12.9 million (or by 5.7%). The decline in traffic volumes combined with a larger subscriber base contributed to a dampening in voice activity levels per subscription. Table 2 below illustrates these trends.

Fixed line telephony	SH 2016	SH 2017	SH 2018
Subscriptions (end of period)	234,368	240,280	255,437
Voice activity levels per subscription			
Number of voice calls	290	263	235
Number of voice call minutes	1,037	937	831
Average rate per minute (ARPM)	€0.028	€0.027	€0.024
on-net FTF call	€0.008	€0.008	€0.006
off-net FTF call	€0.011	€0.009	€0.008
FTM call	€0.137	€0.118	€0.108
FTI call	€0.094	€0.091	€0.104
Average revenue per user (ARPU)	€70.49	€66.96	€65.36

Table 2: Take-up, activity levels and pricing for the fixed line sector

- Fixed telephony ARPU in the second half of 2018 was down by 2.4% when compared to the same period a year earlier, from €66.96 to €65.36. This was mainly a result of lower voice traffic volumes as well as an increased take-up of this service in a bundle, whereby on-net voice allowances are more predominant.
- The ARPM of fixed line communications in the second half of 2018 stood at €0.028, which is 11.1% lower than €0.027 in the second half of 2018.

iii. Fixed and mobile broadband

- The number of fixed broadband subscriptions totalled 191,833 at the end of December 2018. This figure is up by 10,515 (or by 5.8%) from 181,318 reported a year earlier.
- The fixed broadband penetration rate stood at 39.3% at the end of December 2018, representing an increase of 1.2 percentage points year-on-year.
- 88.4% of all fixed broadband subscriptions reported at the end of the second half of 2018 that they were in a bundle, up from 84.1% recorded in the second half of 2017. In absolute terms, the number of fixed broadband subscriptions in a bundle totalled 169,618 at the end of June 2018.

Fixed broadband	SH 2016	SH 2017	SH 2018
Subscriptions (end of period)	171,263	181,318	191,833
less than 5Mbps	1,009	715	415
greater than or equal to 5Mbps but less than 10Mbps	230	142	108
greater than or equal to 10Mbps but less than 20Mbps	60,621	28,093	14,730
greater than or equal to 20Mbps but less than 30Mbps	3,019	2,453	1,626
greater than or equal to 30Mbps but less than 50Mbps	34,528	31,097	29,089
greater than or equal to 50Mbps but less than 100Mbps	61,295	82,528	82,066
100Mbps and more	10,561	36,290	63,799
Average rate per Mbps	€1.064	€0.906	€0.903
less than 5Mbps	€4.425	€4.425	€4.425
greater than or equal to 5Mbps but less than 10Mbps	€4.327	€4.327	€4.327
greater than or equal to 10Mbps but less than 20Mbps	€1.631	€1.440	€1.783
greater than or equal to 20Mbps but less than 30Mbps	€2.012	€2.012	€2.012
greater than or equal to 30Mbps but less than 50Mbps	€0.975	€0.814	€0.817
greater than or equal to 50Mbps but less than 100Mbps	€0.613	€0.623	€0.630
100Mbps and more	€0.432	€0.390	€0.335
ARPU	€103.17	€112.19	€117.92

Table 3: Take-up and pricing for the fixed broadband sector

- The number of fixed broadband subscriptions supporting a download speed of '30Mbps but less than 100Mbps' totalled 111,155 at the end of December 2018. This figure is down slightly by 2.2% when compared to the end of December 2017. Meanwhile, the number of subscriptions supporting download speeds of '100Mbps and greater' was up by 76% to 63,799.
- At the end of December 2018, the number of fixed broadband subscriptions on the cable platform totalled 92,552 (which is equivalent to 48.2% of the subscriber base). The number of DSL-based and wireless-based subscriptions totalled 67,523 (equivalent to 35.2% of the total) and 10,226 (equivalent to 5.3% of the total) respectively. Fibre-to-the-Home (FTTH) subscriptions totalled 21,532 (representing 11.22% of the subscriber base).

- Fixed broadband ARPU in the second half of 2018 stood at €117.92, up by 4.4% from €112.99 in the second half of 2017.
- The average rate per Mbps in the second half of 2018 stood at €0.90, down by 1.1% from €0.91 in the second half of 2017.
- Take-up of mobile broadband services was up in the current review period, with the number of active users surging from 441,643 at the end of December 2017 to 458,306 at the end of the second half of 2018.
- On average, each active mobile broadband subscription consumed 7.2GB of data in the second half of 2018, up by 1.5GB (or by 26.3%) when compared to the same period a year earlier.

iv. Pay-TV

- The number of pay-TV subscriptions totalled 165,289 at the end of December 2018, up by 9,613 (or by 6.2%) from 152,371 a year earlier.
- During this period, the number of analogue cable subscriptions was down by 1,456 (or by 100%), given that the provider of these services – Melita - notified clients that it will discontinue offering analogue packages. Meanwhile, the number of digital terrestrial TV (DTTV) subscriptions fell by 12,182 (or by 35.6%), given the continued efforts by the service provider – GO - to switch clients to IPTV-based packages.
- On the other hand, demand was up for digital cable TV offered by Melita and Internet Protocol TV (IPTV) offered by GO. The former platform saw a rise of 11,135 subscriptions whilst the latter saw an increase of 12,116 subscriptions.

Pay-TV	SH 2016	SH 2017	SH 2018
Subscriptions (end of period)	147,756	155,676	165,289
Average market rates for pay-TV packages	€20.49	€19.66	€19.66
up to 24 channels	€7.46	€9.99	€9.99
25 to 49 channels	€16.49	€14.66	€14.66
50 to 74 channels	-	-	-
75 to 99 channels	€23.99	€21.99	€22.00
100 channels or more	€33.99	€32.00	€32.00
ARPU	€95.13	€89.13	€89.30

Table 4: Take-up and pricing for the pay-TV sector

- The share of total pay-TV subscriptions on the digital cable platform stood 57.8% at the end of December 2018 up 3.6 percentage points when compared to the same period a year earlier. Meanwhile, the DTTV and IPTV platforms respectively accounted for 13.3% and 28.9% of the subscriber base recorded at the end of current reporting period. Compared to its standing at the end of December 2017, DTTV is down by 8.7 percentage points, whilst IPTV is up by 6.0 percentage points.
- The number of pay-TV subscriptions in a bundle was up by 17,718 year-on-year to reach 119,385 by the end of December 2018. The percentage of pay-TV subscriptions purchased in a bundle at the end of June 2018 stood at 72.2%, up by 6.9 percentage points year-on-year.
- Pay-TV ARPU in the second half of 2018 stood at €89.30, up from €89.13 in the second half of 2017.
- MCA workings show that the average advertised monthly access fee for pay-TV plans offered on a stand-alone basis stood at €19.66 in the second half of 2018.

v. Post

- Postal mail volumes delivered in the second half of 2018 totalled 18.1 million items, 0.2 million items lower than recorded in the same reporting period last year.
- Standard mail activity accounts for 95.7% of all postal mail volumes recorded in the second half of 2018. Express mail activity accounted for the remaining share.
- In absolute terms, standard mail volumes in the second half of 2018 were slightly down by 0.3 million items (or by 1.8%) when compared to the same period a year earlier. Meanwhile, express mail volumes were up by 11.7%, from 687,125 mail items to 767,569 mail items.

Post	SH 2016	SH 2017	SH 2018
Postal mail volumes	18,381,582	18,371,962	18,133,217
Standard mail volumes	17,724,580	17,684,838	17,365,648
Single piece letter mail	7,470,966	6,780,377	6,457,570
Bulk mail	9,882,172	10,026,329	9,982,860
Registered mail	710,796	779,644	877,443
Parcel mail	317,648	98,488	47,775
Express mail volumes	657,002	687,124	767,569
Single piece letter mail	427,448	465,016	464,657
Bulk mail	-	-	-
Registered mail	-	-	-
Parcel mail	268,337	266,524	302,912 ³

Table 5: Postal mail volumes

- As to developments by type of mail item, bulk mail activity accounted for 55.1% of all postal mail volumes recorded in the second half of 2018, followed by single piece letter mail at 38.2%, registered mail at 4.8% and parcel mail at 1.9%.

³ The MCA has investigated this figure with the local service provider that registered the big jump in parcel mail volumes. This service provider confirmed its earlier data submission.

3. Market share on the basis of subscriptions

This section looks at the changes in market position of local service providers, based on the number of subscriptions reported at the end of the current review period.

3.1. Fixed line telephony

By the end of second half of 2018, GO's market share stood at 57.1% when compared to Melita's market share of 38.9%. Vodafone Malta's market share stood at 3.8% whilst Ozone Malta and Vanilla Malta held a market share of 0.2% and 0.1% respectively.

Year-on-year, GO's market share was down by 3.9 percentage points, whilst Melita's market share was up by 2.7 percentage points and that of Vodafone Malta was up by 1.2 percentage points.

Market shares	GO	Melita	Vodafone Malta	Ozone Malta	Vanilla Telecoms	SIS
End of SH 2018	57.08%	38.87%	3.81%	0.19%	0.06%	-
End of SH 2017	61.02%	36.13%	2.61%	0.21%	0.05%	-
End of SH 2016	64.83%	33.97%	0.78%	0.32%	0.03%	0.07%

Figure 3: Market shares in terms of fixed line telephony subscriptions as at end of period

3.2. Mobile telephony

Vodafone Malta's market share dropped by 1.8 percentage points year-on-year, from 43.22% at the end of December 2017 to 41.47% at the end of December 2018. GO's market share also dropped 0.61 percentage points during the same period, from 36.7% to 36.1%. Conversely, Melita's market share was up from 18.58% to 21.1%.

The market share for Redtouch Fone fell from 1.46% at the end of December 2017 to 1.3% at the end of December 2018 whilst the market share for Yom was marginally up by 0.04 percentage points from 0.01% at the end of the second half of 2017 to 0.05% at the end of the second half of 2018.

Market shares	GO	Vodafone Malta	Melita	Redtouch Fone	Yom Ltd.
End of SH 2018	36.12%	41.47%	21.10%	1.26%	0.05%
End of SH 2017	36.73%	43.22%	18.58%	1.47%	0.01%
End of SH 2016	37.19%	44.14%	16.99%	1.67%	0.01%

Figure 4: Market shares in terms of mobile telephony subscriptions at the end of period.⁴

3.3. Fixed broadband

GO's fixed broadband market share was down by 1.7 percentage points year-on-year to 46.42% by the end of December 2018. Meanwhile, Melita's market share was up by 0.97 percentage points, from 47.27% to 48.24%. Vodafone Malta also saw a 0.82 percentage point rise in its market share, from 4.23% at the end of December 2017 to 5.05% at the end of the current reporting period. The market shares of Ozone Malta was down by 0.02 percentage points over the last 12 months whilst the market share for Vanilla Telecoms was relatively unchanged.

Market shares	GO	Melita	Vodafone Malta	Ozone Malta	Vanilla Telecoms	SIS
End of SH 2018	46.42%	48.24%	5.05%	0.16%	0.13%	-
End of SH 2017	48.11%	47.27%	4.23%	0.18%	0.13%	-
End of SH 2016	49.72%	47.23%	2.70%	0.21%	0.11%	0.03%

Figure 5: Market shares in terms of fixed broadband subscriptions as at end of period

3.4. Pay-TV

Melita accounts for the largest market share in the pay-TV segment and continues to register gains. The market share of this operator was up by 2.65 percentage points year-on-year, from 55.14% at the end of December 2017 to 57.79% at the end of December 2018. Meanwhile, GO's market share dropped to 44.86% to 42.21% during the same reporting period.

⁴ In the second half of 2017, all reported activity is attributable to Redtouch Fone.

Market shares	GO	Melita
End of SH 2018	42.21%	57.79%
End of SH 2017	44.86%	55.14%
End of SH 2016	48.15%	51.85%

Figure 6: Market shares in terms of pay-TV subscriptions as at end of period.

4. Fixed line telephony

The year 2018 has seen operators in the fixed telephony sector adding new clients to their customer base, with competition mainly played out between the largest players, namely GO and Melita. A much smaller presence in the fixed telephony segment has been established over a wireless infrastructure by Vodafone Malta, Vanilla Telecoms and Ozone Malta. Whilst subscriptions have gone up, their use of the service was down when compared to activity recorded in the previous year. Figures also indicate that the rise in fixed telephony subscriptions is associated with the steady increase in the take-up of dual and triple-play bundles, featuring the fixed telephony service alongside fixed broadband and pay-TV. The drop in fixed voice usage alongside the increased take-up of bundle packages contributed to the observed decline in ARPU for the sector.

4.1. Subscriptions

The number of fixed telephony subscriptions totalled 255,437 at the end of 2018, up by 15,157 over a 12-month period.

The standard post-paid segment largely contributed to this change. In fact, the number of post-paid subscriptions (or contract-based subscriptions) was up by 16,280 (or by 7.2%) year-on-year, from 224,760 to 241,040. Meanwhile, the number of 'enhanced' subscriptions, which are also post-paid subscriptions offering business clients several fixed telephony channel connections, was up by 302 (or by 8.7%) year-on-year.

In contrast, the number of pre-paid subscriptions was down by 1,425 (or by 11.9%) year-on-year, from 12,029 at the end of 2017 to 10,604 at the end of the current reporting period. Pre-paid fixed telephony subscriptions do not entail a contract term agreement and market players have been slowly migrating their pre-paid clients to plans that are post-paid.

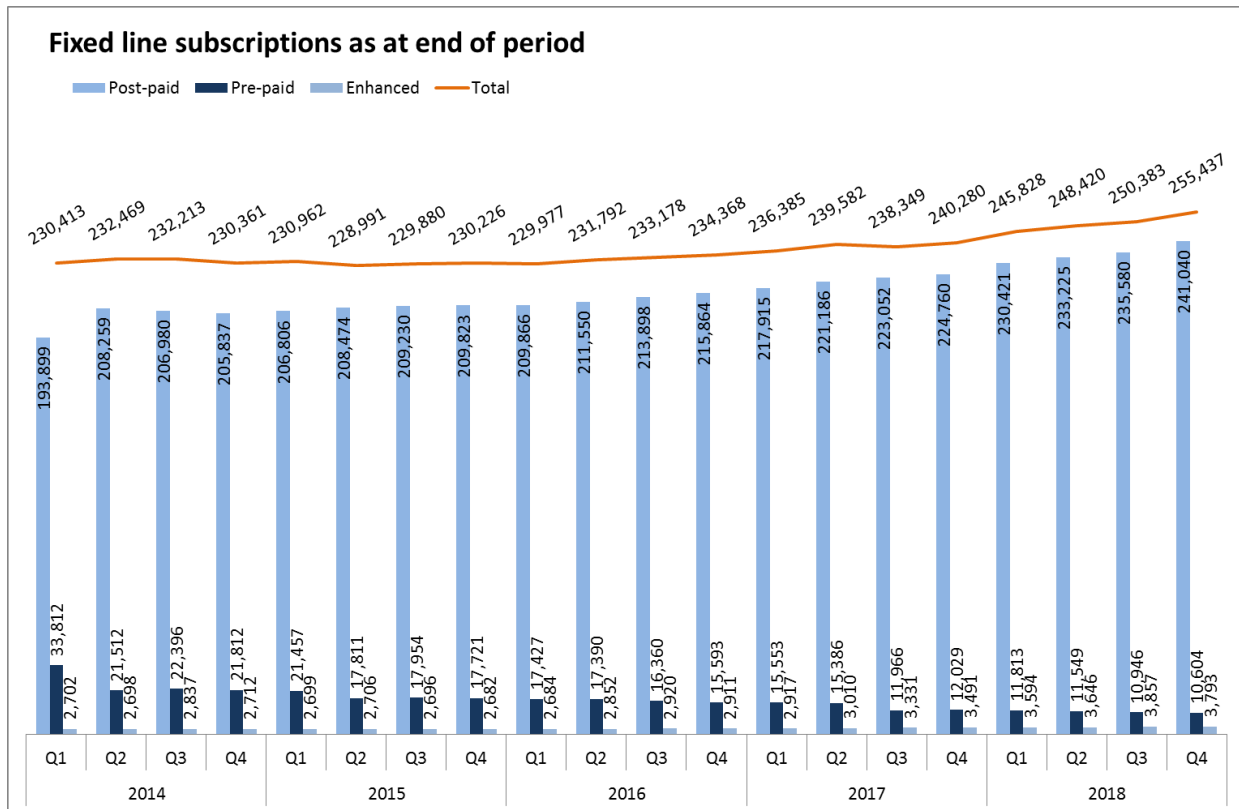


Figure 7: Fixed line telephony subscriptions as at end of period

By the end of 2018, 94.4% of all fixed line telephony subscriptions were on a standard post-paid plan, representing a 0.9 percentage point increase, year-on-year. Meanwhile, pre-paid subscriptions accounted for just 4.2% of the local fixed telephony subscriber base, down from 5.0% a year earlier. The proportion of the fixed telephony subscriber base attributed to the ‘enhanced’ segment stood at 1.5% by the end of the year in review.

4.2. Subscriptions on a bundle

Local operators have also been focusing on accelerating take-up of subscriptions in a bundle, even inviting existing clients to migrate from stand-alone plans to bundle packages. Overall, this strategy paid off, with the proportion of fixed telephony subscriptions in a bundle rising by 2.3 percentage points year-on-year to 70.4% by the end of 2018.⁵

⁵ Locally, only fixed line subscriptions on a post-paid contract can be purchased in a bundle with other electronic communications services.

Fixed line telephony subscriptions in a bundle	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Fixed telephony subscriptions on a dual-play contract	39,137	47,948	52,230	57,870	62,844	67,215	67,120	66,932	65,909	65,472
Fixed & Mobile	13,427	11,112	8,985	7,850	7,502	7,258	6,597	6,092	5,555	5,090
Fixed & Internet	15,979	29,890	36,927	44,179	49,622	54,413	55,227	55,793	55,649	55,306
Fixed & TV	9,731	6,946	6,318	5,841	5,720	5,544	5,296	5,047	4,705	5,076
Fixed telephony subscriptions on a triple-play contract	22,477	25,490	26,718	27,525	28,613	30,540	40,675	46,859	55,064	61,148
Fixed & Mobile & Internet	312	620	630	139	84	58	37	24	16	3
Fixed & TV & Internet	22,165	24,870	26,088	27,386	28,529	30,482	40,638	46,835	55,048	61,145
Fixed telephony subscriptions on a quad-play contract	44,069	44,429	45,683	44,429	48,075	49,900	49,175	49,785	51,691	53,164
Fixed telephony + fixed broadband + pay-TV + mobile telephony	44,069	44,429	45,683	44,429	48,075	49,900	49,175	49,785	51,691	53,164
Total number of fixed telephony subscriptions in a bundle	105,683	117,867	124,631	129,824	139,532	147,655	156,970	163,576	172,664	179,784
Number of fixed telephony subscriptions as at end of period	232,469	230,361	228,991	230,226	231,792	234,368	239,582	240,280	248,420	255,437
Percentage of fixed telephony subscribers in a bundle	45.46%	51.17%	54.43%	56.39%	60.20%	63.00%	65.52%	68.08%	69.50%	70.38%

Table 6: Fixed line post-paid subscriptions on a bundled offer

In absolute terms, the number of fixed line telephony subscriptions purchased in a bundle increased by 16,208 (or 9.9%) year-on-year.

4.3. Fixed line inward portings

A total of 935 fixed line inward portings was reported in the second half of 2018, marginally down from 1,335 portings reported in the second half of 2017.⁶

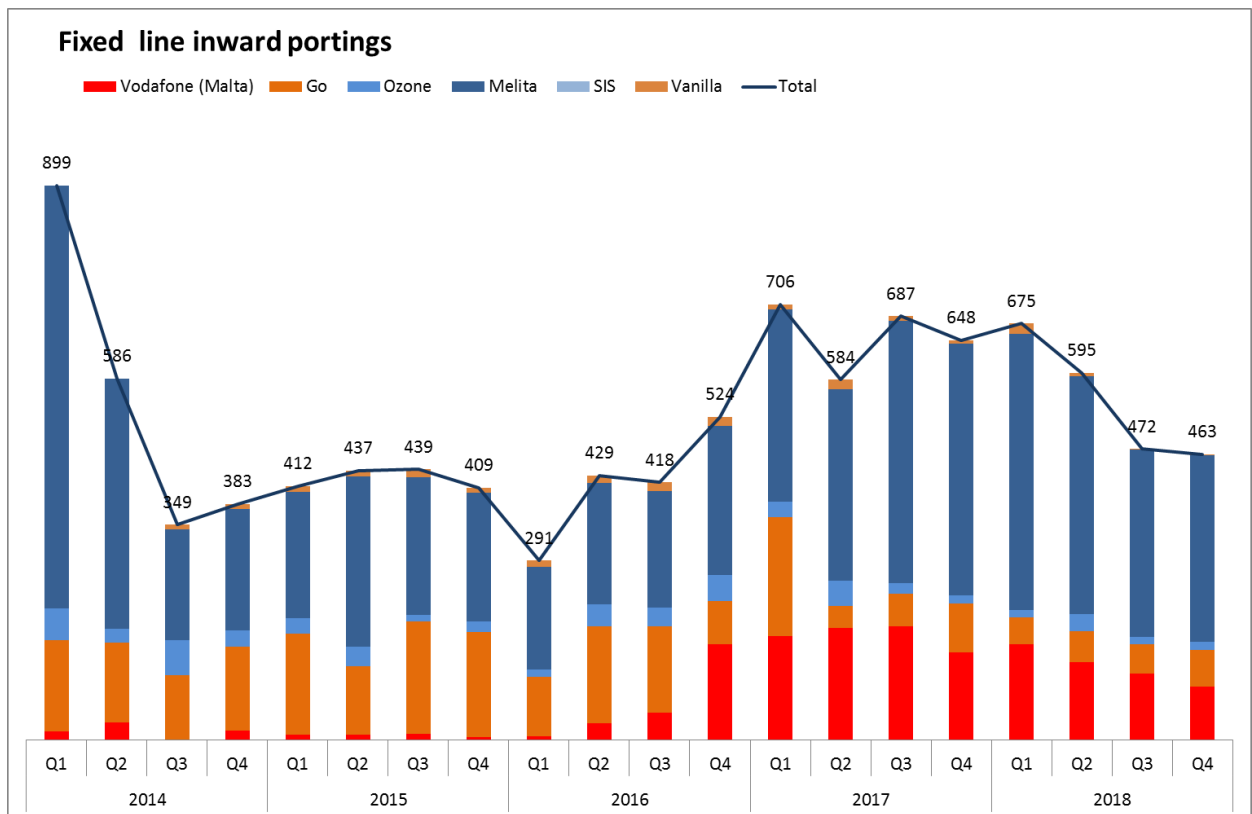


Figure 8: Fixed line number portability - number of inward portings

⁶ The term 'fixed line inward portings' refers to the total number of subscribers that switch from a fixed line operator to another whilst keeping the same number. Figures presented above only take into account inward portings.

In the current review period, the majority of inward portings was recorded by Melita’s, at 65.2% of the total, followed by Vodafone Malta at 18.8% and GO at 12.7%. During the same period, Ozone Malta and Vanilla Telecoms accounted for 2.8% and 0.4% of inward portings respectively.

4.4. Usage trends for fixed line telephony

As expected, fixed voice traffic volumes in the second half of 2018 were down compared to the second half of 2017. The number of fixed voice calls was down by 4.0 million (or by 6.4%), from 63.1 million to 59.1 million. Similarly, the number of voice call minutes was down by 12.9 million (or by 5.7%), from 225.1 million to 212.2 million.

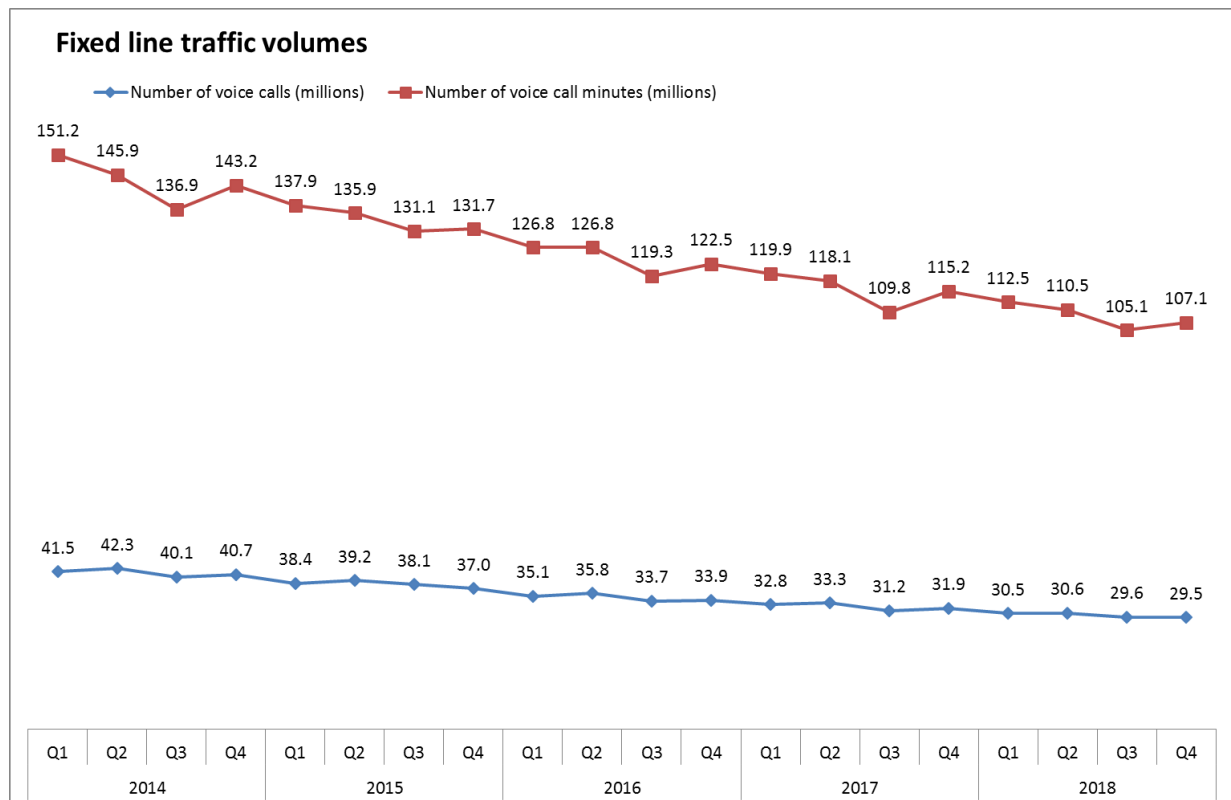


Figure 9: Voice traffic originating from local fixed line networks

Figure 9 depicts developments for both the national traffic and international traffic. The national voice traffic segment refers to volumes of fixed voice calls and voice minutes originated and terminated in Malta, whilst the international voice traffic segment refers to volumes of fixed voice calls and voice minutes originated locally and terminated in a foreign territory. The remainder of this section will focus on the relevant developments for these traffic segments.

4.4.1. National voice traffic volumes

National fixed line traffic volumes in the second half of 2018 comprised of 57.7 million voice calls and 203.8 million voice call minutes. This means that, on average during this period, each fixed telephony subscription accounted for approximately 226 national voice calls and 798 national voice call minutes.

National voice calls

Traffic volumes in this segment totalled 57.7 million in the second half of 2018, down by 3.4 million (or by 5.6%) from 61.1 million recorded in the corresponding period a year earlier.

In the second half of 2018, almost all components of the national voice call traffic segment registered a drop in usage when compared to the second half of the previous year.

The number of on-net FTF calls was down by 2.8 million (or by 9.5%), from 29.7 million to 26.8 million, whilst the number of off-net FTF calls was down by 1.1 million (or by 8.6%), from 13.1 million to 12.0 million. Meanwhile, the 'other' national calls component was up by 502,370 calls (or by 30.1%).⁷

Fixed voice calls (national)	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Total	81,061,884	78,122,647	75,080,520	72,657,406	68,547,147	65,563,474	63,859,644	61,085,677	59,442,893	57,659,206
Fixed-to-fixed(FTF)	61,829,592	58,333,116	56,188,852	53,829,105	50,621,535	48,005,094	45,981,776	42,777,957	41,402,808	38,834,568
on-net FTF	44,020,136	41,187,247	39,631,778	37,723,423	35,555,002	34,006,980	32,594,971	29,661,016	28,701,962	26,845,531
off-net FTF	17,809,456	17,145,869	16,557,074	16,105,682	15,066,533	13,998,114	13,386,805	13,116,941	12,700,846	11,989,037
Fixed-to-mobile(FTM)	17,543,834	18,127,981	17,490,548	17,404,228	16,572,110	16,190,347	16,517,323	16,637,481	16,682,373	16,652,029
Other	1,688,458	1,661,550	1,401,120	1,424,073	1,353,502	1,368,033	1,360,545	1,670,239	1,357,712	2,172,609

Table 7: Outgoing fixed line traffic - number of national voice calls

Conversely to the declines highlighted above, the number of FTM calls was marginally up by 14,538 (or by 0.09%), from 16.6 million to 16.7 million.

National voice call minutes

In terms of national voice call minutes, traffic volumes in the second half of 2018 totalled 203.8 million, which is down by 10.1 million (or by 4.7%) from the second half of 2017.

The number of on-net FTF traffic voice call minutes was down by 8.7 million (or by 6.8%), from 123.6 million to 114.9 million, whilst the number of off-net FTF minutes was down by 3.4 million (or by 6.1%), from 56.3 million to 52.8 million.

Fixed voice call minutes (national)	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Total	280,368,533	263,568,719	258,636,682	248,023,544	239,931,933	229,280,304	225,729,942	213,922,616	213,297,468	203,799,106
Fixed-to-fixed(FTF)	249,682,050	231,976,896	228,062,609	216,988,931	209,588,785	198,933,848	194,717,465	179,863,433	180,421,182	167,698,720
on-net FTF	178,064,325	163,134,907	160,680,942	152,164,197	147,487,069	140,732,212	137,236,132	123,580,585	124,542,376	114,850,688
off-net FTF	71,617,725	68,841,990	67,381,667	64,824,734	62,101,716	58,201,636	57,481,332	56,282,848	55,878,806	52,848,032
Fixed-to-mobile(FTM)	26,892,375	27,867,348	27,223,360	27,436,775	26,774,772	26,633,512	27,244,519	28,113,509	28,607,640	28,853,492
Other	3,794,108	3,724,475	3,350,713	3,597,839	3,568,376	3,712,943	3,767,958	5,945,674	4,268,646	7,246,894

Table 8: Outgoing fixed line traffic - number of national voice call minutes

In contrast to the above-mentioned declines, the number of FTM voice call minutes was marginally up by 0.8 million (or by 2.6%), from 28.1 million minutes to 28.9 million, whilst the number of 'other' national voice call minutes was up by 1.3 million (or by 21.9%), from 5.9 million to 7.2 million.

⁷ This traffic component includes freephone calls, premium calls and payphone calls.

4.4.2. International voice traffic volumes

In the second half of 2018, there were approximately 1.4 million fixed-to-international (FTI) voice calls and 8.4 million FTI voice call minutes. These figures translate to an average of 6 international voice calls and around 33 international voice call minutes per active fixed telephony subscription.

In comparison to the second half of 2017, the number of FTI voice calls was down by 0.6 million (or by 30.3%), whilst the number of international voice call minutes was down by 2.7 million (or by 24.7%).

4.5. Activity levels and call duration

Lower voice activity levels in combination with a rise in subscriptions results in lower activity levels per connection in the fixed telephony sector. In fact, the average number of voice calls and voice call minutes per active fixed line subscription in the second half of 2018 was lower than that recorded in the second half of previous year.

Figure 10 illustrates that the average number of voice calls and the average number of voice call minutes per active fixed line subscription in the second half of 2018 stood at 235 and 831 respectively. This is down from an average of 263 voice calls and 937 voice call minutes per subscription in the second half of 2017.

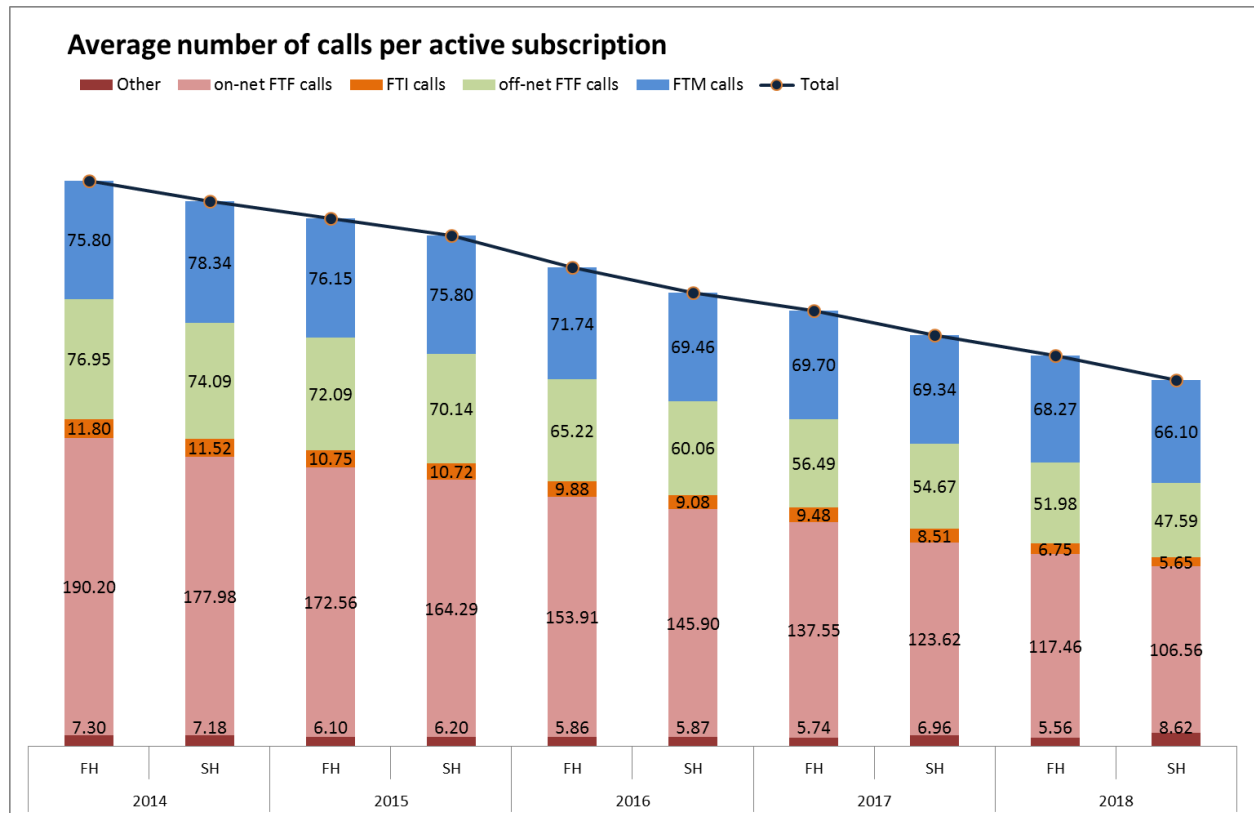


Figure 10: Average number of calls per active subscription

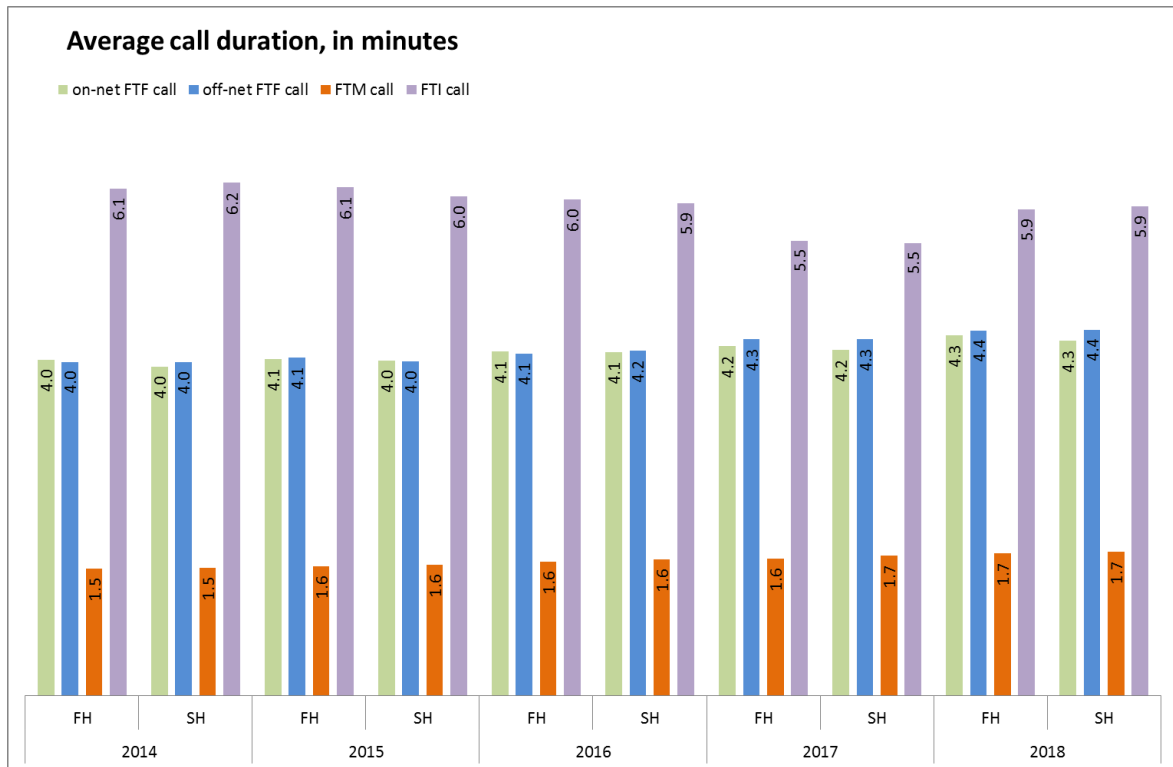


Figure 11: Average duration of an outgoing fixed line call

On average, a fixed line call generally lasted 3 minutes and 35 seconds during the second half of 2018, which is just slightly longer than observed during the same period in 2017. Figure 11 illustrates that a FTI call on average lasted 5 minutes and 54 seconds in the current review period whilst a FTM call lasted 1 minute and 42 seconds. An on-net FTF call on average lasted 4 minutes and 18 seconds whilst an off-net FTF call on average lasted 4 minutes and 24 seconds.

4.6. Fixed telephony ARPU

Fixed telephony ARPU totalled €65.36 in the second half of 2018, which is down by 2.4% from €66.96 recorded in the second half of 2017. Fixed ARPU figures are derived by dividing the total revenues of service providers, including revenues from access fees, by the average number of active subscriptions.⁸

⁸ The average number of active subscribers during a given period corresponds to the number of active subscriptions at the start of the period plus the number of subscriptions at the end of the same period, divided by two.

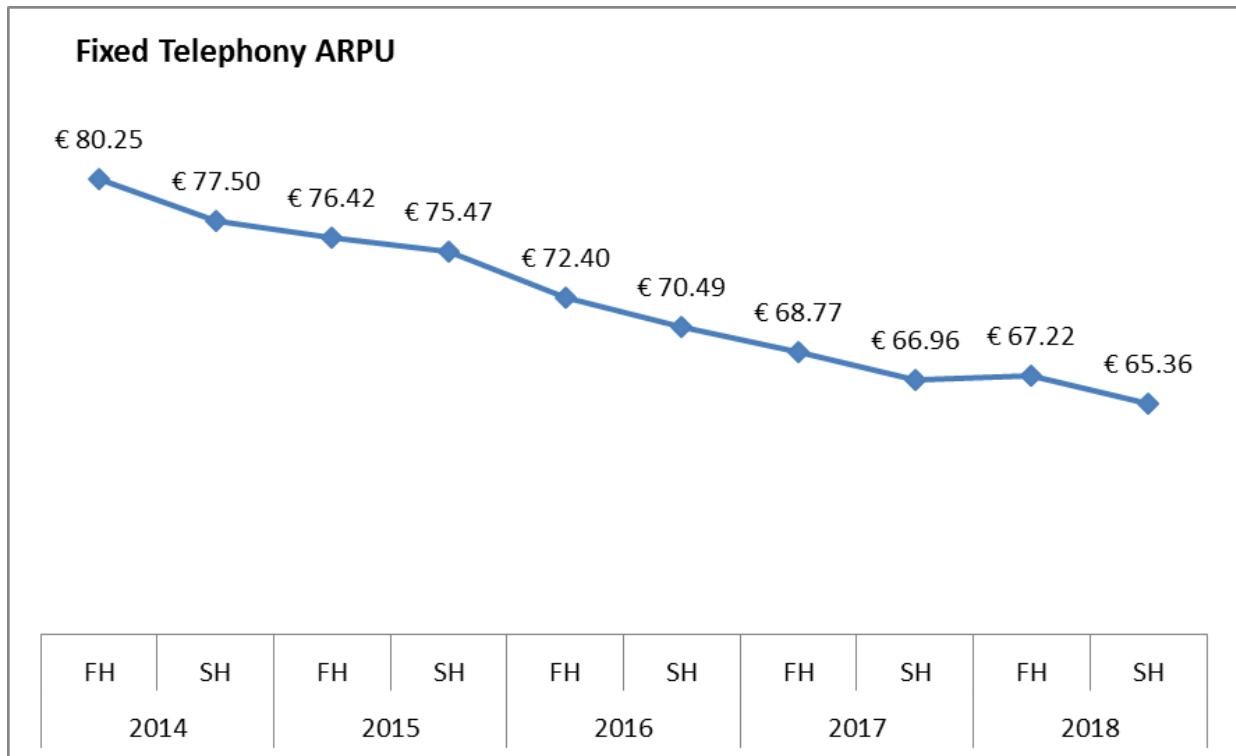


Figure 12: Average revenue per fixed line user

In the second half of 2018 the ARPU for fixed telephony continued on its downwards trajectory. This downwards trend in ARPU for this sector continues to be influenced by the rise in subscriptions for this service alongside the continued bundling trends. Moreover, voice traffic on this platform continues to diminish as consumers rely on their mobile phones to carry out most day-to-day activities.

4.7. Average rate per minute of fixed line communications

Figures for the average rate per minute of fixed line communications are derived by subdividing voice traffic revenues, but excluding revenues from access fees, VAT and excise tax, by the number of minutes reported under each respective heading.

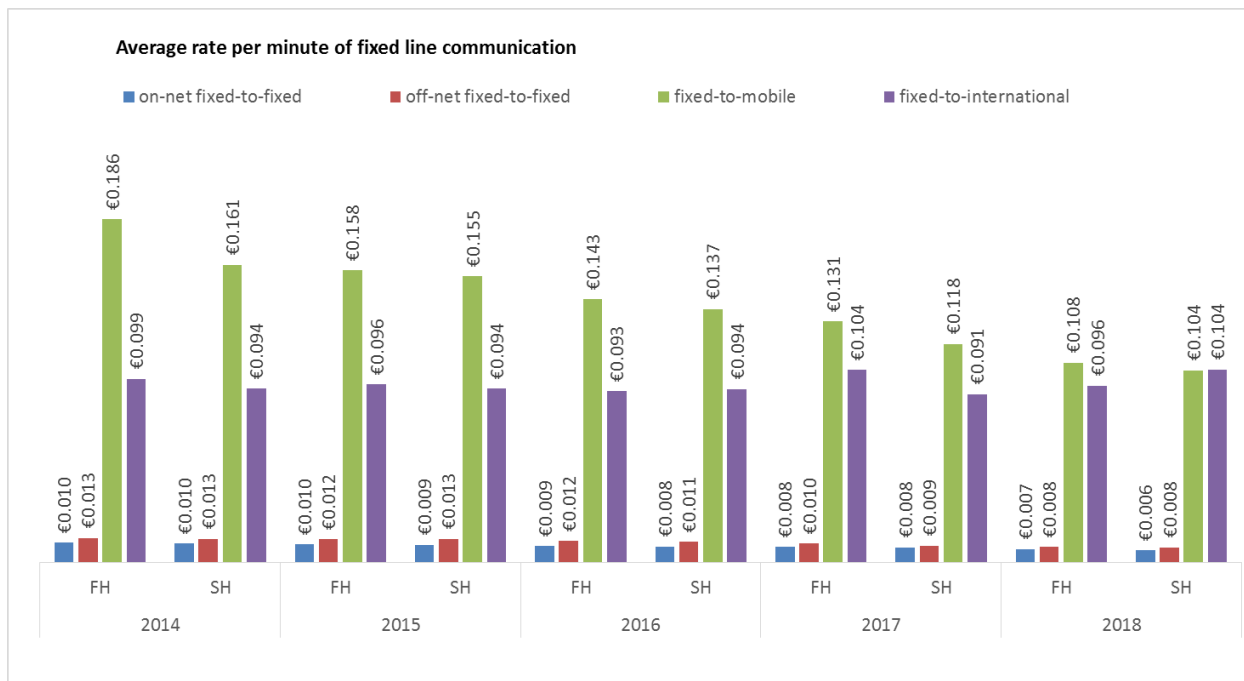


Figure 13: Average cost of a fixed line call derived from revenue-based workings

The second half of 2018 saw an 11.1% drop in the ARPM of a fixed line call, to €0.024 from €0.027 in the second half of 2017. The ARPM of a FTM voice call was down by 3.7%, from €0.11 in the second half of 2017 to €0.11 in the current reporting period.⁹ The ARPM of an on-net FTF call and an off-net FTF call stood at €0.01 in the second of 2018, relatively unchanged from the corresponding rate observed a year earlier. This change coincides with the increased availability of monthly allowances generally associated with the take-up of this service in a bundle. These improved allowances generally include unlimited on-net and off-net calls thus enabling consumers to make calls without being subject to additional charges such as outside bundle rates. Conversely, the FTI segment registered a small uptick in ARPM of about €0.01 (or by 14.3%), from €0.09 in the second half of 2017 to €0.10 in the second half of 2018.

Figures are to be interpreted with caution, as these are not the actual rates quoted on the market for the different plans and schemes launched by local operators. It is to be noted that local fixed line operators may offer free calls or discounted call rates, such as free on-net calls with bundled offers and cheaper call rates on the weekends. These would affect the outcome for the average rate per minute of fixed line communications

⁹ Workings do not take into account monthly access fees from fixed telephony plans and traffic volumes and revenues from free phone calls, premium calls and payphone calls.

5. Mobile telephony

The mobile telephony segment has, over the years, consolidated its position as the primary means with which end-users communicate with one another. For several years now, mobile telephony usage levels have been increasingly above usage levels for fixed telephony, both in terms of voice calls and minute volumes. Significantly, during the second half of 2018, local mobile telephony subscribers on average consumed around 770 voice call minutes, up by 5% compared to the same period a year earlier. The mobile telephony segment has also been recording solid gains in terms of data usage, as more end-users are carrying out online activities over their mobile handset. Subscriber growth has also been steady for the last few years, underscored by a shift from pre-paid plans to post-paid (or contract-based) plans given the changing usage requirements alongside the slow but consistent improvement in voice and data allowances. Growing subscriber numbers and stronger usage levels, especially for mobile data services, enhanced revenues of local service providers and improved ARPU.

5.1. Subscriptions

A total of 615,843 mobile telephony subscriptions were recorded at the end of 2018, up by 11,084 (or by 1.8%) from 604,759 a year earlier.¹⁰ During this period, the number of post-paid customers has gone up by 13,987 (or by 6.6%), from 210,360 at the end of December 2017 to 224,347 at the end of December 2018. Conversely, the number of pre-paid subscriptions was down by 2,903 (or by 0.7%), from 394,399 at the end of December 2017 to 391,496 at the end of December 2018.

Notwithstanding these developments, the pre-paid segment still constitutes the biggest portion of mobile telephony customers, at almost 64% of all subscriptions at the end of 2018.

¹⁰ The number of active mobile subscriptions refers to the number of subscribers having a MSISDN with registered inbound or outbound activity within 90 days of the period stipulated for pre-paid connections and within 30 days of the period stipulated for post-paid connections.

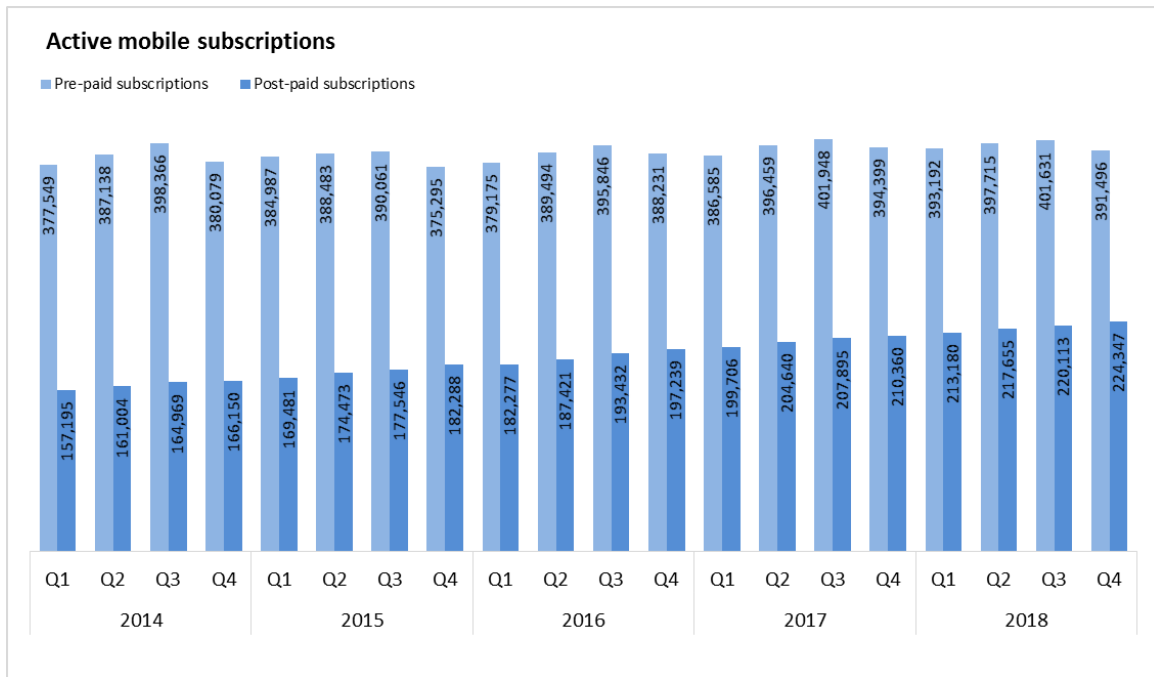


Figure 14: Mobile telephony subscriptions as at end of period

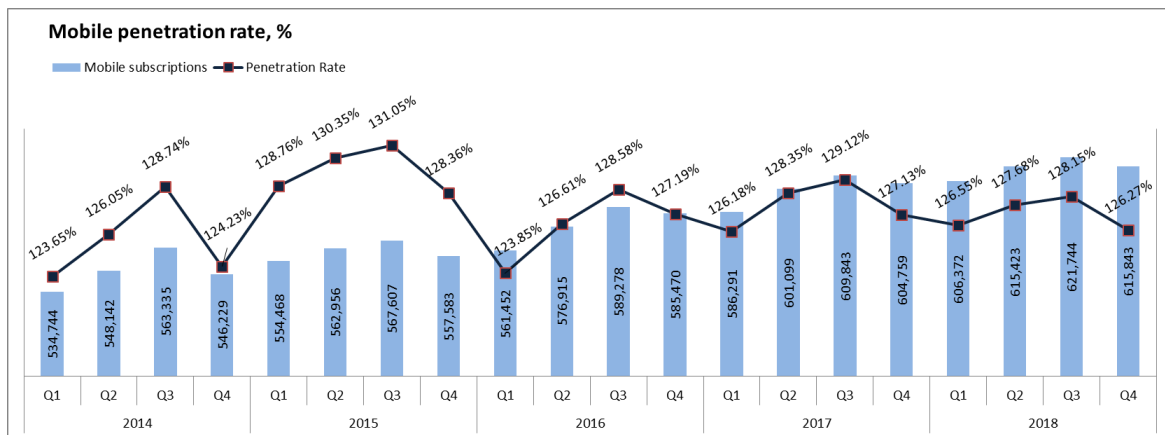


Figure 15: Mobile penetration in Malta

The mobile penetration rate dropped slightly by 0.9 percentage point year-on-year, from 127.13% at the end of 2017 to 126.27% at the end of 2018, given that population growth exceeded the growth in take up of the mobile telephony service.

Subscriptions in a bundle

The mobile telephony service represents a departure from the bundling trends observed for other electronic communications services (ECSs). In fact, few people purchase their mobile telephony service in a bundle package with other ECSs.

Table 9 below shows that just 9.5% of all local mobile telephony subscriptions reported at the end of 2018 were purchased in a bundle. In absolute terms, the number of mobile telephony subscriptions purchased in a bundle totalled 58,257 at the end of 2018, which is up by 2,356 (or by 4.2%) year-on-year.

Mobile telephony subscriptions in a bundle	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Mobile telephony subscriptions on a dual play contract	13,427	11,112	8,985	7,850	7,502	7,258	6,597	6,092	5,555	5,090
Mobile telephony + fixed telephony	13,427	11,112	8,985	7,850	7,502	7,258	6,597	6,092	5,555	5,090
Mobile telephony subscriptions on a triple contract	312	620	630	139	84	58	37	24	16	3
Mobile telephony + fixed telephony + fixed broadband	312	620	630	139	84	58	37	24	16	3
Mobile telephony subscriptions on a quad play contract	44,069	44,429	45,683	46,988	48,075	49,900	49,175	49,785	51,691	53,164
Mobile telephony + fixed telephony + fixed broadband + pay TV	44,069	44,429	45,683	46,988	48,075	49,900	49,175	49,785	51,691	53,164
Total number of mobile telephony subscriptions in a bundle	57,808	56,161	55,298	54,977	55,661	57,216	55,809	55,901	57,262	58,257
Total number of mobile telephony subscriptions at end of period	548,142	546,229	562,956	557,583	576,915	585,470	601,065	604,725	615,423	615,843
Percentage of fixed telephony subscriptions in a bundle	10.55%	10.28%	9.82%	9.86%	9.65%	9.77%	9.29%	9.24%	9.30%	9.46%

Table 9: Mobile subscriptions on a bundled offer

5.2. Mobile inward portings

There were 13,979 mobile inward portings in the second half of 2018, down by 3,166 (or by 18.5%) compared to the same period a year earlier.¹¹

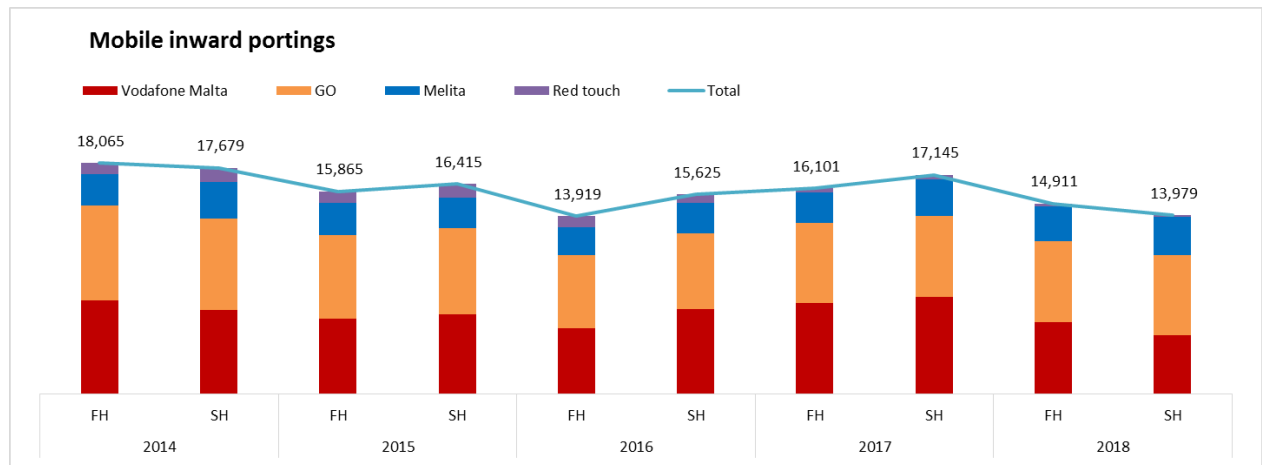


Figure 16: Mobile number portability - number of mobile portings

44.5% of all inward portings reported in the current review period took place on GO’s network, followed by 33.1% for Vodafone Malta and 21.5% for Melita. Redtouch fone accounted for the remaining 0.8% of all inward portings reported during the review period.

5.3. Voice usage trends for mobile telephony

End users are making bigger use of mobile voice telephony services, given their changing voice calling preferences and the relevant falling costs resulting from improved voice call allowances with post-paid offers. Of note is that the number of mobile-originated voice call minutes has been

¹¹ This term corresponds to the total number of mobile users that switch their subscription from one operator to another, whilst keeping the same number. Figure 17 only takes into account the number of mobile inward portings.

exceeding the number of fixed-originated voice call minutes since 2013.¹² The gap between the two continued to widen in the current review period.

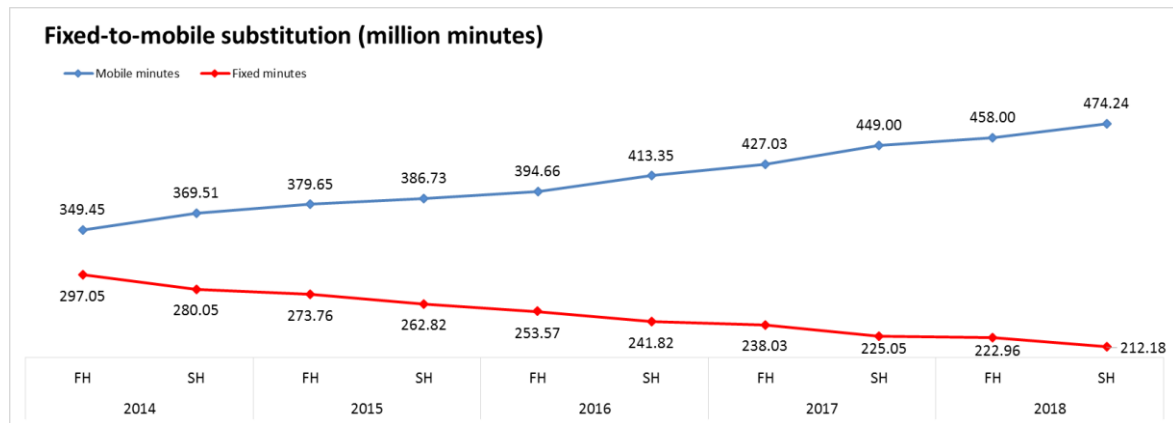


Figure 17: Fixed-to-mobile substitution

Meanwhile, voice call minute volumes rose steadily over the last few years, whilst the number of calls did for several years exhibit a decline. This is a result of the observed decline in the rate charged by service providers for each minute of mobile voice calling, which enticed end-users to make less calls of a longer duration. Developments in this respect for the second half of 2018 have somewhat departed from this trend, as both voice call and minute volumes were higher than recorded in the second half of the previous year. However, voice minute volumes surged ahead at a much faster rate than is the case for voice call volumes.

5.3.1. Voice calls

The number of mobile voice calls reported in the second half of 2018 amounted to 241.5 million, which is up by 8.1 million (or by 3.5%) from 233.4 million reported in the second half of 2017.

Mobile voice calls	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Total	251,391,213	266,266,156	261,199,190	274,658,212	259,931,283	252,890,126	227,372,393	233,389,349	228,873,729	241,459,866
Mobile-to-mobile calls (MTM)	229,223,906	242,626,829	237,816,382	248,147,749	236,647,482	224,160,687	200,923,780	201,924,304	198,754,552	209,375,479
on-net MTM	174,294,465	183,108,242	177,728,673	183,378,292	172,775,579	155,781,776	130,578,178	127,622,510	126,116,316	130,854,997
off-net MTM	54,929,441	59,518,587	60,087,709	64,769,457	63,871,903	68,378,911	70,345,602	74,301,794	72,638,236	78,520,482
Mobile-to-fixed calls (MTF)	18,443,136	19,163,833	19,176,332	20,336,816	19,340,803	23,356,467	20,751,963	22,971,117	21,573,991	22,052,414
Mobile-to-international (MTI)	3,724,171	4,475,494	4,206,476	6,173,647	3,942,998	5,372,972	5,696,650	8,493,928	8,545,186	10,031,973

Table 10: Outgoing mobile traffic - number of voice calls

On a disaggregated level, voice call volumes under the on-net and off-net mobile-to-mobile (MTM) segments were up by 3.2 million and 4.2 million respectively. Meanwhile, the mobile-to-international (MTI) segment saw a rise of 1.5 million voice calls.

¹² It is also relevant to underline here that the number of mobile-originated voice calls has also been exceeding the number of fixed line originated voice calls for the last few years.

5.3.2. Voice call minutes

The number of mobile voice call minutes totalled 619.1 million in the second half of 2018, up by 170.0 million (or by 37.9%) from 449.0 million in the second half of 2017.

Mobile voice call minutes	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Total	349,449,383	369,508,631	379,645,131	386,734,592	394,663,889	413,350,385	427,029,443	448,998,678	596,621,445	619,124,998
Mobile-to-mobile calls (MTM)	302,343,734	318,839,211	328,242,026	332,491,267	342,331,655	355,905,501	369,606,725	381,318,473	531,235,340	550,408,248
on-net MTM	224,440,686	231,550,138	234,871,600	234,096,857	235,093,966	240,818,410	245,893,738	250,283,342	392,614,001	405,525,806
off-net MTM	77,903,048	87,289,073	93,370,425	98,394,410	107,237,689	115,087,091	123,712,987	131,035,130	138,621,339	144,882,442
Mobile-to-fixed calls (MTF)	37,279,753	39,565,696	39,894,002	42,412,245	41,464,160	44,463,315	44,217,808	50,039,970	47,735,163	48,422,109
Mobile-to-international (MTI)	9,825,896	11,103,724	11,509,103	11,831,080	10,868,074	12,981,569	13,204,909	17,640,236	17,650,942	20,294,641

Table 11: Outgoing mobile traffic - number of voice call minutes

On a disaggregate level, on-net MTM minutes and off-net MTM minutes were up by 155.2 million (or by 62.0%) and 13.8 million (or by 10.6%) respectively. The number of MTI minutes was up by 2.7 million (or by 15.0%).

5.4. SMS and MMS usage trends

Text messaging and MMSing continued to lose traction with consumers in the current review period. The number of SMSs was down by 34.7 million (or by 33.4%) in the second half of 2018 compared to the corresponding period a year earlier whilst the number of MMSs was down by over 8,400 (or by 9.2%).

As already noted in previous CMR publications, these volumes are a reflection of a shift in preferences to voice calling alongside indications of the rising popularity of OTT-based services.

5.4.1. SMSs

138.4 million SMSs were recorded in the second half of 2018, down by 29.5 million (or by 17.5%) when compared to 167.9 million SMSs recorded in the same period of 2017.¹³

All segments of the SMS traffic activity followed a negative trend, with on-net volumes recording the biggest drop.

In the second half of 2018, the number of on-net SMSs was down by 27.8 million (or by 26.8%) to 76.0 million. Meanwhile, the number of off-net SMSs was down by 0.4 million (or by 0.6%) from 57.7 million to 57.4 million and the number of premium SMSs and SMSs sent from internet portals was down by 17,941 (or by 12.6%) and by 0.9 million (or by 22.8%) respectively.

¹³ Including on-net SMSs, off-net SMSs, SMSs sent to foreign mobile networks, SMSs sent from Internet Portal and premium SMSs.

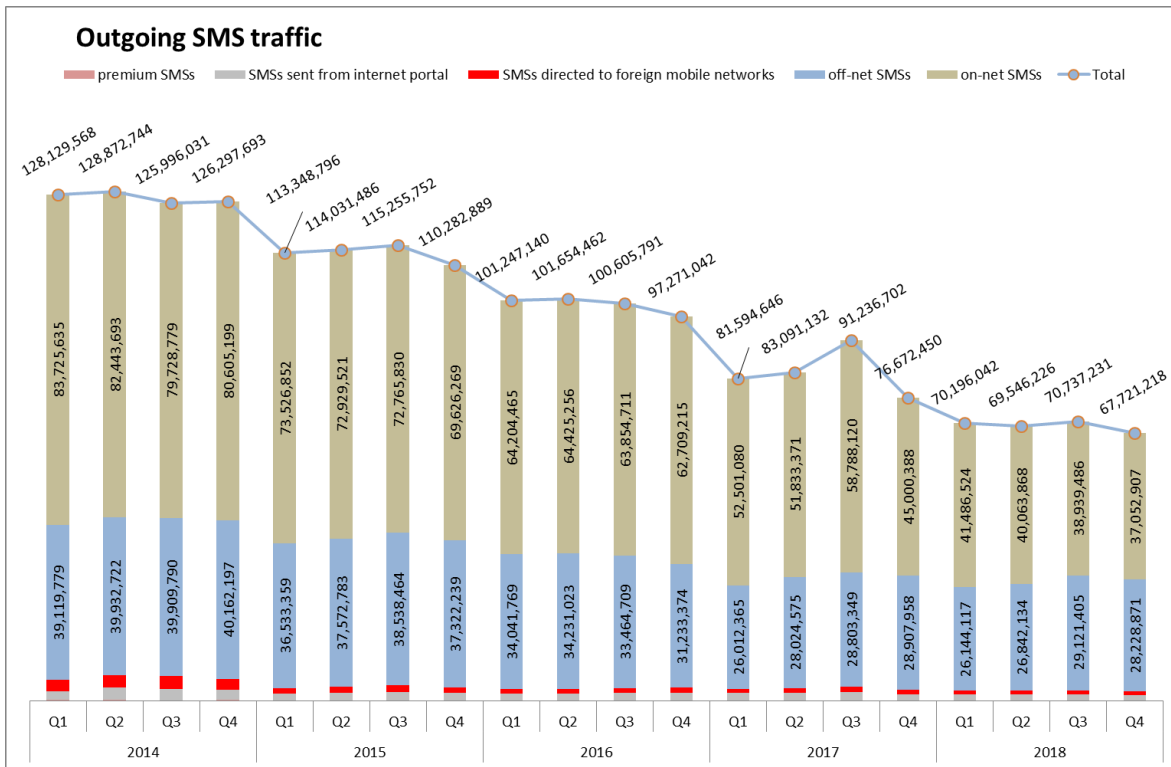


Figure 18: SMS activity - number of outgoing SMSs (1)

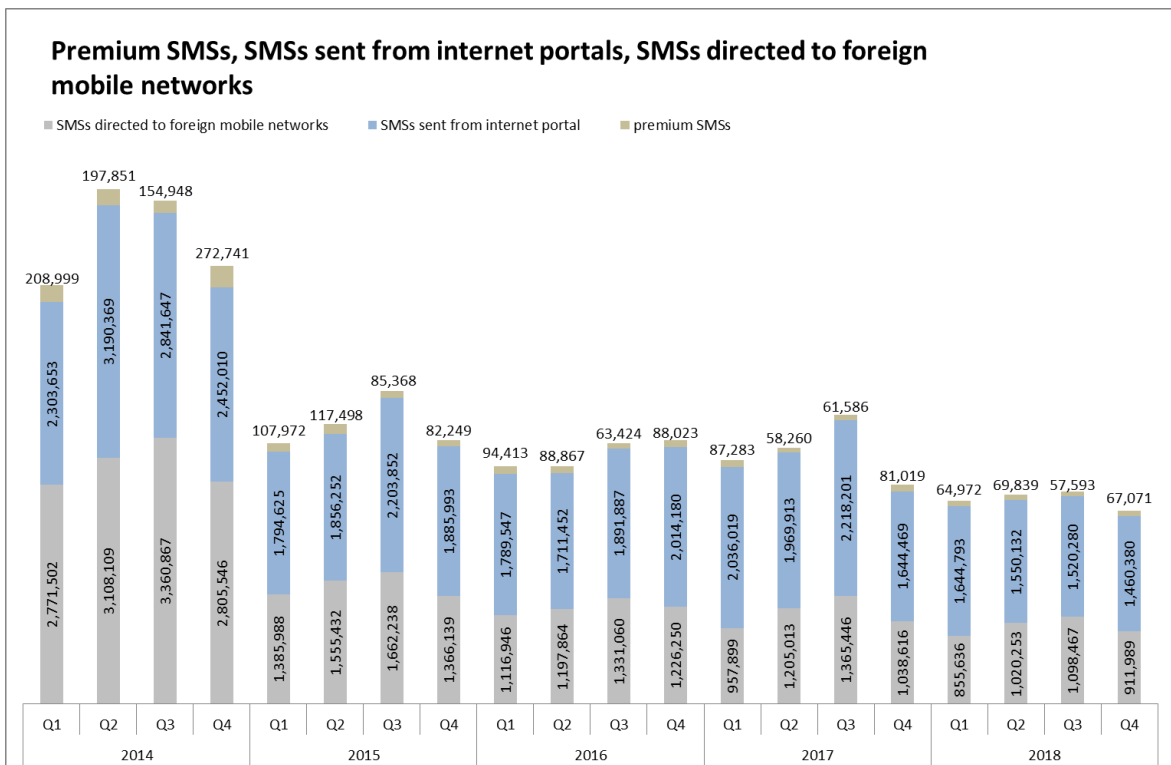


Figure 19: SMS activity - number of outgoing SMSs (2)

Also in line with the above-mentioned trends, the number of SMSs directed to foreign mobile networks was down by 0.4 million (or by 16.4%), from 2.4 million in the second half of 2017 to 2.0 million in the second half of 2018.

5.4.2. MMSs

The number of MMSs in the second half of 2018 totalled to 84,144. This figure is down by 8,488 (or by 9.1%) from 92,632 MMSs recorded in the second half of the previous year.

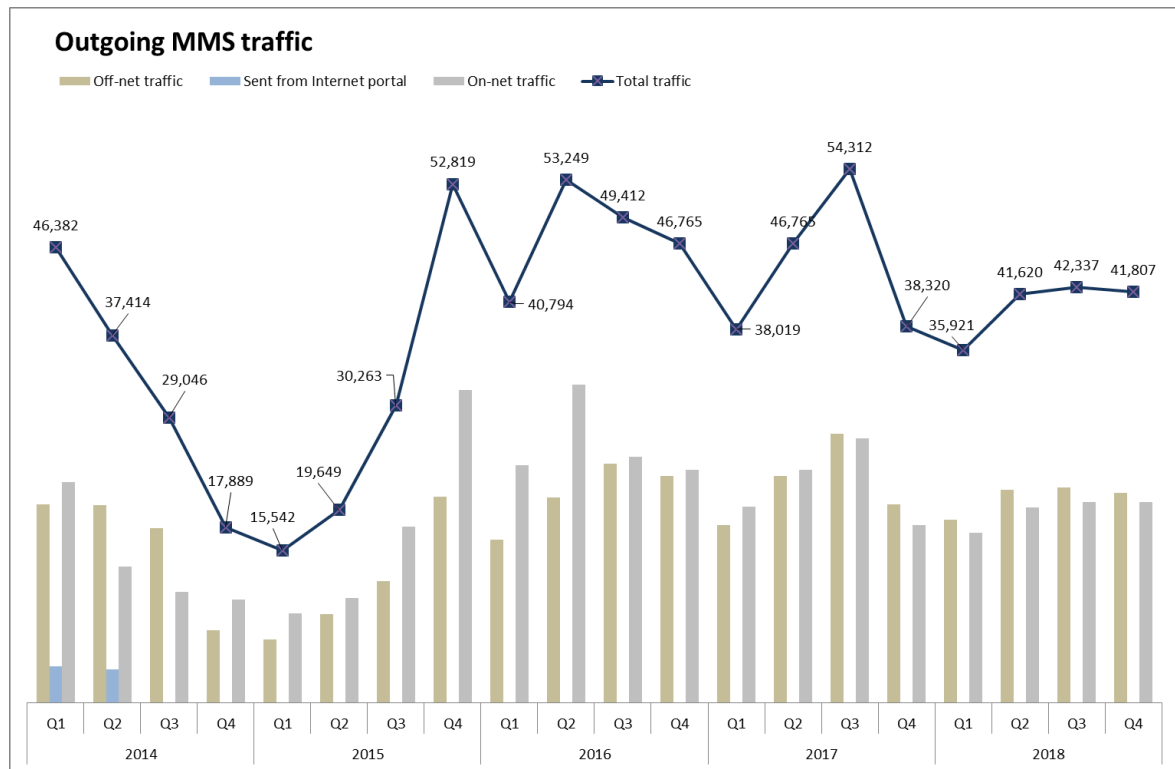


Figure 20: MMS activity - number of outgoing MMSs

5.5. Activity levels per mobile subscription

Developments in activity levels per mobile subscription depend on the rate of growth in traffic volumes and the change in the number of subscriptions.

5.5.1. Voice call activity levels per subscription

Mobile telephony voice calling and minute volumes were up in the second half of 2018. The rate of growth for these two variables exceeded last year’s results by 1.3% and 3.4%. Indeed, the average number of on-net MTM voice call minutes per subscription totalled 423 in the second half of 2018, up from 415 in the second half of 2017. Meanwhile, the average number of MTM voice call minutes taking place off-net per subscription was up from 217 in the second half of 2017 to 235 in the second half of 2018.

Looking at MTF calls, the average number of voice minutes per subscription were up from 75 in the second half of 2017 to 79 minutes per subscriber in the second half of 2018. Meanwhile, the average number of MTI voice call minutes per subscription taking place in the second half 2018 totalled 33 minutes, up from 29 minutes in the same period a year earlier.

As for voice calling per subscription, the average number was also up in the second half of 2018 compared to the second half of 2017. Indeed, on average, a subscriber made 392 calls during the current reporting period, up from 387 calls a year earlier, with all segments except for MTF calls influencing this outcome.¹⁴

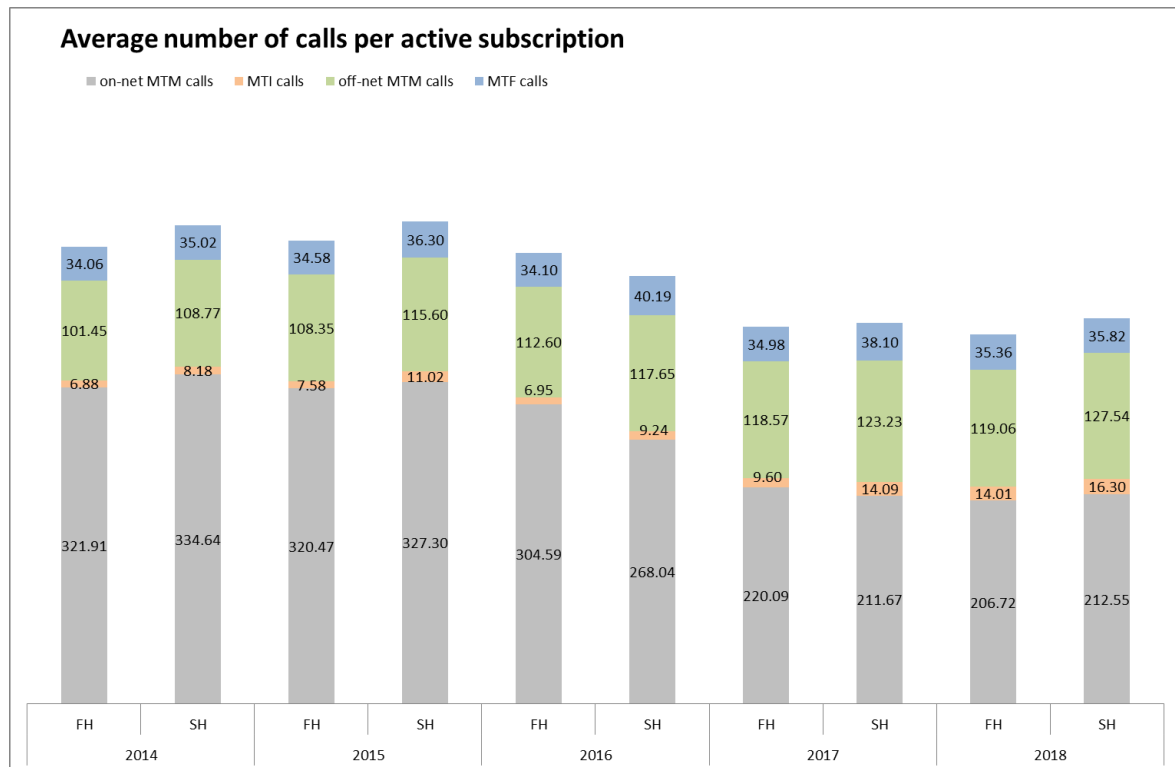


Figure 21: Average number of calls per active subscription

5.5.2. SMS activity levels per subscription

The continued drop in SMS volumes alongside the rise in subscriptions meant that consumers are finding alternatives as effective substitutes over this format. Improved calling allowances and instant messaging over OTT platforms have contributed to the continued reduction in use of this service.

¹⁴ This figure includes calls taking place on-net, off-net, MTF and MTI.

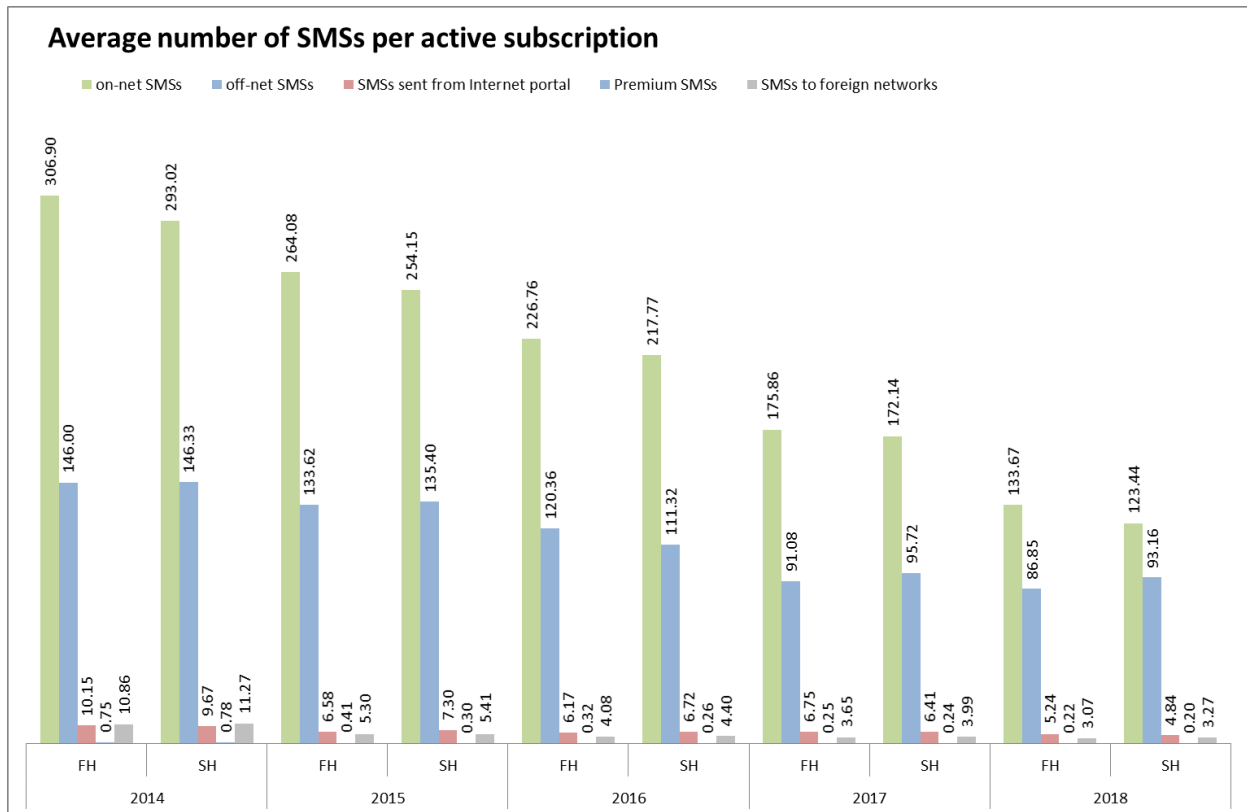


Figure 22: Subscriber activity - average number of SMSs per active subscription

In the second half of 2018, the number of SMSs per active subscription was down to 225 from 279 in the second half of 2017. A more disaggregated look at the at this figure shows all segments of this activity recorded a fall in the average number per subscription, with the most evident decline reported for SMS sent on this network.

5.6. Average mobile call duration

Improved mobile voice call allowances resulted in longer voice calls. On average, a mobile call lasted almost two minutes, which is 37 seconds longer when compared to the second half of 2014

On a disaggregate level, the average duration of an on-net MTM call and an off-net MTM call in the second half of 2018 was up by 44 seconds and by 17 seconds respectively when compared to the second half of 2014.

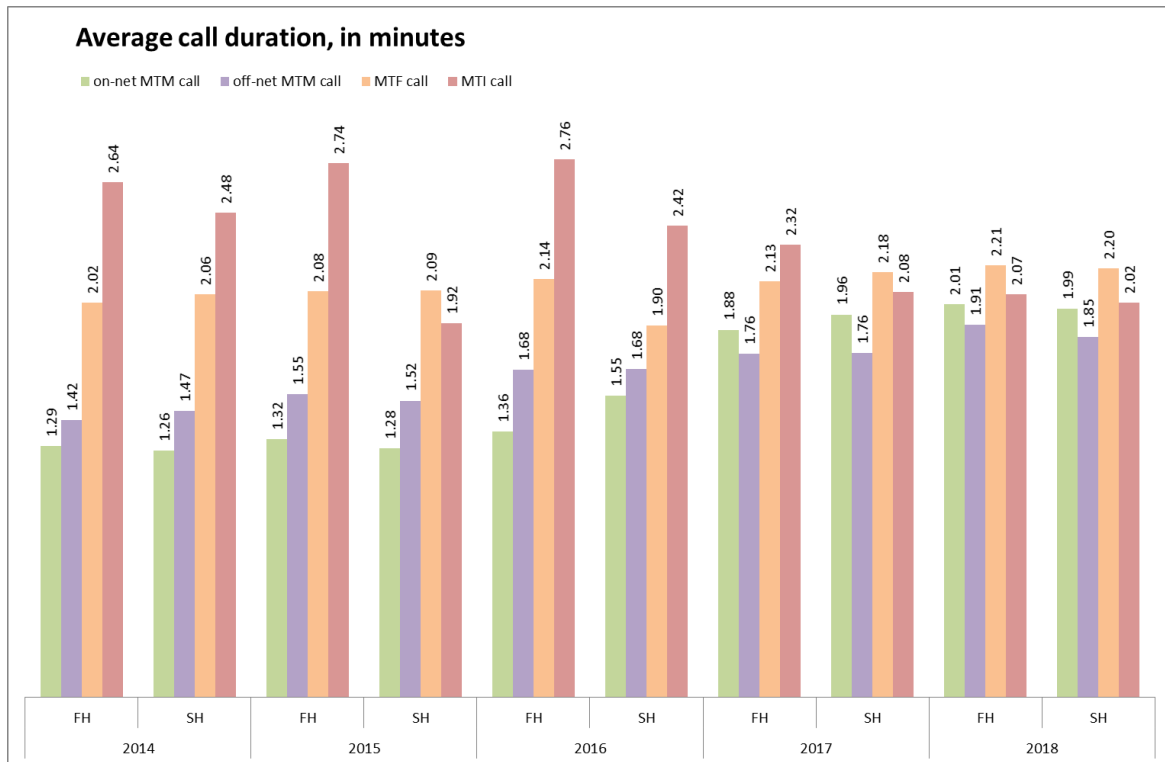


Figure 23: Average duration of an outgoing mobile call

5.7. International roaming usage trends

The level of international roaming activity depends on two main factors, namely the frequency and pattern of travel by end-users and the relative roaming charges that apply for calls and SMSs.¹⁵ It is of relevance to underline here that Malta continues to experience a consistently higher activity in terms of visiting tourists. Meanwhile, the number of Maltese that are travelling abroad has also been on the rise for a number of years.

These trends coincided with a period of falling roaming charges, as envisaged by the EU Roaming Regulation, both in the case of voice calls and text messaging. As of the 15th of June 2017 new roaming regulations were implemented which meant that EU citizens travelling within EU member states were no longer charged roaming rates but were rather charged their standard domestic rates. The full impact of the decline in charges brought about by the roaming regulations will become more evident over time.

¹⁵ From a technical perspective, international roaming encompasses any activity registered by mobile subscribers whilst travelling abroad. In this regard, end-users would be using voice-roaming services when making or receiving calls via their mobile subscription while abroad. They would be using SMS roaming services when sending or receiving an SMS via their mobile subscriptions. End-users can also send or receive data while abroad over their mobile.

5.7.1. Outbound roaming

This type of roaming activity refers to voice call, SMS, and data services operated on foreign mobile networks by local subscribers when roaming abroad.

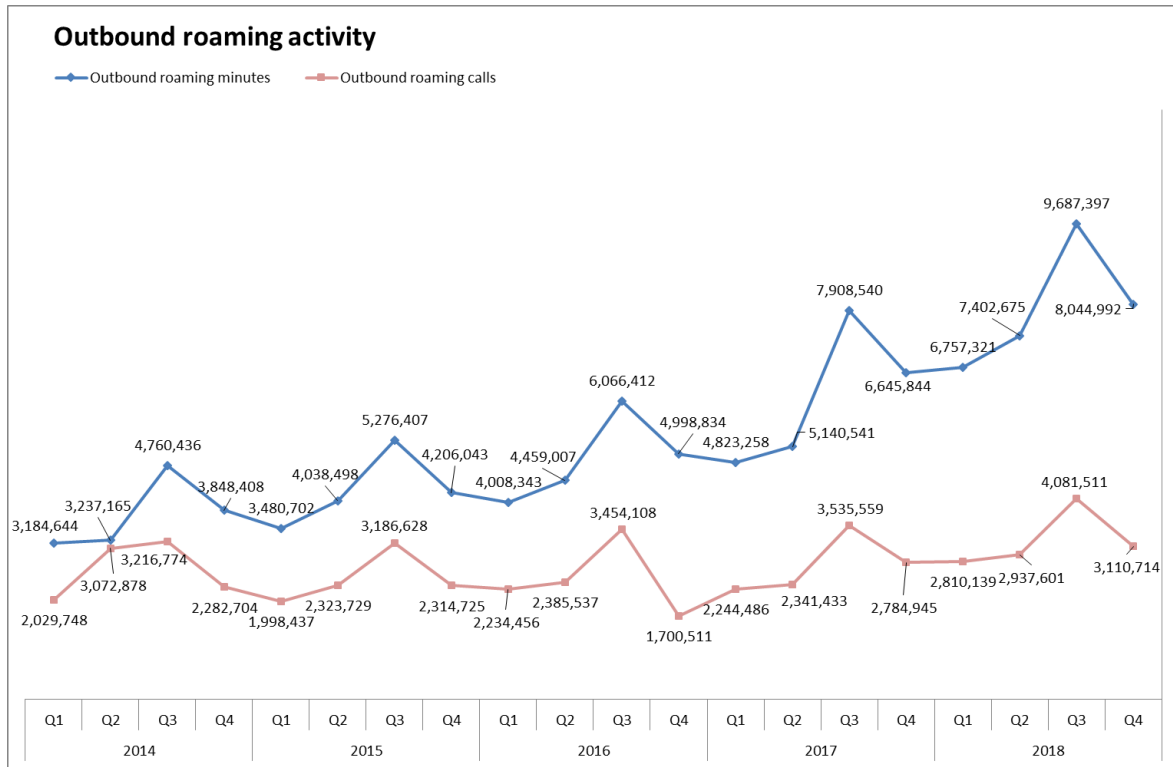


Figure 24: Outbound roaming activity

The number of outbound roaming calls totalled 7.2 million in the second half of 2018, up 13.8% when compared to the same period last year. Meanwhile, the number of outbound roaming minute volumes was up by 3.2 million (or by 21.8%) from 14.6 million to 17.7 million.

5.7.2. Inbound roaming

This type of roaming activity refers to call, SMS and data services operated on local mobile networks by foreign subscribers when roaming in Malta.

The number of inbound roaming calls totalled 29.3 million in the second half of 2018, up by 8.5 million (or by 41.1%) from 20.8 million in the corresponding period a year earlier.

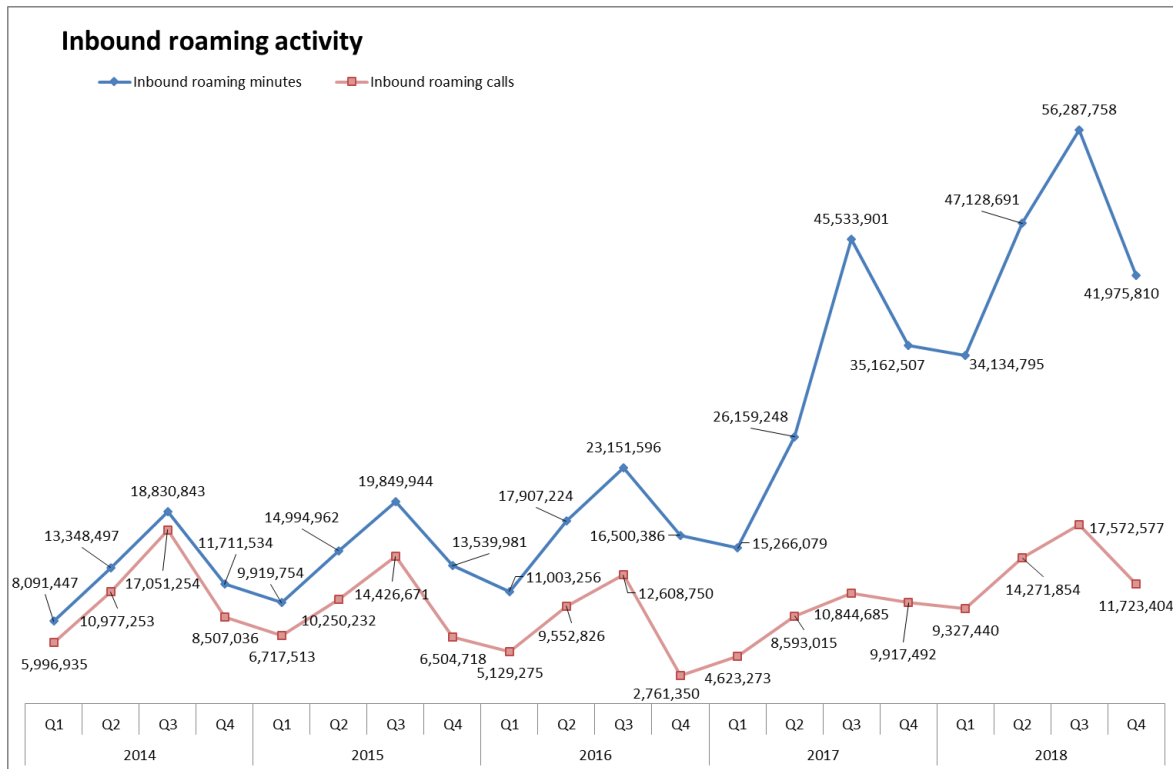


Figure 25: Inbound roaming activity

At the same time, the number of inbound roaming minutes went up by 17.6 million (or by 21.8%), from 80.7 million in the second half of 2017 to 98.3 million in the second half of 2018.

5.8. Mobile ARPU

Mobile telephony ARPU in the second half of 2018 totalled €92.40, which is up by 4.0% from €88.86 in the second half of 2017.¹⁶ These figures are derived by dividing total revenues of mobile service providers, including access and activity revenues related to voice, SMS, MMS and data traffic, by the average number of active subscriptions, during a given period.¹⁷

¹⁶ The derived ARPU excludes revenues from interconnection and inbound roaming activity. The number

¹⁷ The average number of active subscribers during a given period is derived by adding the number of active subscriptions at the start of the period plus the number of subscriptions at the end of the said period, divided by two.

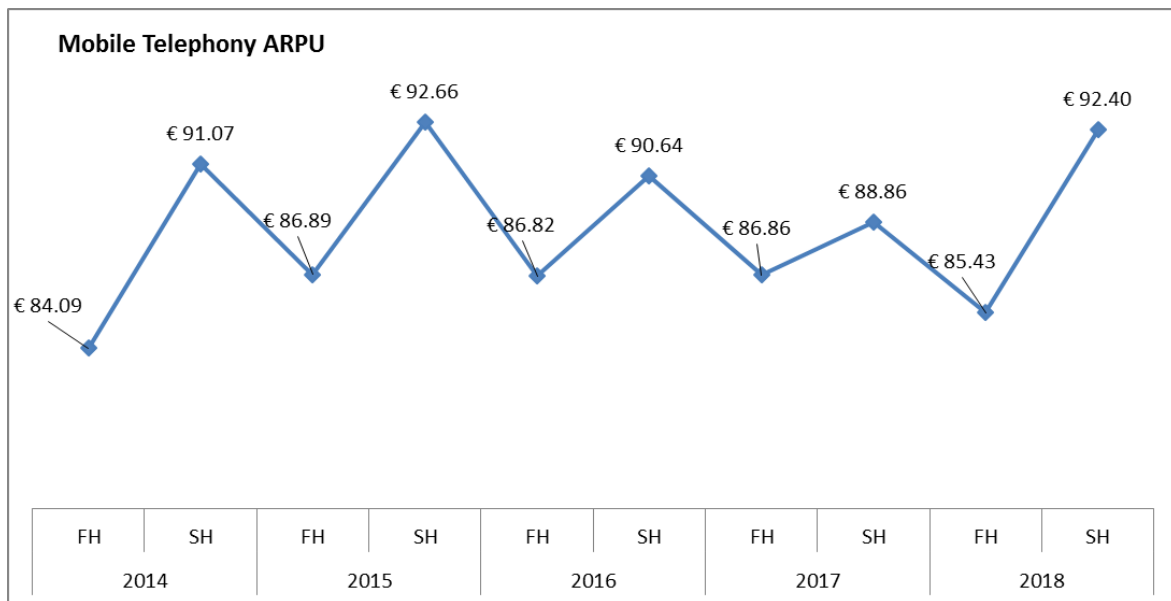


Figure 26: Average revenue per mobile user

The MCA has noted that revenues generated by operators from mobile voice calling and SMSing has roughly remained the same when compared to the same period a year earlier. However, the same cannot be said when mobile data is taken into account. The uptick in ARPU is a most likely a direct result of end-users increasing their usage of mobile broadband services.

5.9. Pricing developments for mobile telephony

It is difficult to determine the exact price paid by the end-user to make a mobile voice call and / or to send an SMS, given the wide array of plans currently on offer and the availability of call and SMS allowances. To this effect, the MCA has developed a metric whereby it seeks to map price movements in mobile voice calls and SMSs by taking into account changes in the average revenue per call minute and the average revenue per SMS based on figures supplied by local service providers.¹⁸

The steady decline in the overall average rate per minute (ARPM) of mobile communication can be explained by the general improvement in the voice minute allowances, particularly in the post-paid segment.

Figure 27 shows that in the second half of 2018, the ARPM was down compared to the ARPM recorded in the same period a year earlier.

¹⁸ To calculate the Average Rate Per Minute (ARPM) of mobile voice communication, figures are derived by dividing domestic and international mobile voice traffic revenues (including voice related access revenues but excluding roaming revenues, VAT and excise tax), by the number of minutes reported under each respective heading. In the case of the average rate per SMS, figures correspond to the division of SMS-related revenues by the number of SMSs made during the period. These calculations exclude revenues from VAT, excise tax, and retail roaming services.

The ARPM of mobile communication for a domestic call stood at €0.060 in the second half of 2018, down by almost 3.2% from an average of €0.062 in the second half of 2017.¹⁹

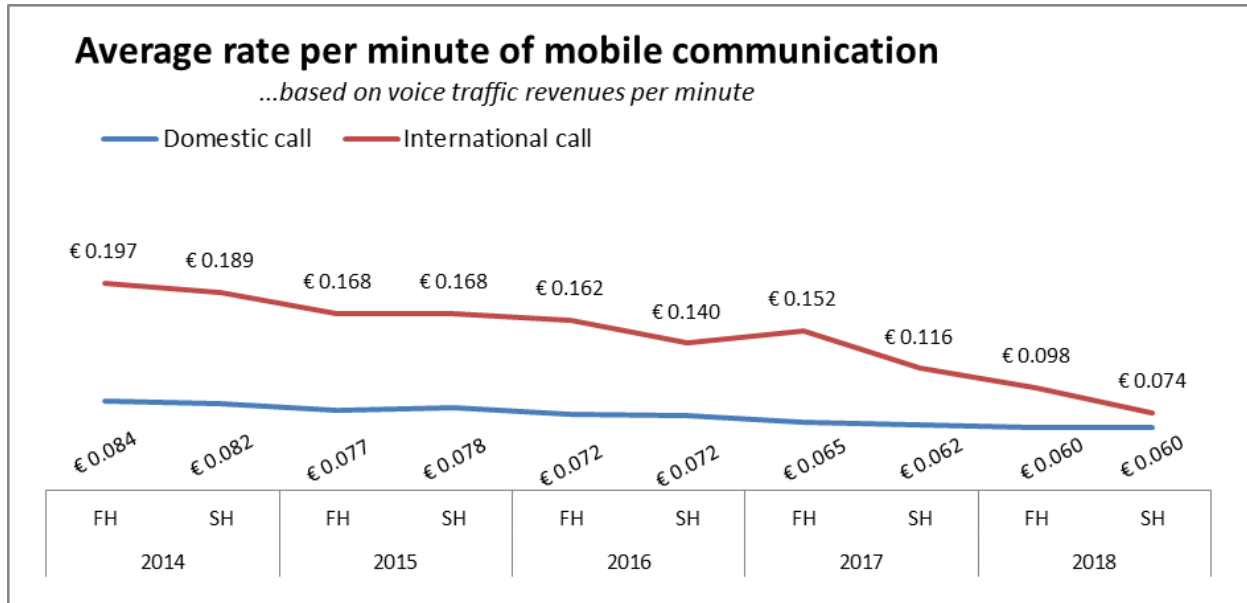


Figure 27: Average rate per minute of mobile communications

Similarly, the average rate per minute of mobile communication for an international call was also down, this time by 36.2%, from €0.116 in the second half of 2017 to €0.074 in the second half of 2018.

¹⁹ It is again noted here that local mobile operators may offer monthly allowances such as free calls or discounted call rates, such as on weekends and evenings, and also in the case of particular schemes for closed user groups and bundled products. However, the current calculations do not take these factors into account.

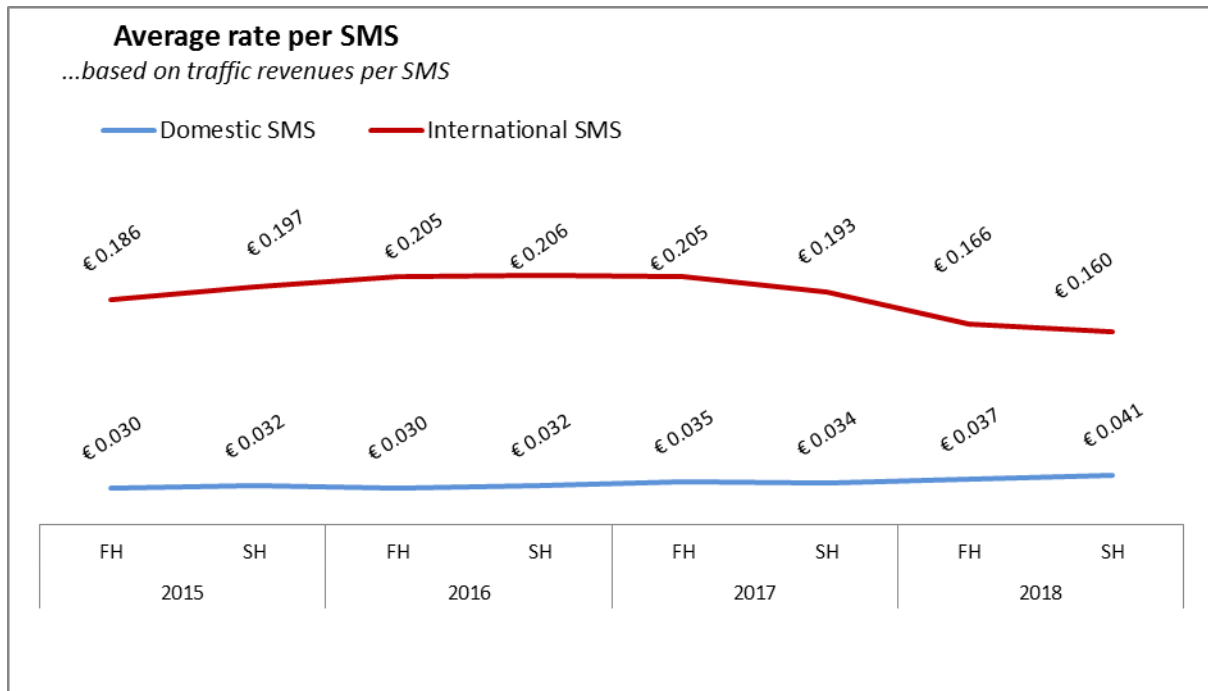


Figure 28: Average rate per domestic and international SMS

In terms of the average rate per SMS, Figure 28 illustrates that, in the second half of 2018, the end-user on average paid €0.04 for a domestically bound SMS and €0.16 for an internationally bound SMS.²⁰

²⁰ Figures for internationally bound SMSs are provisional, pending some clarifications being sought from service providers.

6. Fixed and mobile broadband

Fixed broadband sustained its growth trajectory in 2018, with gains in the subscriber base characterised by a higher take-up of products supporting download speeds of 100Mbps or more.²¹ Both new and existing clients are shifting away from legacy products as service providers enhance their marketing efforts to sell high-speed fixed broadband products in bundles. This strategy has so far been very successful, with the reported increase in fixed broadband subscriptions materialising alongside a rise in take-up of bundled packages. Significantly, fixed broadband retains pole position as the most bundled electronic communications service, with 88% of all active connections at the end of 2018 subscribed to a dual, triple or quad play bundle product.

A closer look at subscription figures shows that almost one third of all active connections at the end of 2018 supported download speeds equal to or exceeding a download speed of 100Mbps whilst 43% supported a download speed of 50Mbps but less than 100Mbps.

The steady rise in subscriptions boosted broadband penetration on the basis of population. To this effect, Malta has consolidated its position on an EU level and now ranks 6th in the EU, surpassed only by the Netherlands, Luxembourg, United Kingdom, Denmark and Germany.

From a pricing standpoint, developments in 2018 were consistent with long-term trends. In general, fast and ultra-fast fixed broadband packages entail higher monthly access fees than was the case with legacy products. Nevertheless, the much higher download speeds that are on offer have brought about a drop in the average rate per Mbit, as access fees have gone up at a slower rate than was the case for speeds. The overall average rate per Mbit for fixed broadband was down by 1%, from €0.91 per Mbit at the end of 2017 to €0.90 at the end of 2018.

The mobile broadband segment also gained in terms of both take-up and active usage of the relevant service. Take-up of the mobile broadband service materialised on the back of new users via both standard mobile subscriptions, keys and dongles. The growth in data volumes has also been significant. When comparing mobile data consumption levels in the years 2017 and 2018, volumes surged by 31%, from 4.7 million GB to 6.2 million GB in 2018.

6.1. Fixed broadband subscriptions

Year-on-year, the number of fixed broadband subscriptions was up by 10,515 (or by 5.8%) from 181,318 at the end of 2017 to 191,833 at the end of the current reporting period. This growth was driven by the uptake of high-speed broadband services, supported by FTTH and DOCSIS 3.1 technologies.

The above-mentioned uptick in subscription numbers resulted in a higher fixed broadband penetration rate, up by 1.2 percentage points year-on-year, from 38.1% to 39.3%.

²¹ For the purpose of this report, fixed broadband Internet subscriptions refer to those connections that are always on and have a speed of 128kbps or more.

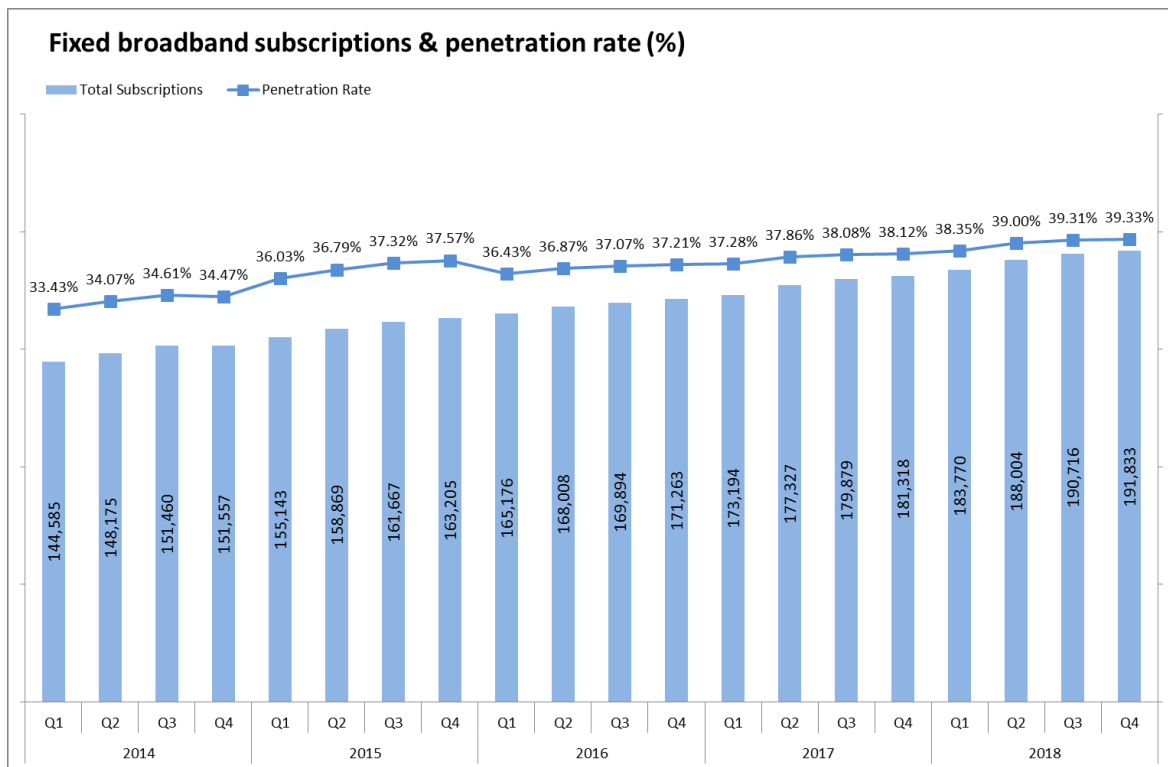


Figure 29: Take-up of fixed broadband and fixed broadband penetration

Fixed broadband subscriptions in a bundle	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Fixed broadband subscriptions on a dual-play contract	15,979	29,890	36,927	44,179	49,622	54,413	55,227	55,793	55,649	55,306
Fixed broadband + fixed telephony	15,979	29,890	36,927	44,179	49,622	54,413	55,227	55,793	55,649	55,306
Fixed broadband subscriptions on a triple-play contract	22,477	25,490	26,718	27,525	28,613	30,540	40,675	46,859	55,064	61,148
Fixed broadband + fixed telephony + mobile telephony	312	620	630	139	84	58	37	24	16	3
Fixed broadband + fixed telephony + pay-TV	22,165	24,870	26,088	27,386	28,529	30,482	40,638	46,835	55,048	61,145
Fixed broadband subscriptions on quad-play contract	44,069	44,429	45,683	46,988	48,075	49,900	49,175	49,785	51,691	53,164
Fixed broadband + fixed telephony + pay-TV + mobile telephony	44,069	44,429	45,683	46,988	48,075	49,900	49,175	49,785	51,691	53,164
Total number of fixed broadband subscriptions in a bundle	82,525	99,809	109,328	118,692	126,310	134,853	145,077	152,437	162,404	169,618
Number of fixed broadband subscribers as at end of period	148,175	151,557	158,869	163,205	168,008	171,263	177,327	181,318	188,004	191,833
Percentage of fixed broadband subscribers in a bundle	55.69%	65.86%	68.82%	72.73%	75.18%	78.74%	81.81%	84.07%	86.38%	88.42%

Table 12: Fixed broadband subscriptions purchased in a bundle

By the end of 2018, 88.4% of all fixed broadband subscriptions were purchased in a bundle, representing a 4.3 percentage point increase over a 12-month period. Take-up of bundles has been rising steadily over the past five years as operators phased out their legacy stand-alone plans and packaged their fastest fixed broadband products in a bundle with other electronic communications services. Changing consumer download speed requirements preferences and lack of choice in the stand-alone department are deemed as the main contributors to the current market outcomes.

6.2. Fixed broadband subscriptions by type of access technology

Fixed broadband services in Malta are offered over three main technology platforms, these being DSL, fibre, DOCSIS cable and fixed wireless access.

A total of 92,522 cable-based broadband subscription were reported by the end of the current reporting period. Meanwhile, DSL-based subscriptions and FTTH-based subscriptions totalled to 67,523 and 21,532 respectively and subscriptions on the fixed wireless platform totalled 10,226.

The cable platform recorded the biggest year-on-year increase in subscriber numbers, followed by FTTH. The former’s client base gained 6,845 new subscriptions over a 12-month period ending December 2018. During the same period, the FTTH segment reported an increase of 6,826 subscriptions. The fixed wireless sector also registered a growth in its subscriber base, albeit with a much smaller margin of 1,846 new subscriptions. Mainly as a result of the observed rise in take-up of FTTH and the discontinuation of legacy products, the DSL-based subscriber base registered a drop of 5,002 subscriptions.

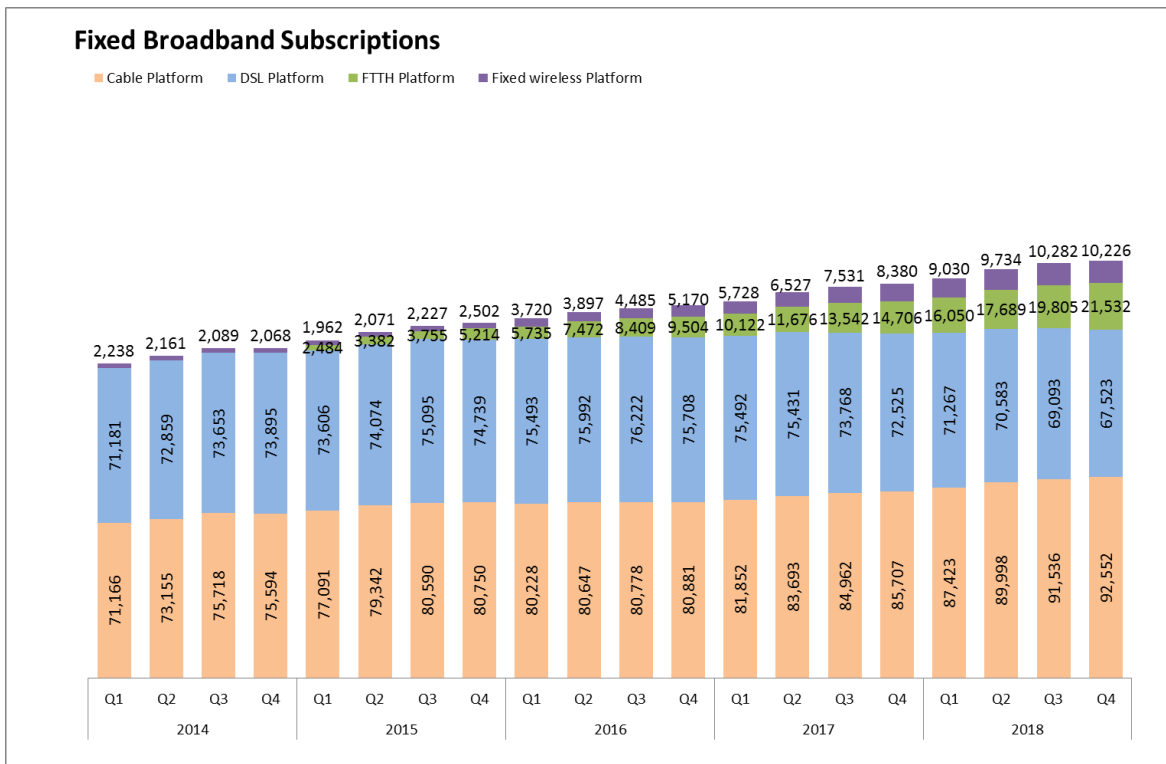


Figure 30: Fixed broadband subscriptions as at end of period - by technology

By the end of the current reporting period, the cable platform accounted for 48.2% of all fixed broadband subscriptions followed by the DSL platform at 35.2%, FTTH at 11.2% and fixed wireless at 5.3%.

6.3. Fixed broadband subscriptions by download speed²²

2018 has seen a steady rise in fixed broadband subscriptions supporting ultra-fast download speeds. This change materialised on the back of both new clients and existing clients on legacy products opting for such products. A disaggregated look at the fixed broadband sector by speed shows that the ‘100Mbps and more’ category was the only area to register an uptick in its subscriber base with subscriptions increasing by 76% from 36,290 at the end of 2017 to 63,799 at the end of 2018. As at the end of the current reporting period, ultra-fast broadband subscriptions accounted for over 33.0% of the local fixed broadband subscriber base.

²² Quoted figures refer to advertised speeds.

Meanwhile, the number of fixed broadband subscriptions supporting a download speed of ‘30Mbps but less than 100Mbps’ was down slightly by 2,470 (or by 2.22%), from 113,625 to 111,155. Another year-on-year decline was reported in terms of fixed broadband subscriptions supporting a download speed of less than 30Mbps, which stood at 16,879 by the end of the current reporting period from 31,403 a year earlier.

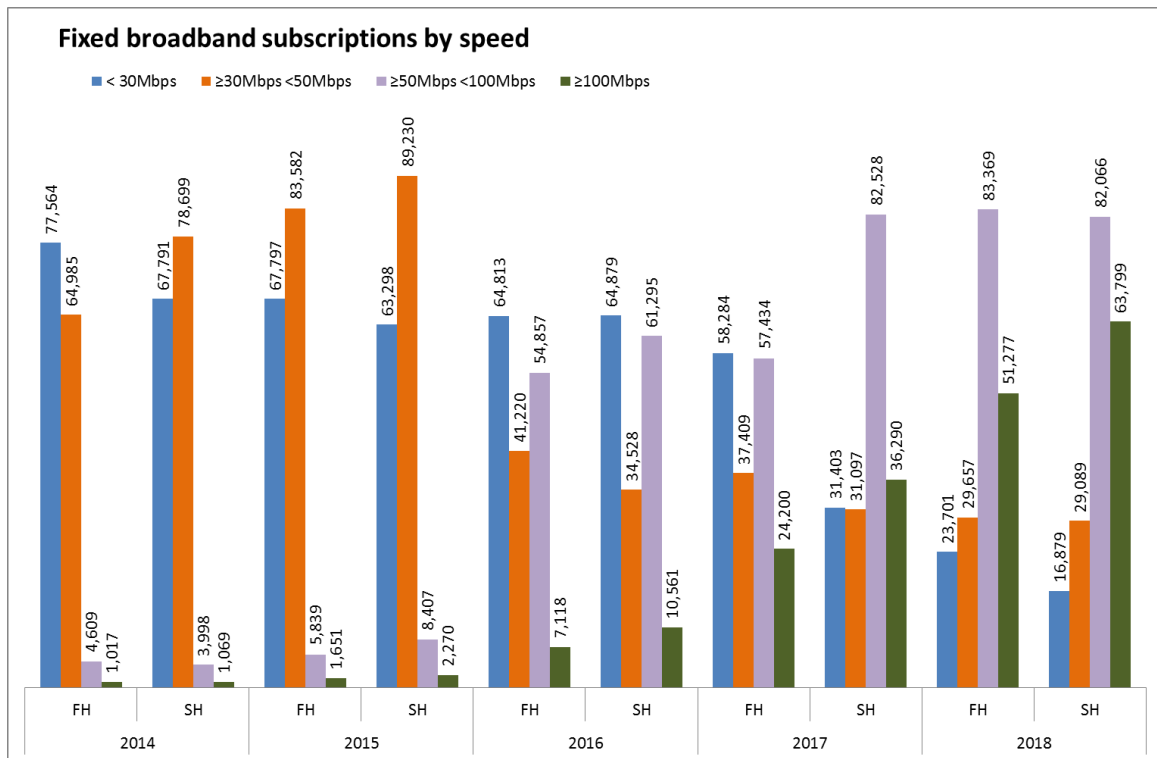


Figure 31: Fixed broadband subscriptions as at end of period, by speed

6.4. Fixed broadband subscriptions by access technology and download speed²³

A closer look at the reported fixed broadband subscriptions by download speed shows that 59.1% of all cable-based fixed broadband connections supported download speeds of ‘100Mbps or more’ whilst 35.7% of cable-based subscriptions supported download speed of ‘50Mbps but less than 100Mbps’. The remaining 5.2% of all cable-based subscriptions supported download speeds of ‘30Mbps but less than 50Mbps’.

When it comes to FTTH, 42.2% of subscriptions supported download speeds of ‘100Mbps or more’ and 47.9% supported download speeds of ‘30Mbps but less than 100Mbps’. The remaining 9.8% of FTTH subscriptions allowed for a download speed of ‘less than 30Mbps’.

²³ The download speeds reported in this segment are those advertised by the operators and they do not necessarily represent the download speeds end-users reach in their households.

With respect to DSL, none of the subscriptions supported a download speed of 100Mbps or more, but 51.6% allowed for a download speed of between '50Mbps and 100Mbps' whilst 18.6% supported a download speed of '30Mbps but less than 50Mbps'. Meanwhile, 29.8% of all DSL subscriptions supported a download speed of 'less than 30Mbps'.

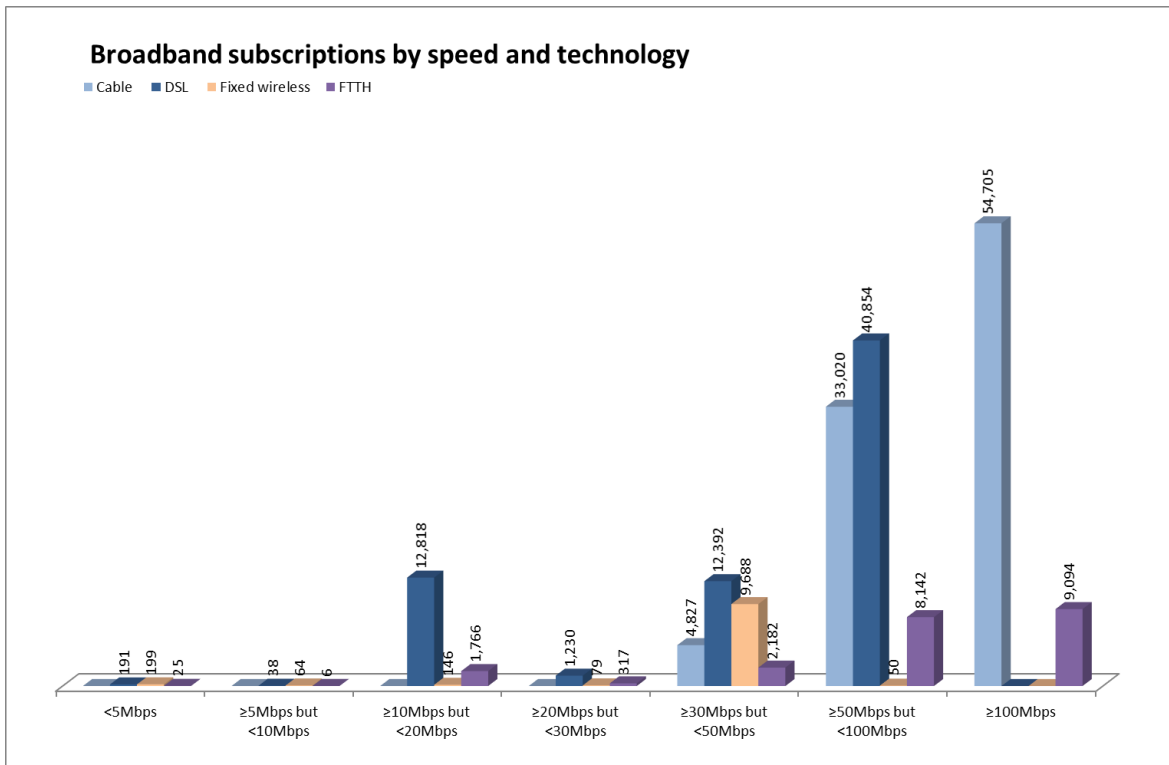


Figure 32: Broadband Internet subscriptions as at end of period - by technology & connection speed

As for the download speeds supported over fixed wireless platforms, 94.7% of all subscriptions supported download speeds of '30Mbps but less than 50Mbps' and 0.5% supported a download speeds of '50Mbps or but less than 100Mbps'. Meanwhile, the remaining share of fixed wireless subscriptions, at 4.7%, allowed for a download speed of 'less than 30Mbps'.

6.5. Fixed broadband ARPU

Fixed broadband ARPU in the second half of 2018 totalled €117.92, up by 4.4% year-on-year. Fixed broadband ARPU figures are derived by dividing the total retail revenues reported by service providers in terms of monthly access fees related to the fixed broadband service (excluding installation costs and connection fees) by the average number of subscriptions during a given period.²⁴

²⁴ The average total number of subscriptions takes the sum of the total subscriptions at the start and the end of the quarter under consideration divided by two.

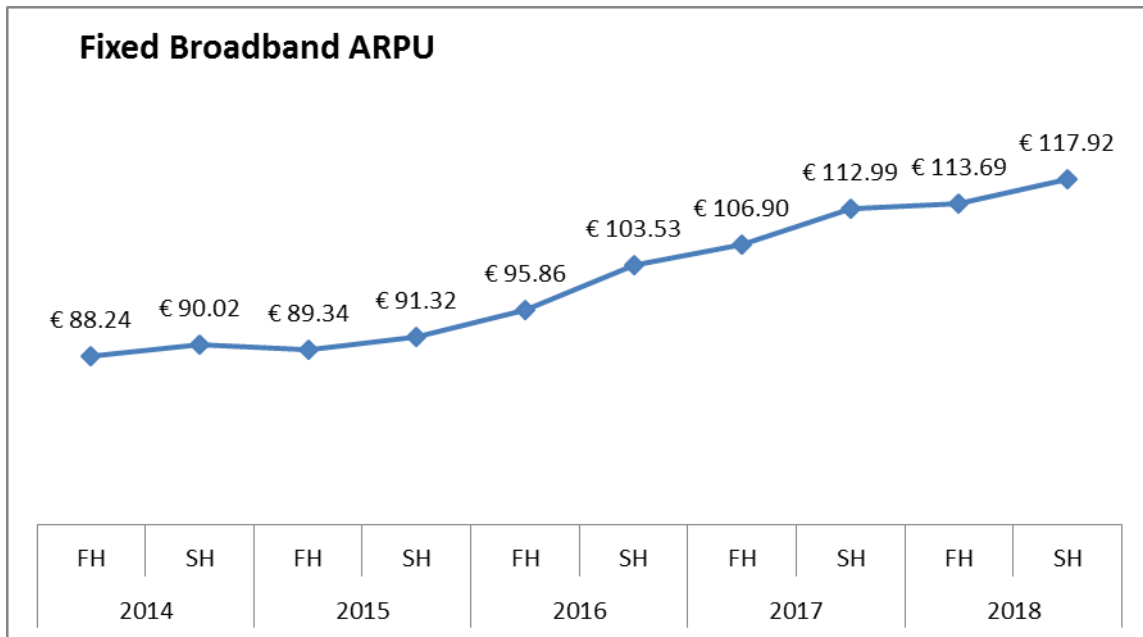


Figure 33: Average revenue per fixed broadband user

Over the last couple of years, the ARPU for the fixed broadband sector has been steadily on the rise. This increase comes on the back of two main factors, namely rising demand for products supporting fast and ultra-fast to satisfy requirements in terms of, for example, 4K video content and the continued strategy of service providers to phase out legacy plans and to boost take-up of fast and ultra-fast products that generally carry higher monthly access fees.

6.6. Average rate per Mbps

The MCA continuously monitors the pricing strategies undertaken by operators with respect to fixed broadband. Pricing developments in this sector have become increasingly more relevant seeing that such changes strongly influence competition. This segment gives special attention to the average rate charged per each Mbps of download (the rate per Mbps) based on numerous observations of products being advertised on websites of operators. Of note is that the average rates per Mbps quoted in this section correspond to different categories of stand-alone and dual-play offers depending on the advertised download speeds.²⁵

Over the last couple of years the rate per Mbps has gone down significantly particularly with the increased take-up of fast and ultra-fast fixed broadband packages. However, there has been a rise in entry-level prices as download speeds improved. In general, improved download speeds result in higher the monthly access fees but which however mean lower per Mbit rates.

²⁵ The average rate per Mbps calculation in this report takes into account fixed broadband plans that are available nationwide, including dual play bundled packages. Plans that are on a triple-play or quad-play bundle are not taken into account. Also, expenses incurred by the end-user, such as installation fees and other charges, do not feature in the calculations when determining the average rate per Mbps.

The average rate per Mbps roughly dropped by 1% in the second half of 2018 when compared to the same period a year earlier, on the back of the applicable monthly access fees in the ultra-fast product categories.

The figure below illustrates that in the second half of 2018, fixed broadband connections supporting download speeds of 'less than 5Mbps' and download speeds of '5Mbps but less than 10Mbps' would on average entail an outlay of €4.43 and €4.33 per Mbps of download. These rates are unchanged from those observed in the same period last year. An unchanged rate of €1.78 was determined for fixed broadband connections supporting download speed of '10Mbps but less than 20Mbps'. Similarly, in the case of fixed broadband products with download speeds of '20Mbps but less than 30Mbps' the average rate per Mbps stood at €2.01 unchanged from the rate observed during the same period a year earlier. It is noted that for the most part the average price per Mbps did not differ for packages with low download speeds due to operators reducing the number of available plans with such download speeds and giving greater attention to fast and ultra-fast fixed broadband packages.

Meanwhile, the average rate per Mbps for fixed broadband products supporting download speeds of '30Mbps but less than 50Mbps' was up by around 2.4%, from €0.80 in the second half of 2017 to €0.82 in the second half of 2018. On a similar note, the average rate per Mbps for products supporting download speeds of '50Mbps but less than 100Mbps' was up by 5.9% from €0.60 at the end of 2017 to €0.63 during the current review period. The uptick in these categories stems from operators reducing the number of stand-alone and dual-play fixed broadband packages such as Melita's '50Mbps Internet Fibre Power' dual-play plan.

Conversely, in the case of fixed broadband products supporting a download speed of 100Mbps or more, the average rate per Mbps was down by almost 7.7%, from €0.36 in the second half of 2017 to €0.34 in the second half of 2018. The drop in the average rate per Mbps for this segment was a result of an operator upgrading packages for its clientele from download speeds of 50Mbps to download speeds of 100Mbps at no additional monthly fee.

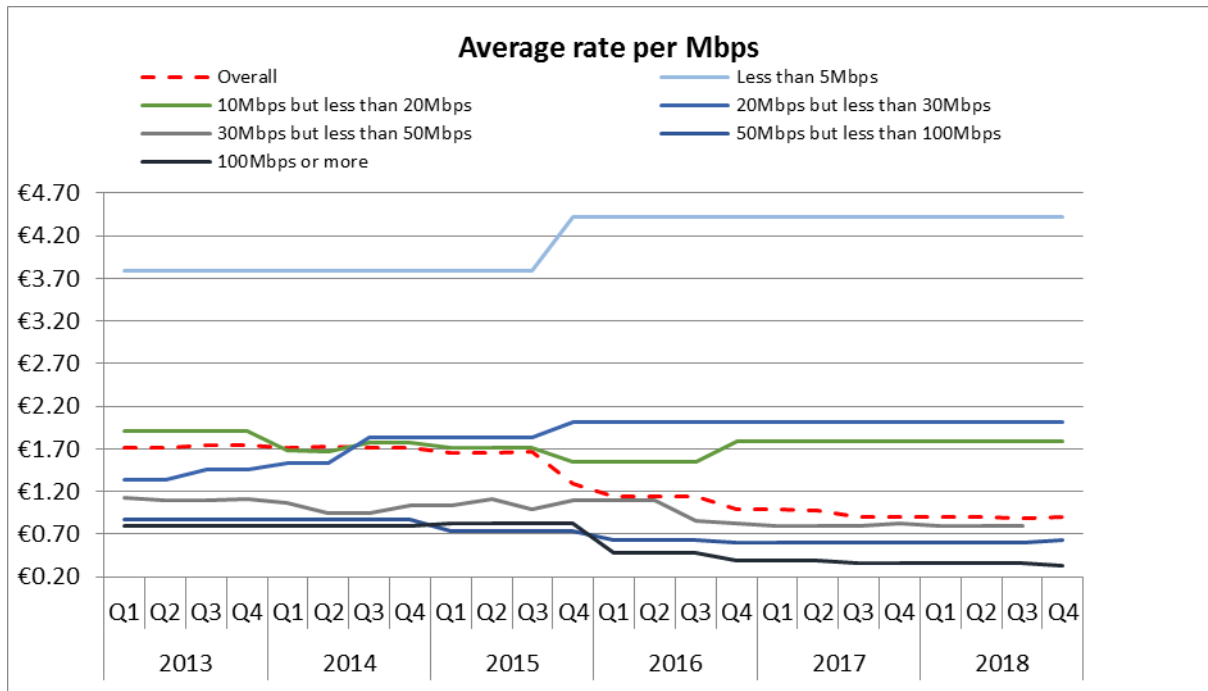


Figure 34: Average price per Mbps of fixed broadband for packages

6.7. Take-up and usage of mobile broadband

The term mobile broadband that is used in this review encompasses data access and internet connectivity services offered over the following devices:

- A mobile handset with 3G or 4G capabilities.
- Portable computers and tablets, enabled by USB dongles / keys and built-in broadband cards.

For the sake of consistency, the methodology used to measure the take-up of mobile broadband in Malta corresponds with that adopted by the EU Commission when measuring progress in this area across the EU.²⁶

Figure 35 illustrates that the number of end-users actively accessing mobile broadband services via 3G and 4G-enabled mobile subscriptions totalled 458,306 at the end of December 2018. This figure is up by 16,663 (or by 3.8%) from 441,643 at the end of December 2017.

²⁶ The EU Commission states that, for the sake of clarity, what is measured for mobile BB is the number of users, and not the number of transactions, since the overall objective is to measure a penetration per 100 population.

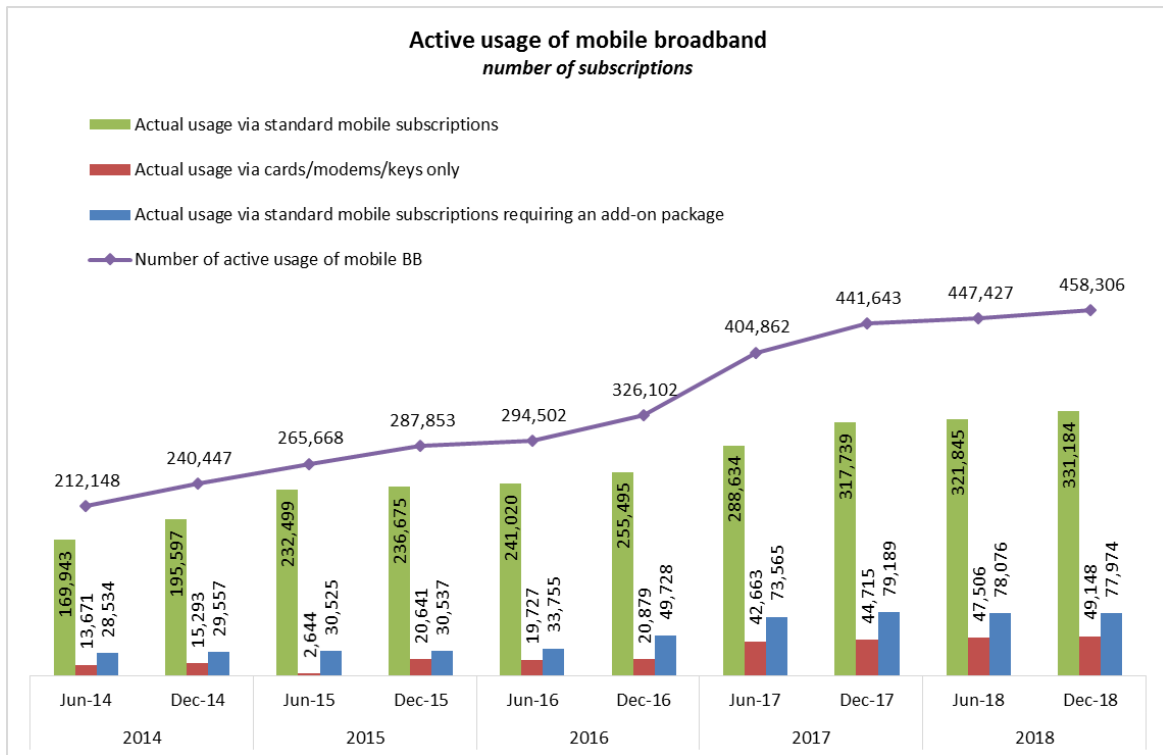


Figure 35: Mobile broadband active connections as at end of period

A disaggregated look at the above illustration shows that the number of active users of mobile broadband services via cards/modems and keys was up from 44,715 at the end of December 2017 to 49,148 at the end of December 2018. During the same period, the number of active users of mobile data services through standard mobile subscriptions was also up, in this case by 13,445 (or by 4.2%) from 317,739 to 331,184. Meanwhile, the number of active users making use of mobile data services via mobile telephony add-ons was down by 4,511, from 79,189 at the end of 2017 to 77,974 at the end of the current reporting period.

6.8. Mobile data usage

Improved monthly allowances as well as the increased take-up of standard mobile post-paid plans have allowed consumers to make bigger use of mobile data services.²⁷ Figure 36 shows that mobile data usage has been rising steadily since 2014. Total mobile data volumes amounted to 3.3 million GB in the second half of 2018 up by 763,516 GB (or by 30.1%) when compared to volumes recorded in the same period a year earlier.

²⁷ It is relevant to underline that these figures only takes into account active mobile data users via paid mobile subscriptions. It does not consider any mobile data usage over wireless networks such as residential WIFIs, free or paid WiFi hotspots.

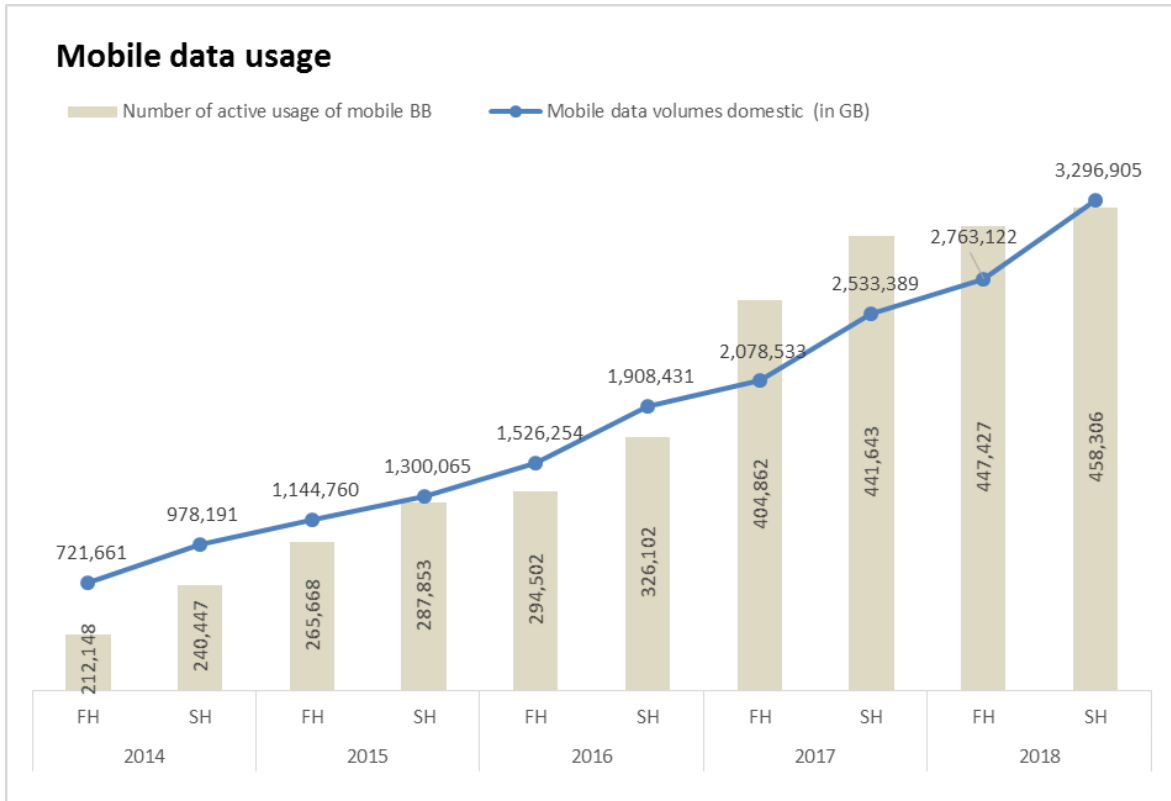


Figure 36: Mobile data usage as at end of period

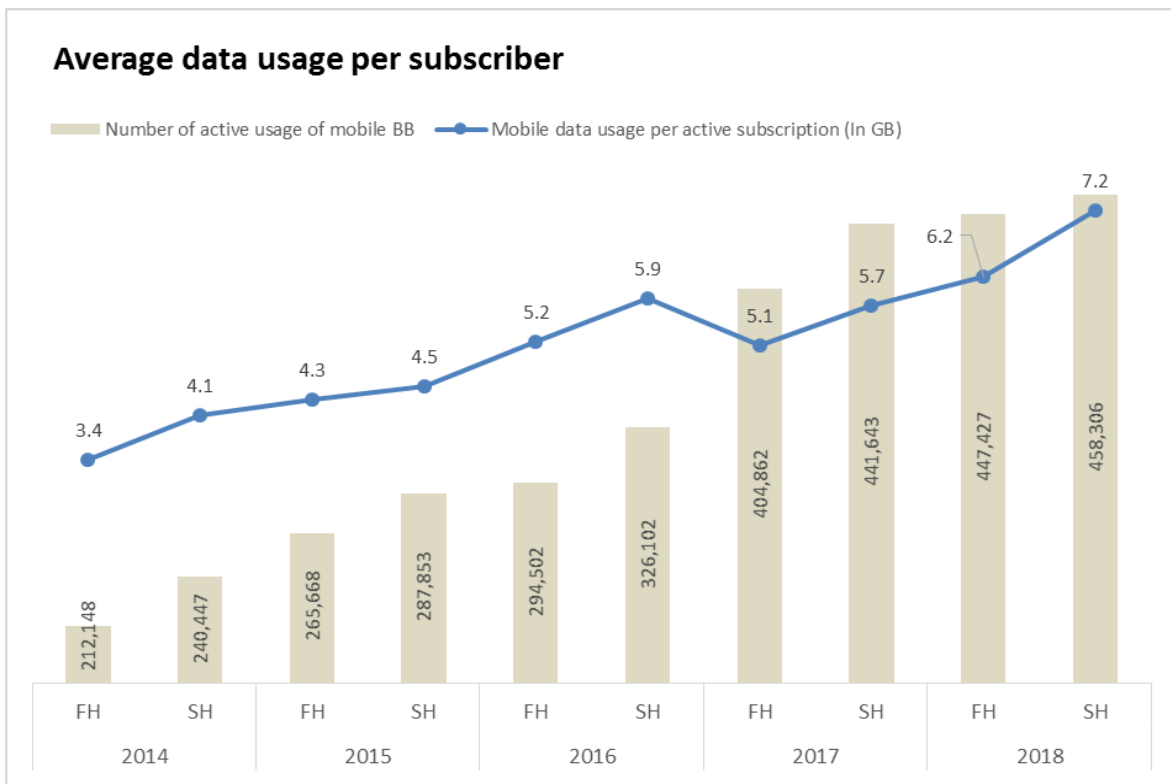


Figure 37: Active data usage at end of period

6.9. Mobile broadband data usage per active subscription

A look at mobile data consumption on a per user basis shows that, on average, each active mobile broadband subscription consumed 7.2GB of data in the second half of 2018, which is up by 1.5GB (or by 26.3%) than what was consumed in the second half of 2017 at 5.7GB.

6.10. Mobile broadband penetration

The EU’s Digital Agenda Scoreboard depicts Malta surpassing the EU average in terms mobile broadband penetration. As at June 2018, Malta’s mobile broadband penetration rate at 97.2% whilst the EU average stood at 96.0%.²⁸

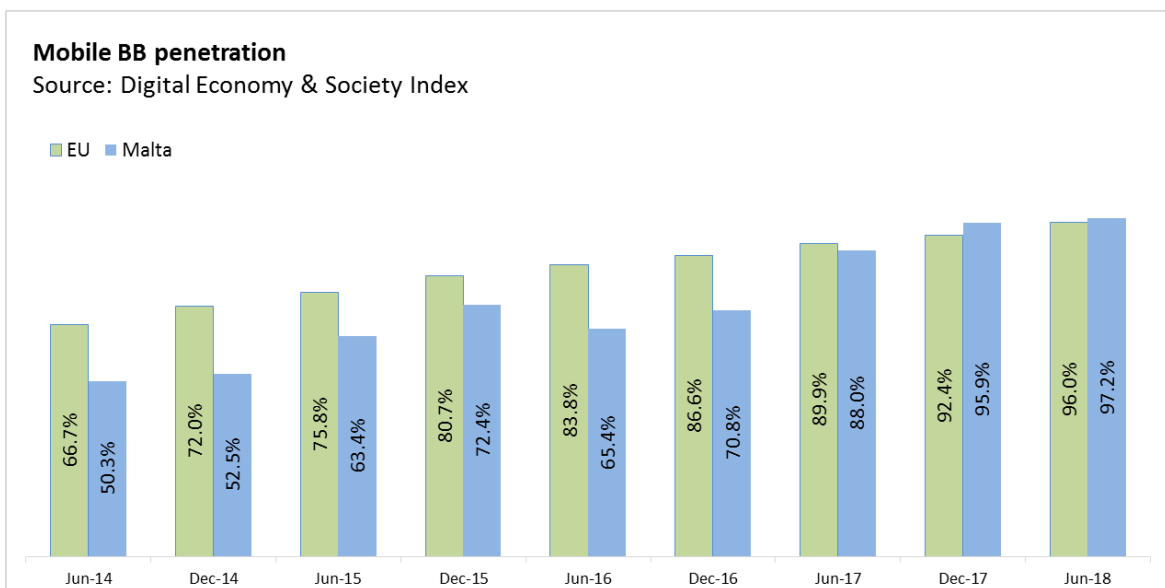


Figure 38: Mobile broadband penetration (active end-users/100 people), as at end of period

²⁸ Data beyond June 2018 is currently not available on the Commission’s Digital Agenda Scoreboard.

7. Pay-TV

Malta's pay-TV segment has seen a good increase in subscriptions for the second year in a row, despite the increasing popularity of subscription video on demand (SVOD) services and of online content via products of the modern internet era. The surge in take-up of pay-TV in 2018 coincided with the discontinuation of analogue pay-tv services and the launch of premium sports packages under the TSN branding. Meanwhile, the bigger emphasis placed by service providers on interactive platforms and on-demand content has also helped to reinvigorate interest in take up of pay-TV.

Of relevance is that a larger number of customers are now signed up to bundle packages featuring pay-TV. In fact, the composition of the subscriber base further tilted towards the bundle option, with the proportion of pay-TV subscriptions in a bundle rising from around 65% at the end of 2017 to around 72.2% by the end of the current reporting period.

The pricing situation in 2018 for the pay-tv segment was relatively unchanged to that prevailing in the previous year. Both operators opted to maintain the same product line-up seen in 2017 whilst generally offering a better pay-tv experience in a bundle setting. The higher take-up of pay-TV in a bundle and related discounts left an impact on revenues reported by service providers. However, stronger demand for TSN sports packages did contribute to new revenue streams, which explains why pay-TV ARPU in the second half of 2018 was up marginally by 0.2% when compared to ARPU in the second half of the previous year.

7.1. Pay-TV subscriptions

The number of pay-TV subscriptions totalled 165,289 by the end of 2018, which is up by 9,613 (or by 6.2%) year-on-year.²⁹ The figures presented in Figure 39 below indicate that Melita's digital cable was the most popular pay-TV subscription format at the end of the current reporting period, with 95,523 subscriptions compared to GO's 69,766 subscriptions. It is noted that Melita discontinued its analogue pay-TV service in the fourth quarter of 2018.

GO's subscriber base encompasses two subscription formats, one based on digital terrestrial television (DTTV) platform and the other on Internet Protocol television (IPTV) platform. Here, a significant shift in consumer preferences has been observed, with the number of DTTV subscriptions going down by 12,182 year-on-year, whilst the number of IPTV subscriptions rose by 12,116. The number of DTTV subscriptions totalled 21,999 at the end of 2018, whilst the number of IPTV subscriptions totalled 47,767.

²⁹ This figure excludes forms of subscriptions to Over-the-Top (OTT) Video-on-Demand (VoD) offerings or internet-only streaming services. No data on take-up of such subscriptions is available to the MCA since these providers are not authorised locally.

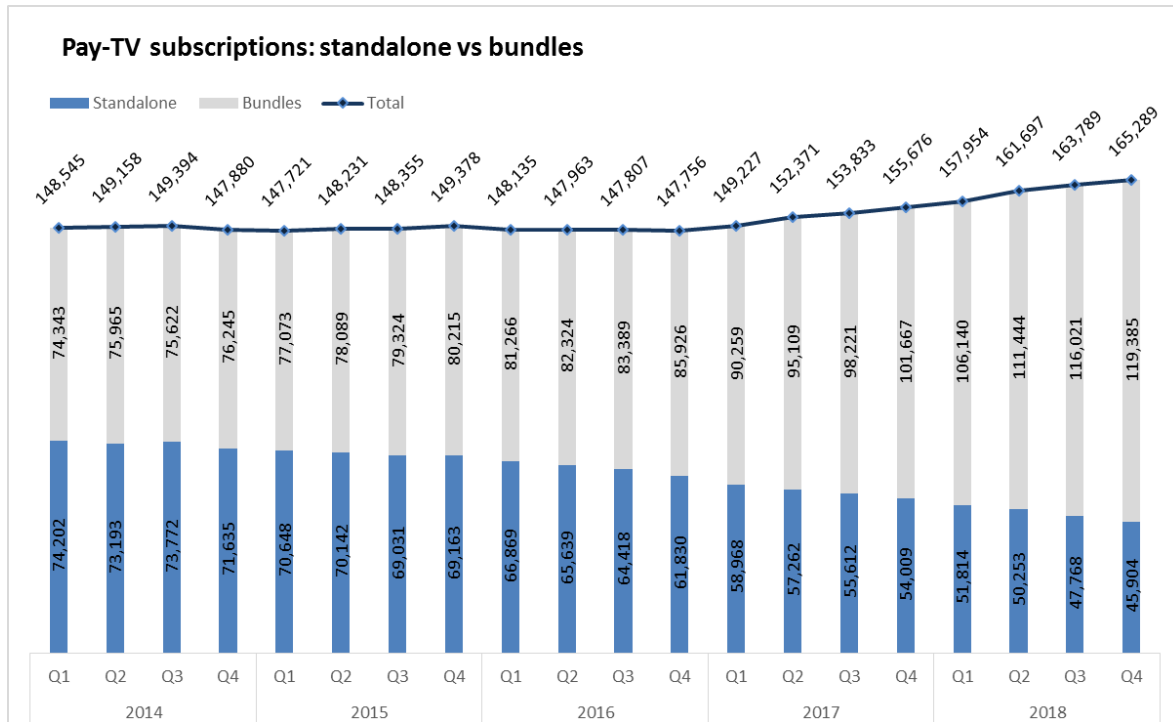


Figure 39: Pay-TV subscriptions as at end of period

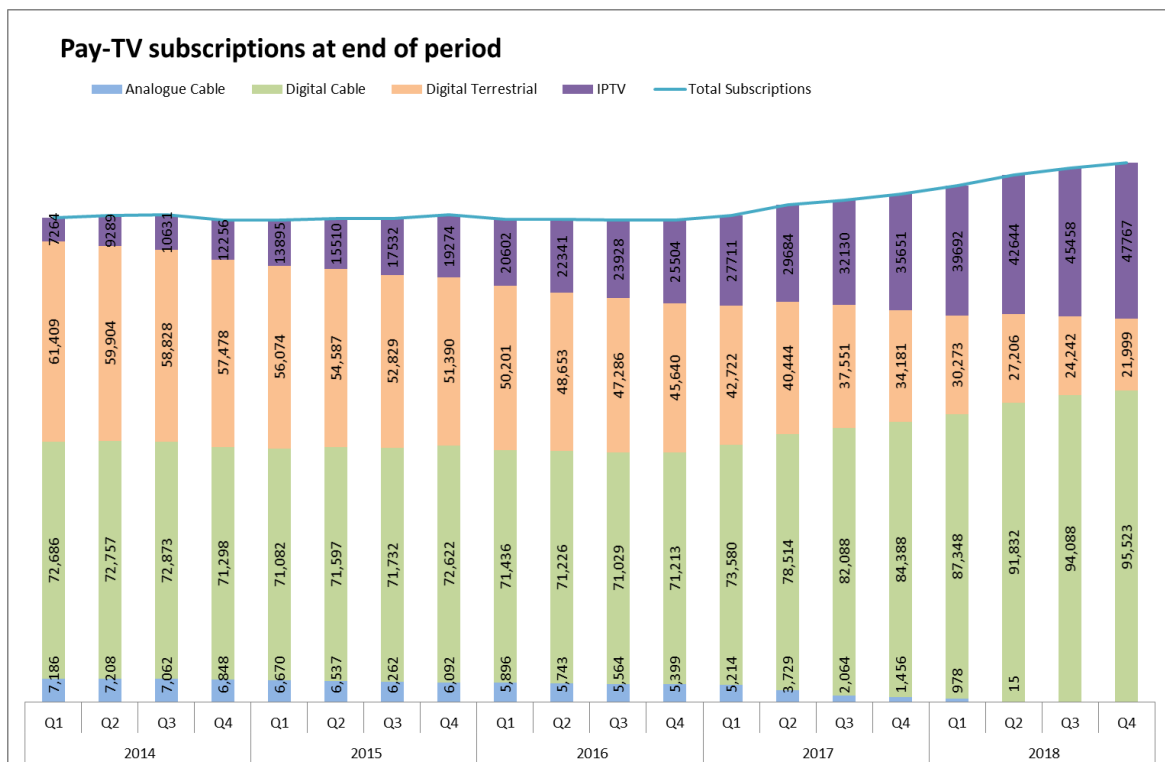


Figure 40: Pay-TV subscriptions as at end of period

As a result of the reported increase in subscriptions, Melita registered a significant market share gain in the pay-TV segment. This operator’s market share was up by almost 4-percentage points year-on-year from 54.2% at the end of 2017 to 57.8% at the end of 2018.

This change came at the expense of GO, which saw its market share shrink by the same percentage point margin during the same period, from 46.2% to 42.2%. Disaggregating GO’s total market share shows that DDTV accounted for 13.3% of all pay-TV subscriptions at the end of 2018 and IPTV accounted for 28.9%.

7.2. Pay-TV subscriptions in a bundle

There were 119,385 pay-TV subscriptions in a bundle at the end of 2018, up from 101,667 at the end of 2017. As a result, the proportion of pay-TV subscriptions in a bundle was up by 6.9 percentage points year-on-year up from 65.3% at the end of 2017 to 72.2% at the end of the current reporting period.

Pay-TV subscriptions in a bundle	2014		2015		2016		2017		2018	
	FH	SH	FH	SH	FH	SH	FH	SH	FH	SH
Pay-TV subscriptions on a dual-play contract	9,731	6,946	6,318	5,841	5,720	5,544	5,296	5,047	4,705	5,076
Pay-TV + fixed telephony	9,731	6,946	6,318	5,841	5,720	5,544	5,296	5,047	4,705	5,076
Pay-TV subscriptions on a triple-play contract	22,165	24,870	26,088	27,386	28,529	30,482	40,638	46,835	55,048	61,145
Pay-TV + fixed telephony + fixed broadband	22,165	24,870	26,088	27,386	28,529	30,482	40,638	46,835	55,048	61,145
Pay-TV subscriptions on a quad-play contract	44,069	44,429	45,683	46,988	48,075	49,900	49,175	49,785	51,691	53,164
Pay-TV + fixed broadband + fixed telephony + mobile telephony	44,069	44,429	45,683	46,988	48,075	49,900	49,175	49,785	51,691	53,164
Total number of pay-TV subscriptions in a bundle	75,965	76,245	78,089	80,215	82,324	85,926	95,109	101,667	111,444	119,385
Number of pay-TV subscriptions as at end of period	149,158	147,880	148,231	149,378	147,963	147,756	152,371	155,676	161,697	165,289
Percentage of pay-TV subscribers in a bundle	50.93%	51.56%	52.68%	53.70%	55.64%	58.15%	62.42%	65.31%	68.92%	72.23%

Table 13: Pay-TV subscriptions in a bundle

7.3. Pay-TV ARPU

The pay-TV ARPU calculation apportions total revenues reported by local pay-TV service providers by the average number of subscriptions in the current review period. The calculation takes into account revenues from premium services, such as movies or sports add-ons, in addition to other revenue streams, such as those generated from installation and monthly access fees.

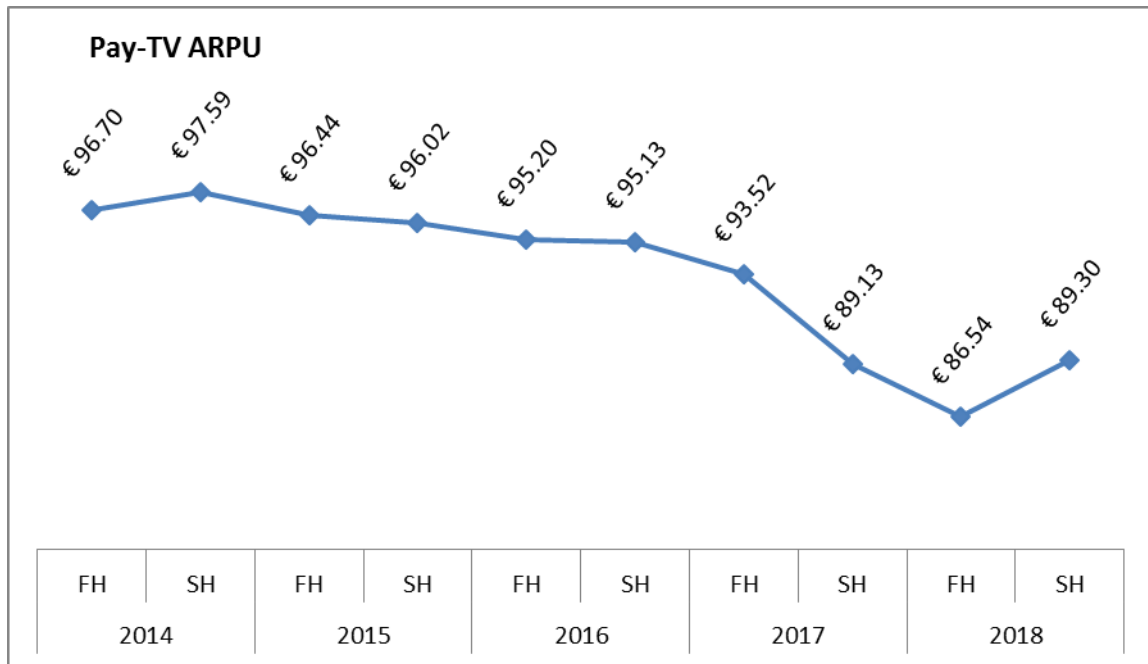


Figure 41: Average revenue per pay-TV user

ARPU developments in the second half of 2018 defied the general declining trend observed for the pay-TV sector since 2014 with an uptick recorded for this variable. Effectively, this change coincides with the launch of the TSN sport package line up and the subsequent increase in take up of relevant sport channel plans. By way of higher take-up of TSN-based plans, service providers managed to make up for any losses in revenue streams associated with discounts offered with bundle packages including pay-TV.

7.4. Average advertised monthly access fees for stand-alone Pay-TV

This section outlines changes in the average advertised monthly access fees for five distinct pay-TV channel categories, with each category encompassing stand-alone plans listing a particular number of channels, but excluding optional add-ons (such as those featuring sports and video-on-demand channels). The pay-TV categories highlighted in this section encompass the following number of channels: 'Up to 24 channels'; '25 to 49 channels'; '50 to 74 channels'; '75 to 99 channels'; and '100 channels or more'.

In the second half of 2018 the overall average advertised monthly access fee for stand-alone pay-TV stood at €18.00, which is unchanged from what was observed in the same period a year earlier. The lack of development in the stand-alone pay-TV sector reflects the status quo in the channel line-up of plans offered by local service providers. It is relevant to underline that important changes were, however made in the sport and video-on-demand channel line-up available through add-ons, which are not taken into account when calculating the average advertised monthly access fees for standard pay-TV.

Figure 42 illustrates that the average advertised monthly access fee for pay-TV packages encompassing 'up to 24 channels' stood at €10.00 by the end of the current reporting period, which is identical to the results observed a year earlier. It is noted that only Melita's 'Starter' and GO's 'Start Interactive' feature in this category.

As for pay-TV packages encompassing both '25 to 49' and '75 to 99' the advertised rates for both these categories at €17.00 and €22.00 respectively. Similarly, on average pay-TV packages encompassing '100 channels or more' continue to carry the same monthly price of €32.00, which is unchanged from previous year.

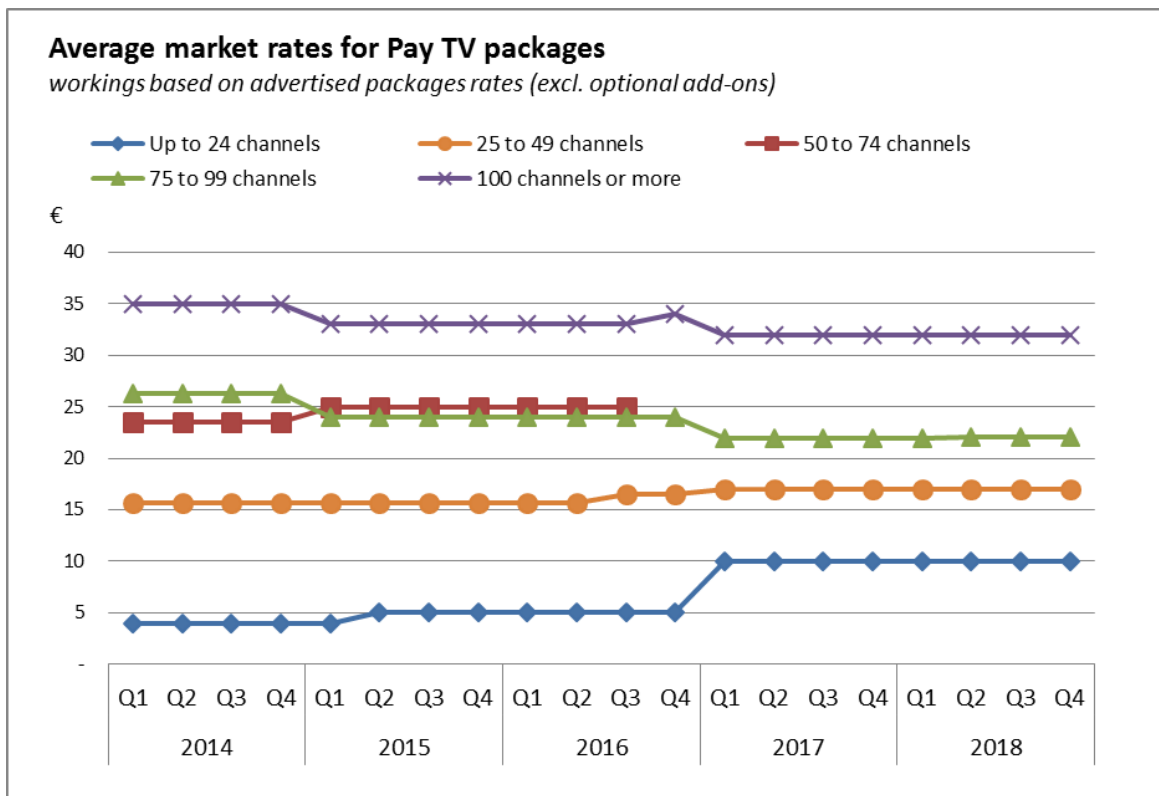


Figure 42: Average market rates for pay-TV packages

It is to be noted that the figures presented above do not take into account charges or fees that come into force if the end-user requires paper billing or does not pay bills via direct debit.

8. Post

The downward trend of postal mail volumes has somewhat levelled off in 2018, with a marginal 0.1% decline in mail volumes year-on-year. This slight decline is attributed to the single piece letter mail and bulk letter mail segments, which are most susceptible to e-substitution. Meanwhile, the growing parcel mail and registered letter mail segments helped ease the aforementioned volume declines. As a result of e-commerce-driven growth for both domestic and cross-border mail, postal operators delivered a bigger number of packets and parcels year-on-year and continued to diversify into different lines of business whilst improving last mile services. These changes happened alongside the emergence of new players, such as Postal Article Forwarding Services (PAFS) providers.

8.1. Postal mail volumes

A total of 18.1 million postal mail items were delivered by local postal operators in the second half of 2018.³⁰ This figure is down by 0.2 million (or by 1.3%) from 18.4 million postal mail items delivered in the same period a year earlier.

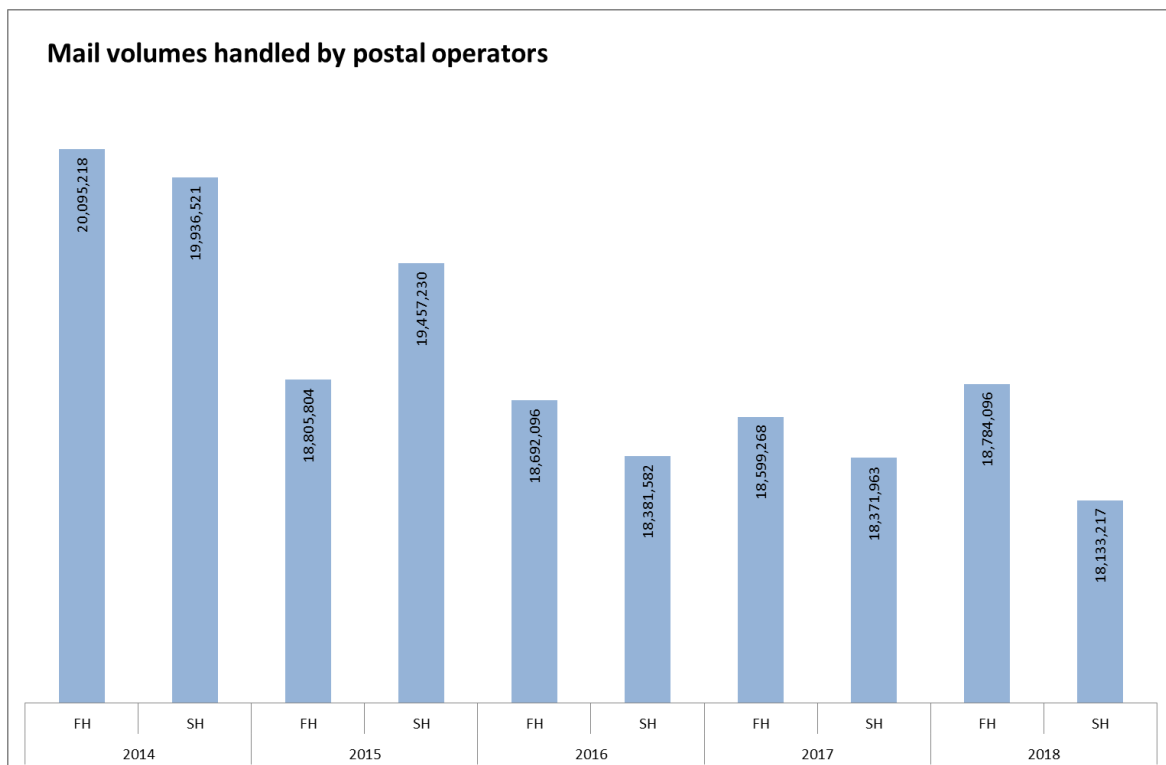


Figure 43: Postal activity - mail volumes handled by local service providers

³⁰ Maltapost plc (the designated Universal Service Provider, hereafter also referred to as “the USP”), DHL International Ltd., and Premiere Post Ltd. provide services within the universal service area. As part of its universal service obligation Maltapost is obliged to provide a set of services, outside the reserved area. Another 23 postal operators (courier and express services) provide services outside the scope of the universal service area.

An important distinction for postal mail volumes relates to the definition of the standard postal mail category and the express postal mail category.

By way of definition, standard postal mail encompasses the delivery of single piece letter mail, bulk mail, registered mail and parcel mail.³¹ Express postal mail encompasses the accelerated and secure worldwide delivery of mail items, be it for important letters, documents or parcels, through express mail or courier service providers. The services offered by these providers is characterised throughout by a degree of speed, tracking and managerial control (that exceed that applied to the fastest standard category of the basic universal letter post and parcel services). The distinguishing characteristic of a courier service provider is that it focuses on the delivery of express mail items that are in possession of an employee of the company at all stages of its journey.

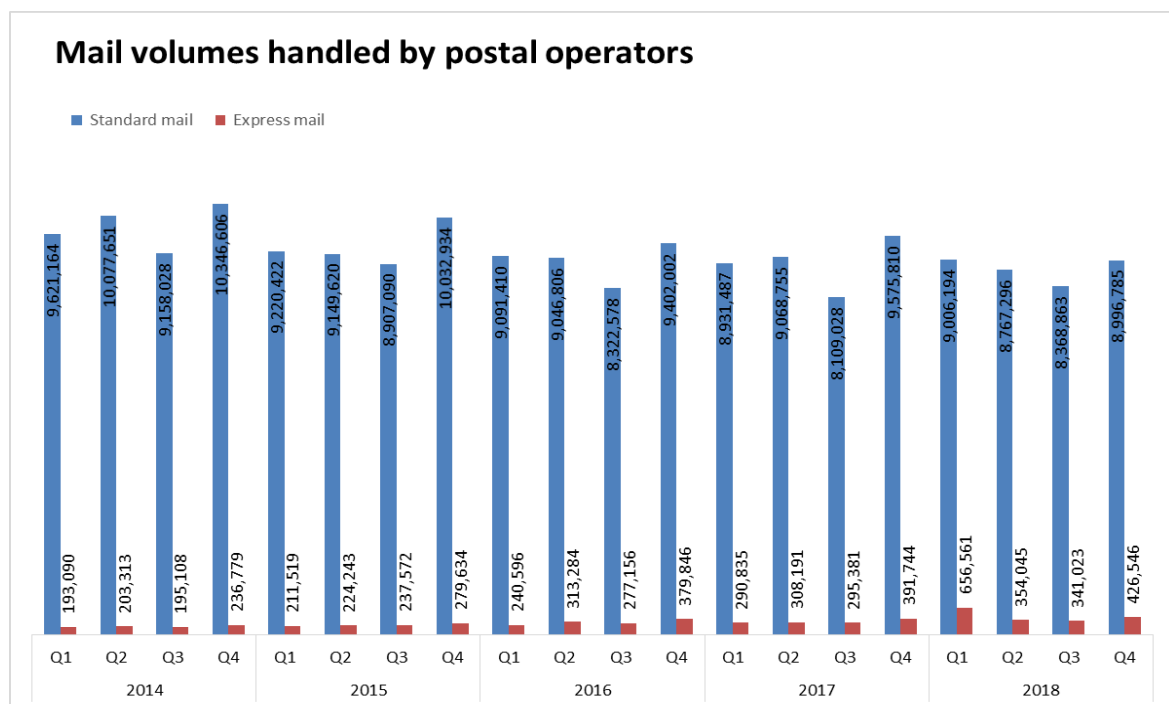


Figure 44: Postal activity - number of handled mail items by type of mail activity

Of note is that standard postal mail accounted for 95.7% of total postal mail volumes delivered in the second half of 2018. Express mail activity accounted for the remaining share, at 4.2%.

In absolute terms, the number of standard postal mail items delivered in the second half of 2018 totalled 17.4 million, which is slightly down by 0.3 million (or by 1.8%) compared to the volumes recorded in the same period a year earlier. Conversely, the number of express postal mail items

³¹ Single piece letter-post mail (also referred to as ordinary mail) is the ordinary day-to-day correspondence posted by individuals and businesses (other than bulk letter-post mail), at street letterboxes or over the counter at postal outlets. The registered letter-post mail service (also referred to as registered mail) refers to a service providing a flat-rate guarantee against risks of loss, theft or damage and supplying the sender, where appropriate upon request, with proof of the handing in of the postal article or of its delivery to the addressee. Bulk letter-post mail (also referred to as bulk mail) consists of a substantial number of similar letter-post items deposited with MaltaPost at the same place and time, to be transported and distributed to the addressees indicated on each of the postal articles.

delivered in the current review period was up by 0.08 million (or by 11.7%) when compared to the second half of 2017, fuelled by growth in ecommerce-related packets and parcels.

8.2. Postal mail volumes by type of mail

There are four types of postal mail categories, namely single piece letter mail, bulk letter mail and registered letter mail and parcel mail.

Single piece letter-post mail accounted for 38.2% of all postal mail items delivered during the current review period. In absolute terms, the number of single piece letter items totalled 6.9 million in the second half of 2018, which is down by 0.3 million (or by 4.3%) from volumes registered in the second half of 2017.

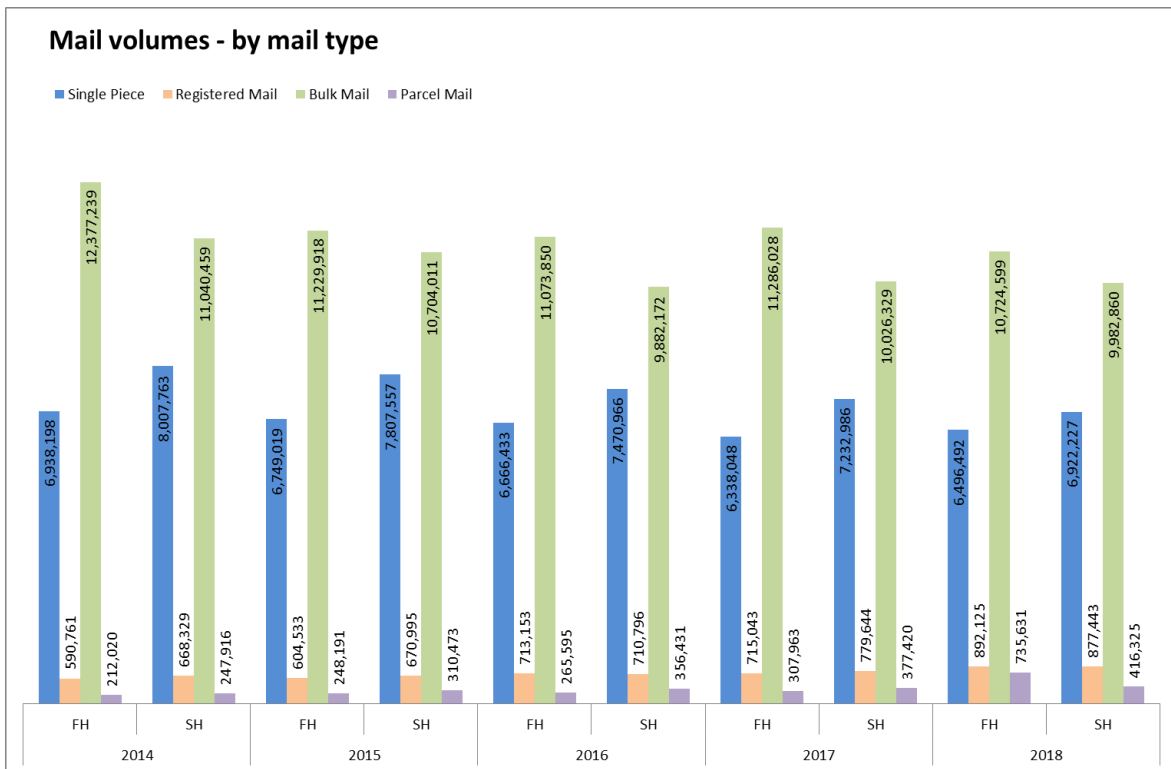


Figure 45: Postal activity - number of handled mail items by type of mail item

Bulk letter mail items totalled 10.0 million in the second half of 2018, which is equivalent to 55.1% of total mail volumes delivered during this period. Compared to volumes recorded in the in second half of 2017, the number of bulk mail items that were delivered in the current review period was down by 0.04 million (or by 0.4%).

The number of registered letter mail items delivered in the second half of 2018 totalled 0.9 million, which is equivalent to 4.8% of all postal mail items recorded during the period. When compared with the second half of 2017, registered letter mail volumes were up by 97,799 (or by 12.5%).

Parcel mail items totalled 0.4 million in the second half of 2018, which is equivalent to 1.9% of total postal mail volumes recorded during this period. Compared to mail volumes recorded in the second half of 2017, the number of parcel mail items was up by 17,683 (or by 5.3%).³²

The increase in volumes for registered letter mail and parcel mail eased the fall in volumes recorded for single piece letter mail and bulk letter mail, which are most susceptible to e-substitution.

8.3. Postal mail volumes by destination

This section distinguishes between mail activity according to the destination, namely by outlining developments for domestic mail volumes; outbound cross border mail volumes,³³ and inbound cross border mail volumes.³⁴

Domestic mail volumes delivered in the second half of 2018 totalled to 13.9 million items. This figure is down by 0.3% compared to the figure recorded in the same period a year earlier.

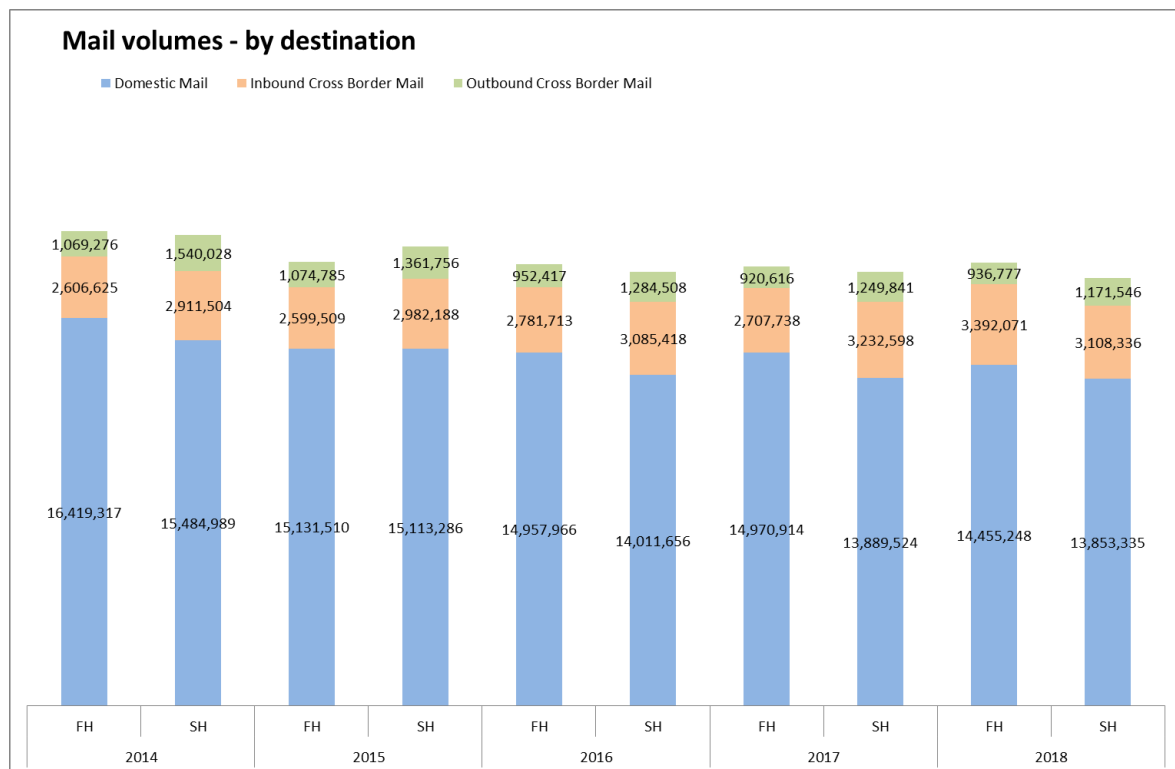


Figure 46: All postal activity - number of handled mail items by destination

Volumes of outbound cross border mail and inbound cross border mail in the second half of 2018 totalled 1.2 million items and 3.1 million items respectively. Figure 47 illustrates that, in the case of

³² This increase is a result of a more buoyant activity for inbound cross border mail recorded by one specific operator.

³³ These postal mail items originate locally for delivery to foreign destinations.

³⁴ Foreign-originated postal mail forwarded to Malta.

inbound cross border mail, volumes recorded in the current reporting period were up by 124,262 items (or by 3.8%), compared to volumes recorded in the second half of 2017. Meanwhile, outbound cross border mail volumes were up by 78,295 (or by 6.3%).

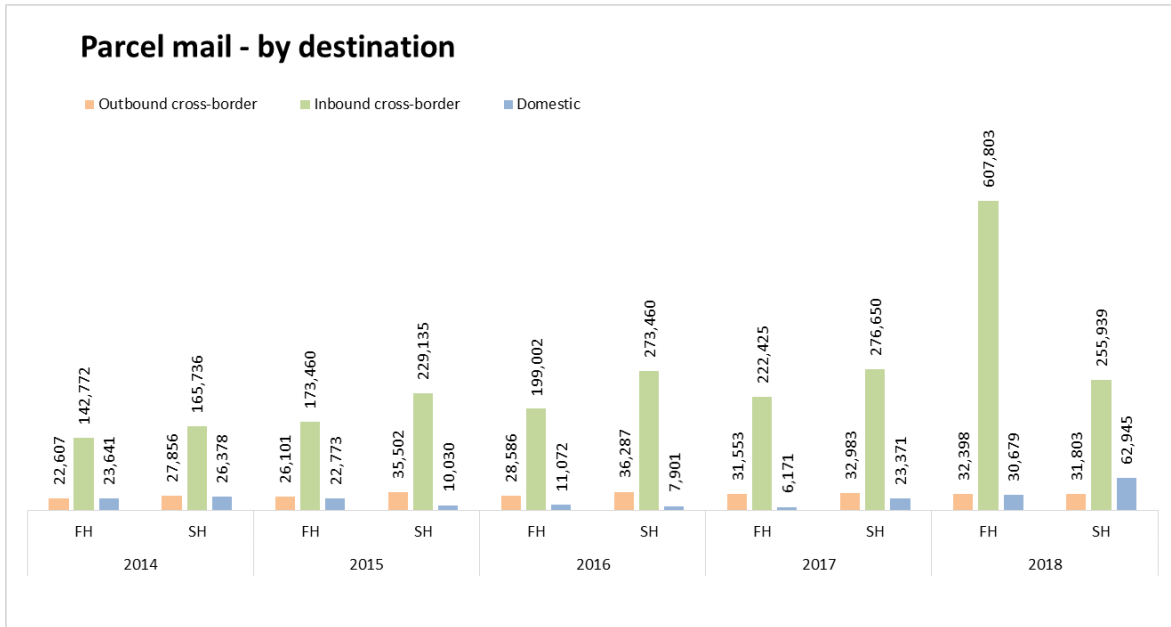


Figure 47: Parcel mail activity - number of handled mail items by destination

A further disaggregated look at parcel mail illustrates that the volume of outbound cross border mail and inbound cross border mail in this reporting period totalled 31,803 items and 255,939 items respectively. In the case of inbound cross border mail, volumes recorded in the current reporting period were down by 7.5%, compared to the same period in 2017. Meanwhile, volumes for outbound cross border mail were down by 3.6%. Conversely, the domestic parcel mail segment was up by 169.3%, when comparing activity reported for the second half of 2018 to that reported in the second half of 2017.

8.4. Quality of service for the delivery of postal mail

The MCA has established a methodology, based on a series of Quality of Service (QoS) targets, to determine whether Maltapost is meeting its universal service obligations for the delivery of different mail items. These QoS targets are set in accordance with the MCA Decision on the quality performance measurement of postal items delivered within the defined service standard.³⁵ QoS data corresponds to the full calendar year.³⁶

³⁵ Link to MCA Decision concerning the 'Review of Quality of Service Targets and Requirements to be achieved by Maltapost plc': http://www.mca.org.mt/sites/default/files/articles/QoS_Review_-_DN.Nov_10.pdf

³⁶ In terms of the MCA Decision Notice on the measurement of MaltaPost's Quality of Service, MaltaPost is required to attain the standards set by the Authority over a given financial year (October to September).

The QoS data presented in this report is adjusted to reflect developments over a standard calendar year, not a financial one.

8.4.1. Local ordinary mail and bulk mail

The QoS targets set by the MCA for the next day delivery (D+1) to destination of local ordinary mail and bulk mail stands at 95%.

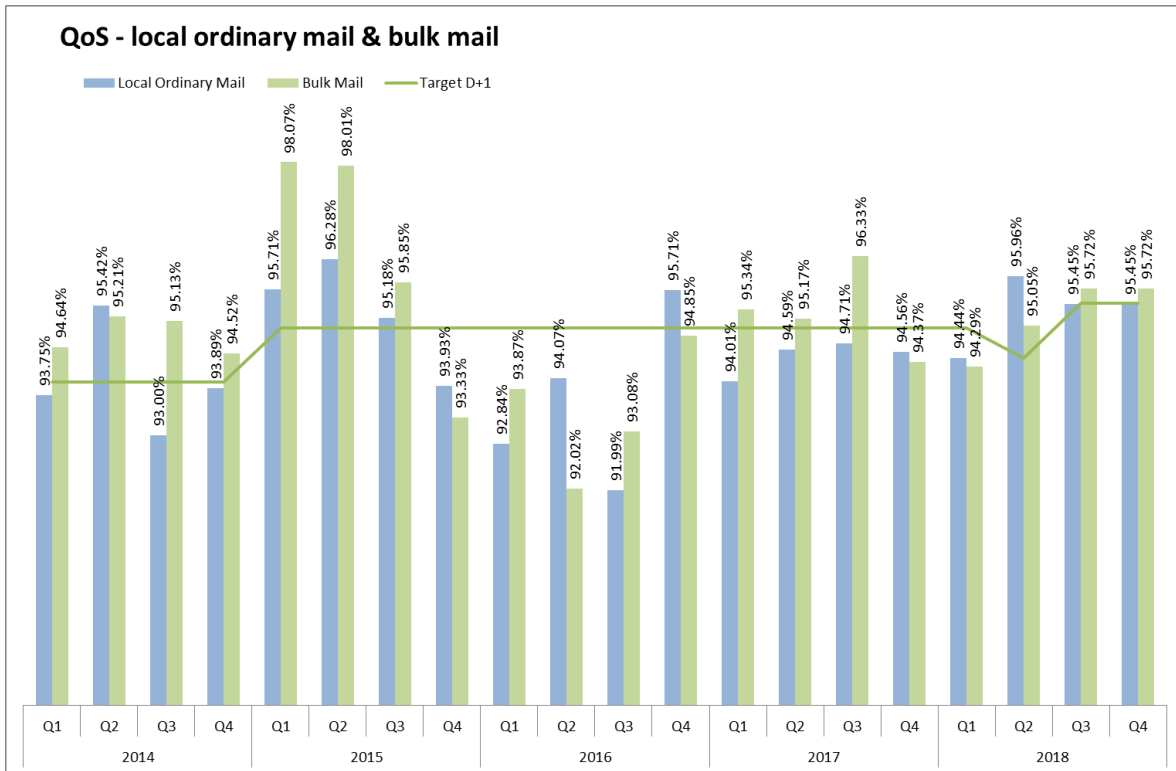


Figure 48: Quality of service - local ordinary and bulk mail

Figure 48 illustrates that Maltapost did reach the established target for both single piece letter mail and letter bulk mail in the second half of 2018.

8.4.2. Local registered mail and priority inbound parcels

The (D+1) QoS target for the delivery to destination of local registered letter mail and priority inbound parcels has been set at 98%.

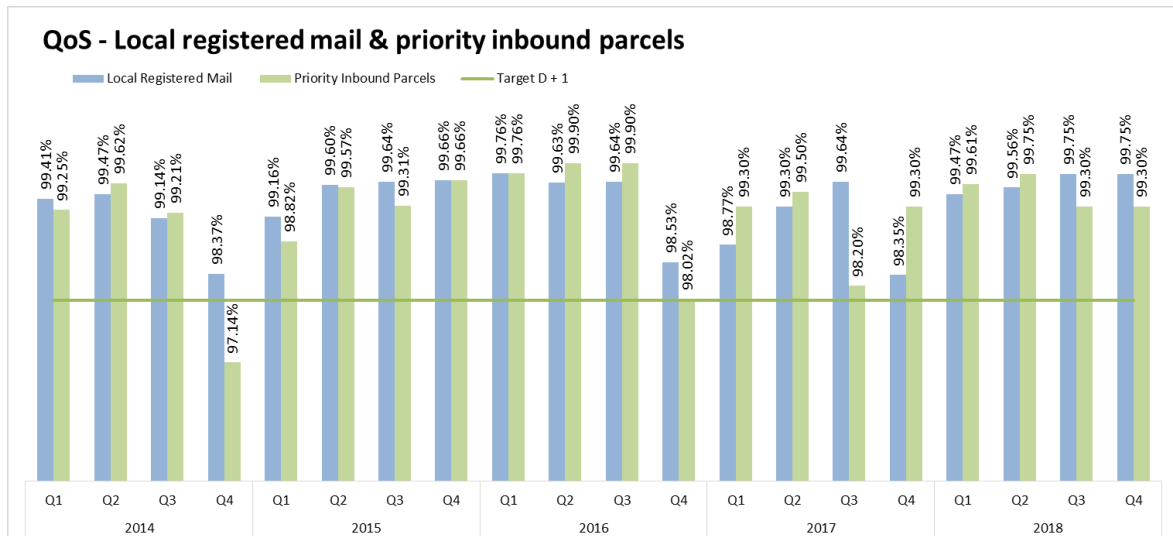


Figure 49: Quality of service - local registered mail and priority inbound parcels

Figure 49 illustrates that, in the second half of 2018, Maltapost has met and exceeded all the set targets for the mail activities under consideration.

8.5. Postal rates: Malta vs EU

The March 2018 publication by Deutsche Post entitled ‘Letter Prices in Europe’ shows that Malta’s nominal prices for a domestic standard letter and an outbound letter within the EU continue to benchmark at the bottom (or close to the bottom) of the ranking.³⁷

Survey data shows that Malta’s nominal price for domestic standard letter and for letter mail within Europe stood at €0.26 and €0.59 respectively by the end of Q1 2018. The former rate corresponds to a standard letter mail item weighing up to 50 grams, whilst the latter rate corresponds to an outbound cross-border letter mail having higher weight steps.

³⁷ Link to May 2018 publication: <https://www.dpdhl.com/content/dam/dpdhl/en/media-center/media-relations/documents/2018/letter-price-survey-2018.pdf>

The publication findings are based on certain considerations

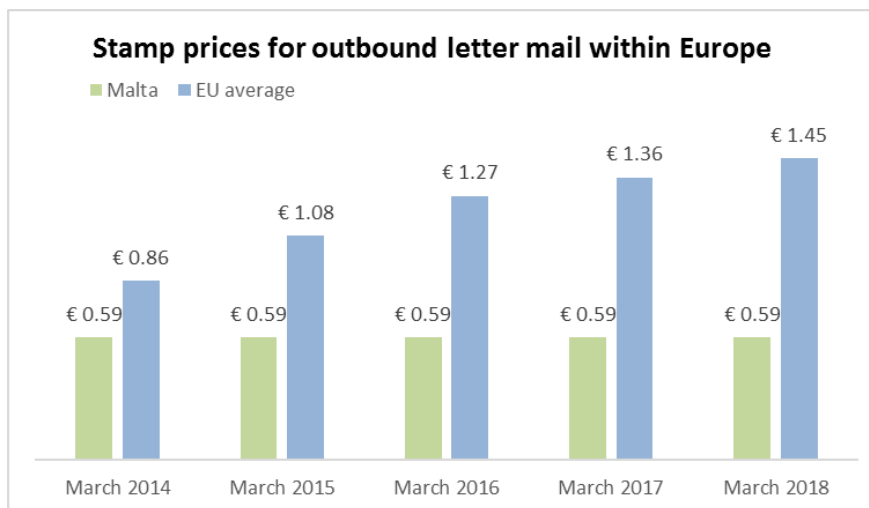
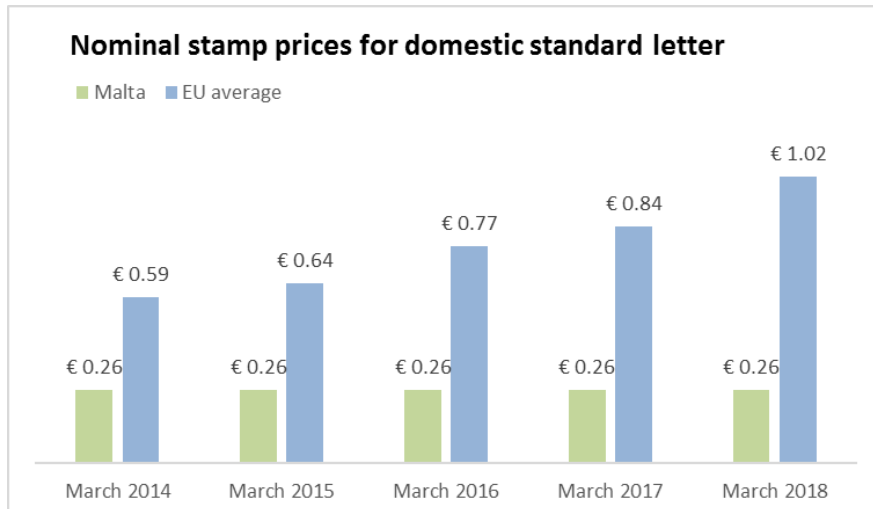


Figure 50: Nominal stamp prices in Malta and the EU

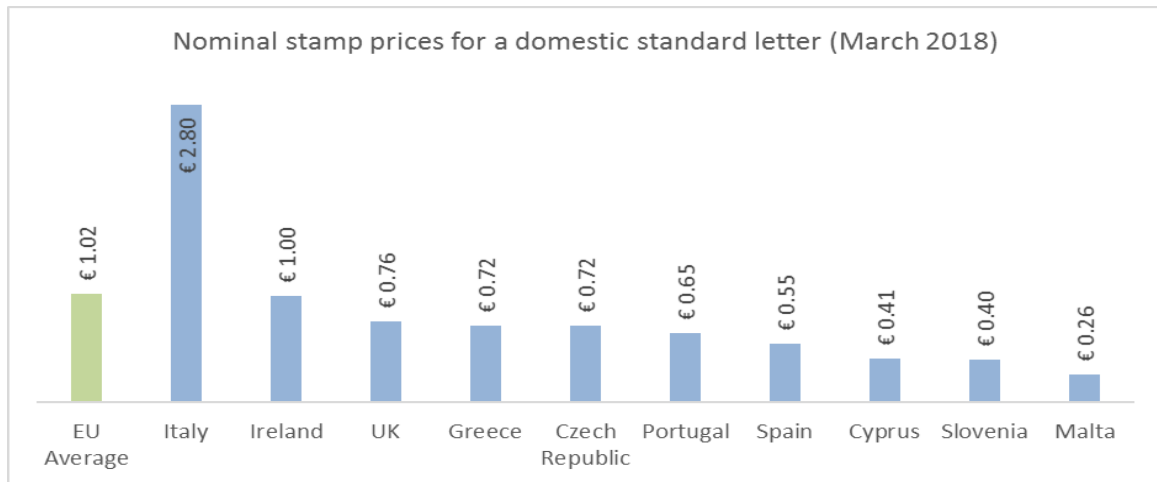


Figure 51: Comparison with selected EU countries

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11. Glossary of Terms

ARPU	Average revenue per user. Selected revenue items of the operator divided by the average number of active subscriptions during the period.
Broadband	A service or connection to the Internet which is 'always on' and has a speed of more than 128kbps. The number of active broadband subscriptions refers to subscriptions/connections having recorded a transaction within 90 days of the period stipulated.
Dial-up	The number of active dial-up subscriptions refers to those subscriptions/connections which made a call to an Internet number (2188, or 2186) within the last 90 days.
DSL	Digital Subscriber Line. A high-speed transmission technology mainly applied for Internet and video file access service. DSL services allow voice and data to share the same infrastructure and usually require a splitter at the customer's premises to separate voice and data traffic from the line. Forms of DSL include ADSL, HDSL, and VDSL.
DTTV	Digital Terrestrial Television. The term refers to a delivery platform primarily for television programmes in digital format, using the DVB-T standard.
SH	Second half of the year, referring to the period July to December.
FNO	Fixed network operator. A provider which owns a fixed line network.
FTF	Fixed-to-fixed traffic.
FTI	Fixed-to-international traffic.
FTM	Fixed-to-mobile traffic.
ISPs	Internet Service Providers. An ISP is a point of access to the Internet for small business and individual users. The ISP provides its customers with access to its router which relays traffic to web servers on the Internet.
Mbps	Megabits per second ("MBit/s") or millions of bits per second. Unit applied to measure the transmission speed of digital information.
MCA	Malta Communications Authority.
MMS	Multimedia Messaging Service. MMS extends the short messaging service ("SMS") to include longer text, graphics, photos, audio clips, video clips, or any combination of the above, within certain size limits.
MNO	Mobile network operator. A provider which owns a mobile network.

MPR	Mobile penetration rate. The MPR is a term used to describe the number of active mobile subscriptions (or SIM cards) as a percentage of total population.
MTM	Mobile-to-mobile traffic.
MTF	Mobile-to-fixed traffic.
MTI	Mobile-to-international traffic.
MVNO	Mobile Virtual Network Operator. An MVNO is a mobile operator that usually would not have a licence to use radio spectrum but would have access to the radio networks of one or more of the current mobile operators and would be able to offer services using that spectrum.
Off-net activity	Activity between two or more connections on different networks.
On-net activity	Activity between two or more connections on the same network.
Pay-TV	Television services (generally a channel or set of channels) paid for by the user, by means of subscription or other ways of service payment.
Q	Quarter of the year. Q1 refers to first quarter (January to March), Q2 refers to second quarter (April to June), Q3 refers to third quarter (July to September), Q4 refers to fourth quarter (October to December).
QoS	Quality of Service. A statistical measure of a system or service. May also be used to set varying priorities for traffic.
Service provider	A supplier of electronic communications and postal services, to third parties, either through its own network or through a network of another operator.
SH	Second half of the year, referring to the period July to December.
SMS	Short message service. This refers to short text messages which can be sent from one mobile phone to another, usually up to 160 characters. Such messages can also be sent from the Internet to a mobile phone.
Universal service	The basic level of telecommunications services which should be available to all customers.
USO	Universal Service Obligations. A provision in Maltese law requiring certain operators to provide certain services to all specified persons who may reasonably request them.
VAT	Value Added Tax.

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