



Communications Market Review

January to June 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.

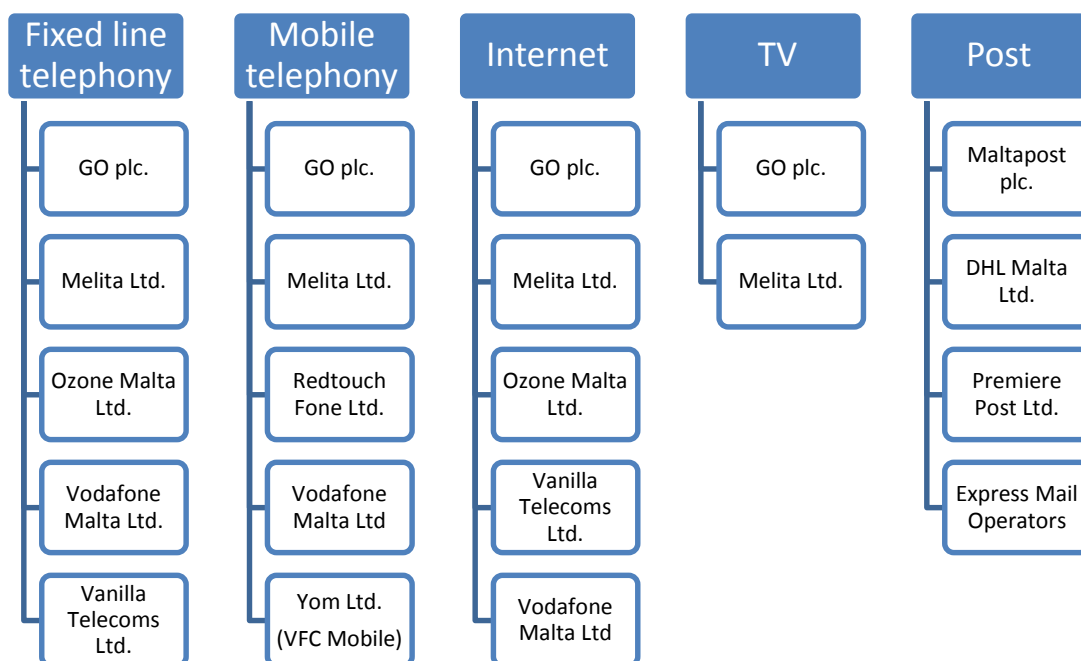


Figure 1: Operators providing quarterly data in 2018

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 Q2 2018.

The data cut-off date for implementing changes and updates in the data has been set at the 17th September 2018. Any data revised and updated by the sources after the cut-off date has been incorporated in the Data Report Sheet (DRS) published in December 2018².

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-q3-2018>

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.

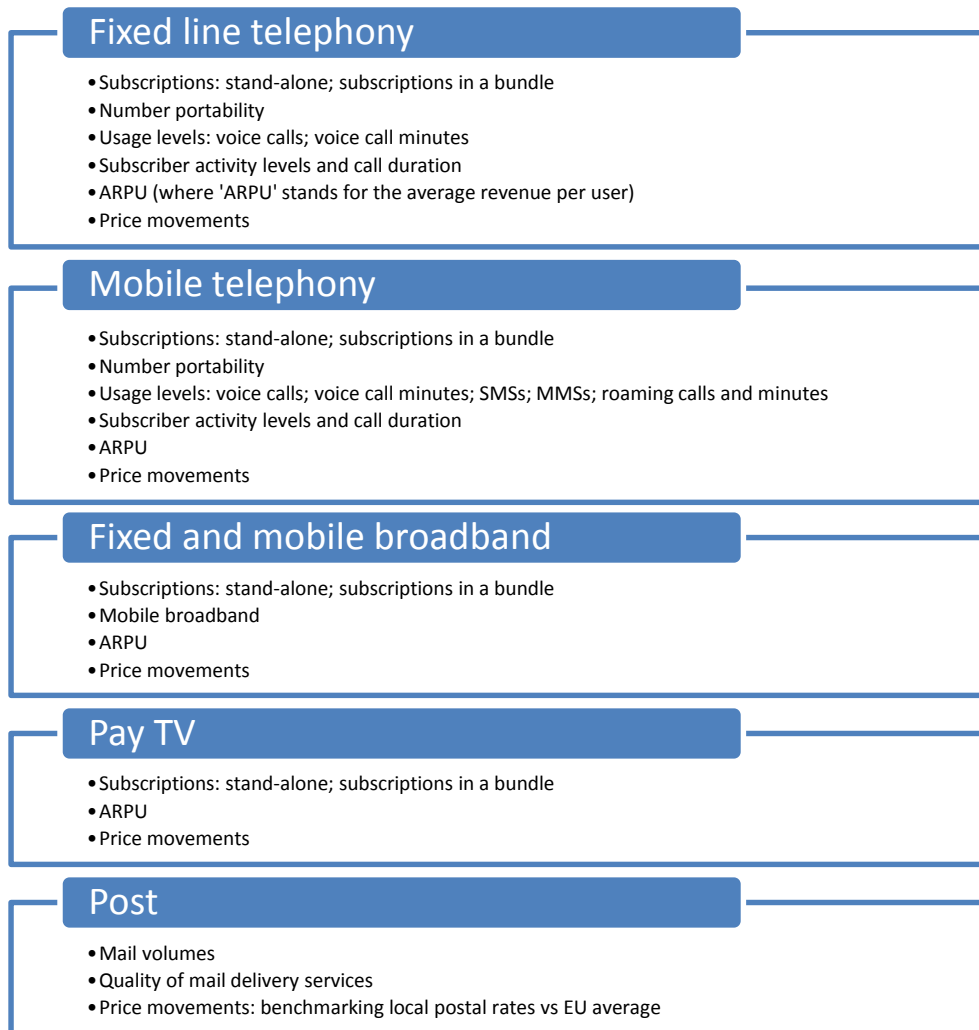


Figure 2: Key market indicators for electronic communications and post

2. Key market outcomes

The main indicators in this report outline a positive performance for telecoms in the first six months of 2018. Subscriber growth materialised across all segments of the sector, but with the broadband and TV segments outpacing the rest. The latter development reflects the continued shift to the consumption of IP-based digital services alongside an expansion of service portfolios and changes in price plans increasingly tailored for the need of end-users.

Surging demand for fast and ultra-fast download speeds underscores the continued growth of fixed broadband penetration over the 12-month period ending June 2018. During this period, the number of fixed broadband subscriptions jumped by 6% to 188,000 as the proportion of fast and ultra-fast connections rose from 46% to almost 72%. Fixed broadband ARPU in the first half of 2018 was 6.4% higher than that reported in the same period of 2017. In relative terms, however, end-users paid less per Mbit of download in the first half of 2018 compared to the first half of 2017,

Mobile telephony subscriptions were up by 2.4% year-on-year, to 615,000 by the end of June 2018. Take-up was particularly robust in the contract segment, with this category of plans growing its share of the mobile subscriber base to reach 35.4% by the end of the reporting period. Meanwhile, trends in usage of the traditional mobile voice and messaging services remain consistent with long-term developments. Mobile voice minute volumes surged ahead in the current review period, as end-users continued to move away from SMS messaging and fixed voice calling.

The consumption of mobile data services also grew rapidly, as growth in subscriptions for mobile PC connectivity services materialised alongside the rising take-up of mobile tariff plans featuring data allowances. Notwithstanding the growing consumption of voice minute and data volumes, mobile telephony ARPU in the first half of 2018 was 1.6% lower than that recorded in the first half of the previous year. This goes to suggest that end-users are paying less per unit of consumption.

Fixed telephony subscriptions were up by 3.7% in the first half of 2018 with almost 70% of all fixed subscriptions pertaining to a bundle package. Notwithstanding the registered increase, the usage for this service continues to dwindle as end-users continue to make the switch to mobile telephony. Indeed, during a one-year period voice calls and minutes dropped by 7.0% and 5.5% respectively.

With regard to the pay-TV sector, there was a total of 161,697 subscriptions by the end of the first half of 2018, up by 9,326 (or by 6.1%). Similarly, bundled pay-TV subscriptions were up by 6.5 percentage points during this period. The increased take-up of this service is a result of operators introducing pay-TV plans in the majority of their bundle packages. Despite the increased take-up of this service, the ARPU for this segment continued to decline.

Postal mail volumes in Malta recorded in the first half of 2018 were up when compared to results recorded a year earlier, from 18.6 million to 18.8 million. This development was a result of the growth observed in the packet and parcel segments that overshadowed declines in the bulk sector.

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 14,324 (or by 2.4%) year-on-year, to 615,423 at the end of June 2018. The mobile penetration rate at the end of the current reporting period stood at 127.7%, down from 128.35% a year earlier.
- The number of post-paid subscriptions was up by 13,015 (or by 6.4%) year-on-year and the number of pre-paid subscriptions was up by 1,256 (or by 0.3%).
- The proportion of the subscriber base on a post-paid plan was up from 34.0% at the end of June 2017 to 35.4% at the end of June 2018.
- 9.3% of all mobile subscriptions recorded at the end of June 2018 were bundled with some other electronic communications service.
- The number of mobile inward portings totalled 14,911 in the first half of 2018, down by 1,190 (or by 7.4%) from 16,101 inward portings recorded in the same period a year earlier.
- The number of mobile voice call minutes recorded in the first half of 2018 totalled 458.0 million, which is up by 31.0 million (or by 7.3%) from 427.0 million recorded in the first half of 2017. The number of mobile voice calls was also up, by 1.5 million (or by 0.6%) from 227.4 million to 228.9 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 | FH 2016 | FH 2017 | FH 2018 |
|-----------------------------------------|---------|---------|---------|
| Subscriptions (end of period) | 576,915 | 601,065 | 615,423 |
| Activity levels per subscription | | | |
| Number of voice calls | 458 | 383 | 375 |
| Number of voice call minutes | 696 | 720 | 751 |
| Number of SMSs | 358 | 278 | 229 |
| ARPM (overall) | €0.072 | €0.065 | €0.060 |
| Average rate per SMS (overall) | €0.030 | €0.035 | €0.037 |
| ARPU | €86.82 | €86.86 | €85.43 |

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 first half of 2018 was down by 7.9% to €0.070 from €0.076 in the first half of previous year.

ii.Fixed line telephony

- The number of fixed line subscriptions totalled 248,420 by the end of June 2018, up by 8,838 subscriptions (or by 3.7%) from 239,582 a year earlier.
- Year-on-year, the number of post-paid subscriptions and 'enhanced' subscriptions was up by 12,039 and 636 respectively. In contrast, the number of pre-paid subscriptions was down by 3,837.
- As for the proportion of the local subscriber base by type of subscription, 93.9% were on a post-paid contract at the end of the current reporting period, 4.7% were on a pre-paid plan and 1.5% were on an 'enhanced' plan.
- 69.5% 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 1,270 fixed line inward portings in the first half of 2018, marginally down from 1,290 inward portings recorded a year earlier.
- Fixed line traffic volumes were down in the first half of 2018 when compared to the same period a year earlier. The number of outgoing voice calls was down by 5.0 million (or by 7.6%) and the number of outgoing voice call minutes was down by 15.0 million (or by 6.3%). 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 | FH 2016 | FH 2017 | FH 2018 |
|-----------------------------------------------|---------|---------|---------|
| Subscriptions (end of period) | 231,792 | 239,582 | 248,420 |
| Voice activity levels per subscription | | | |
| Number of voice calls | 307 | 279 | 250 |
| Number of voice call minutes | 1,098 | 1,004 | 912 |
| Average rate per minute (ARPM) | €0.028 | €0.028 | €0.024 |
| on-net FTF call | €0.009 | €0.008 | €0.007 |
| off-net FTF call | €0.012 | €0.010 | €0.008 |
| FTM call | €0.143 | €0.131 | €0.108 |
| FTI call | €0.093 | €0.104 | €0.096 |
| Average revenue per user (ARPU) | €72.40 | €68.77 | €67.22 |

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

- Fixed telephony ARPU in the first half of 2018 was down by 2.3% when compared to the same period a year earlier, from €68.77 to €67.22. 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 first half of 2018 stood at €0.024, which is 14% lower than €0.028 in the first half of 2017.

iii.Fixed and mobile broadband

- The number of fixed broadband subscriptions totalled 188,004 at the end of June 2018. This figure is up by 10,677 (or by 6%) from 177,327 reported a year earlier.
- The fixed broadband penetration rate stood at 39.0% at the end of June 2018, representing an increase of 1.1 percentage points year-on-year.
- 86.4% of all fixed broadband subscriptions reported at the end of the first half of 2018 that they were in a bundle, up from 81.8% recorded in the first half of 2017. In absolute terms, the number of fixed broadband subscriptions in a bundle totalled 162,404 at the end of June 2018.

| Fixed broadband | FH 2016 | FH 2017 | FH 2018 |
|-------------------------------------------------------|---------|---------|---------|
| Subscriptions (end of period) | 168,008 | 177,327 | 188,004 |
| less than 5Mbps | 1,311 | 653 | 660 |
| greater than or equal to 5Mbps but less than 10Mbps | 707 | 338 | 118 |
| greater than or equal to 10Mbps but less than 20Mbps | 59,690 | 54,455 | 20,862 |
| greater than or equal to 20Mbps but less than 30Mbps | 3,105 | 2,838 | 2,061 |
| greater than or equal to 30Mbps but less than 50Mbps | 41,220 | 37,409 | 29,657 |
| greater than or equal to 50Mbps but less than 100Mbps | 54,857 | 57,434 | 83,369 |
| 100Mbps and more | 7,118 | 24,200 | 51,277 |
| Average rate per Mbps | €1.141 | €0.975 | €0.906 |
| 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 | €1.543 | €1.783 | €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 | €1.096 | €0.798 | €0.798 |
| greater than or equal to 50Mbps but less than 100Mbps | €0.625 | €0.623 | €0.607 |
| 100Mbps and more | €0.489 | €0.390 | €0.363 |
| ARPU | €95.86 | €106.90 | €113.69 |

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 113,026 at the end of June 2018. This figure is up by 18.4% when compared to the end of June 2017. Meanwhile, the number of subscriptions supporting download speeds of 100Mbps was up by 18.4% to 83,369.
- At the end of June 2018, the number of fixed broadband subscriptions on the cable platform totalled 89,998 (which is equivalent to 47.9% of the subscriber base). The number of DSL-based and wireless-based subscriptions totalled 70,583 (equivalent to 37.5% of the total) and 9,734 (equivalent to 5.2% of the total) respectively. Fibre-to-the-Home (FTTH) subscriptions totalled 17,689 (representing 9.4% of the subscriber base).
- Fixed broadband ARPU in the first half of 2018 stood at €113.69, up by 6.4% from €106.90 in the first half of 2017.

- The average rate per Mbps in the first half of 2018 stood at €0.91, down by 7.1% from €0.98 in the first half of 2017.
- Take-up of mobile broadband services was up in the current review period, with the number of active users surging from 404,862 at the end of June 2017 to 441,651 at the end of the first half of 2018.
- On average, each active mobile broadband subscription consumed 6.3GB of data in the first half of 2018, up by 1.2GB when compared to the same period a year earlier.

iv. Pay TV

- The number of pay TV subscriptions totalled 161,697 at the end of June 2018, up by 9,326 (or by 6.1%) from 152,371 a year earlier.
- During this period, the number of analogue cable subscriptions was down by 3,714 (or by 99.6%), 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 13,328 (or by 32.7%), 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 13,318 subscriptions whilst the latter saw an increase of 12,960 subscriptions.

| Pay TV | FH 2016 | FH 2017 | FH 2018 |
|-------------------------------------------------|---------|---------|---------|
| Subscriptions (end of period) | 147,963 | 152,371 | 161,697 |
| Average market rates for pay TV packages | €22.65 | €19.59 | €18.00 |
| up to 24 channels | - | €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 | €21.99 |
| 100 channels or more | €33.99 | €32.00 | €32.00 |
| ARPU | €95.20 | €93.52 | €86.54 |

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

- The share of total pay-TV subscriptions on the analogue cable and digital cable platforms stood at 0.1% and 56.7% respectively at the end of June 2018. In the former case, the share is down by 2.4 percentage points whilst in the latter case the share is up by 5.2 percentage points. Meanwhile, the DTTV and IPTV platforms respectively accounted for 16.8% and 26.4% of the subscriber base recorded at the end of current reporting period. Compared to its standing at the end of June 2017, DTTV is down by 9.7 percentage points, whilst IPTV is up by 6.8 percentage points.
- The number of pay-TV subscriptions in a bundle was up by 16,335 year-on-year to reach 111,444 by the end of June 2018. The percentage of pay-TV subscriptions purchased in a bundle at the end of June 2018 stood at 68.9%, up by 6.5 percentage points year-on-year.
- Pay-TV ARPU in the first half of 2018 stood at €86.54, down from €93.52 in the first 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 €18.00 in the first half of 2018, down from €19.59 recorded in the first half of 2017.

v. Post

- Postal mail volumes delivered in the first half of 2018 totalled 18.8 million items, 0.2 million items higher than recorded in the same reporting period last year.
- Standard mail activity accounts for 94.5% of all postal mail volumes recorded in the first half of 2018. Express mail activity accounted for the remaining share.
- In absolute terms, standard mail volumes in the first half of 2018 were slightly up by 0.2 million items (or by 1.3%) when compared to the same period a year earlier. Meanwhile, express mail volumes were up by 70.7%, from 599,026 mail items to 1,022,739 mail items.

| Post | FH 2016 | FH 2017 | FH 2018 |
|----------------------------|------------|------------|----------------------|
| Postal mail volumes | 18,691,588 | 18,599,268 | 18,796,229 |
| Standard mail volumes | 18,138,216 | 18,000,242 | 17,773,490 |
| Single piece letter mail | 6,275,770 | 5,913,961 | 6,055,104 |
| Bulk mail | 11,073,850 | 11,286,028 | 10,724,599 |
| Registered mail | 713,153 | 715,043 | 892,125 |
| Parcel mail | 75,443 | 85,210 | 101,662 |
| Express mail volumes | 553,372 | 599,023 | 1,022,739 |
| Single piece letter mail | 390,649 | 424,087 | 442,571 |
| Bulk mail | - | - | - |
| Registered mail | - | - | - |
| Parcel mail | 162,723 | 174,939 | 580,168 ³ |

Table 5: Postal mail volumes

- As to developments by type of mail item, bulk mail activity accounted for 57.1% of all postal mail volumes recorded in the first half of 2018, followed by single piece letter mail at 34.6%, registered mail at 4.8% and parcel mail at 3.6%.

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 first half of 2018, GO's market share stood at 58.1% when compared to Melita's market share of 36.3%. Vodafone Malta's market share stood at 3.3% 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 5.3 percentage points, whilst Melita's market share was up by 3.4 percentage points and that of Vodafone Malta was up by 1.9 percentage points.

| Market shares | GO | Melita | Vodafone Malta | Ozone Malta | Vanilla Telecoms | SIS |
|----------------|--------|--------|----------------|-------------|------------------|-------|
| End of FH 2018 | 58.12% | 38.34% | 3.28% | 0.20% | 0.06% | - |
| End of FH 2017 | 63.37% | 34.98% | 1.41% | 0.21% | 0.04% | - |
| End of FH 2016 | 65.47% | 33.96% | 0.15% | 0.31% | 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 1.2 percentage points year-on-year, from 44.0% at the end of June 2017 to 42.9% at the end of June 2018. GO's market share also dropped slight by 0.57 percentage points during the same period, from 36.7% to 36.1%. Conversely, Melita's market share was up from 17.8% to 19.6%.

The market share for Redtouch Fone fell from 1.6% at the end of June 2017 to 1.4% at the end of June 2018 whilst the market share for YOM was relatively unchanged.

| Market shares | GO | Vodafone Malta | Melita | Redtouch Fone | YOM |
|----------------|--------|----------------|--------|---------------|-------|
| End of FH 2018 | 36.09% | 42.87% | 19.63% | 1.39% | 0.03% |
| End of FH 2017 | 36.66% | 44.03% | 17.75% | 1.56% | 0.01% |
| End of FH 2016 | 37.22% | 44.76% | 16.27% | 1.75% | - |

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

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

3.3. Fixed broadband

GO's fixed broadband market share was down by 2.2 percentage points year-on-year to 46.7% by the end of June 2018. Meanwhile, Melita's market share was up by 0.7 percentage points, from 47.2% to 47.9%. Vodafone Malta also saw a 1.5 percentage point rise in its market share, from 3.4% at the end of June 2017 to 4.9% at the end of the current reporting period. The market shares of Ozone Malta and Vanilla Telecoms were relatively unchanged.

| Market shares | GO | Melita | Vodafone Malta | Ozone Malta | Vanilla Telecoms | SIS |
|----------------|--------|--------|----------------|-------------|------------------|-------|
| End of FH 2018 | 46.95% | 47.86% | 4.90% | 0.16% | 0.13% | - |
| End of FH 2017 | 49.12% | 47.20% | 3.39% | 0.19% | 0.11% | - |
| End of FH 2016 | 49.62% | 48.00% | 1.99% | 0.21% | 0.12% | 0.06% |

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 2.8 percentage points year-on-year, from 54.0% at the end of June 2017 to 56.8% at the end of June 2018. Meanwhile, GO's market share dropped to 43.2% from 46.0% a year earlier.

| Market shares | GO | Melita |
|----------------|--------|--------|
| End of FH 2018 | 43.20% | 56.80% |
| End of FH 2017 | 46.02% | 53.98% |
| End of FH 2016 | 47.98% | 52.02% |

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

4. Fixed line telephony

Subscriptions to the fixed telephony service were up in the first half 2018, but usage of the service dropped as voice traffic activity shifted further to mobile. More end-users also opted to purchase this service in a bundle with pay-TV and fixed broadband services. Higher take-up of bundles and the related discounts on access fees alongside falling voice traffic volumes largely explain the observed decline in fixed telephony ARPU.

4.1. Subscriptions

The number of fixed telephony subscriptions totalled to 248,420 at the end of the first half of 2018 compared to 239,582 a year earlier, thus representing a year-on-year increase of 8,838 subscriptions. Of the different categories of fixed telephony subscriptions, the post-paid segment largely contributed to the observed growth in take-up for the service. The number post-paid subscriptions was up by 12,039 (or by 5.4%) year-on-year, from 221,186 at the end of June 2017 to 233,225 at the end of the current reporting period. Meanwhile, the number of ‘enhanced’ subscriptions, which are subscriptions that offer multiple (dual or more) fixed telephony channel connections, was up by 636 (or by 21.1%) year-on-year.

In contrast to the above-mentioned increases, the number of pre-paid subscriptions, which are subscriptions that do not entail a contractual term agreement, was down by 3,837 (or by 24.9%) year-on-year, from 15,386 at the end of June 2017 to 11,549 at the end of June 2018.

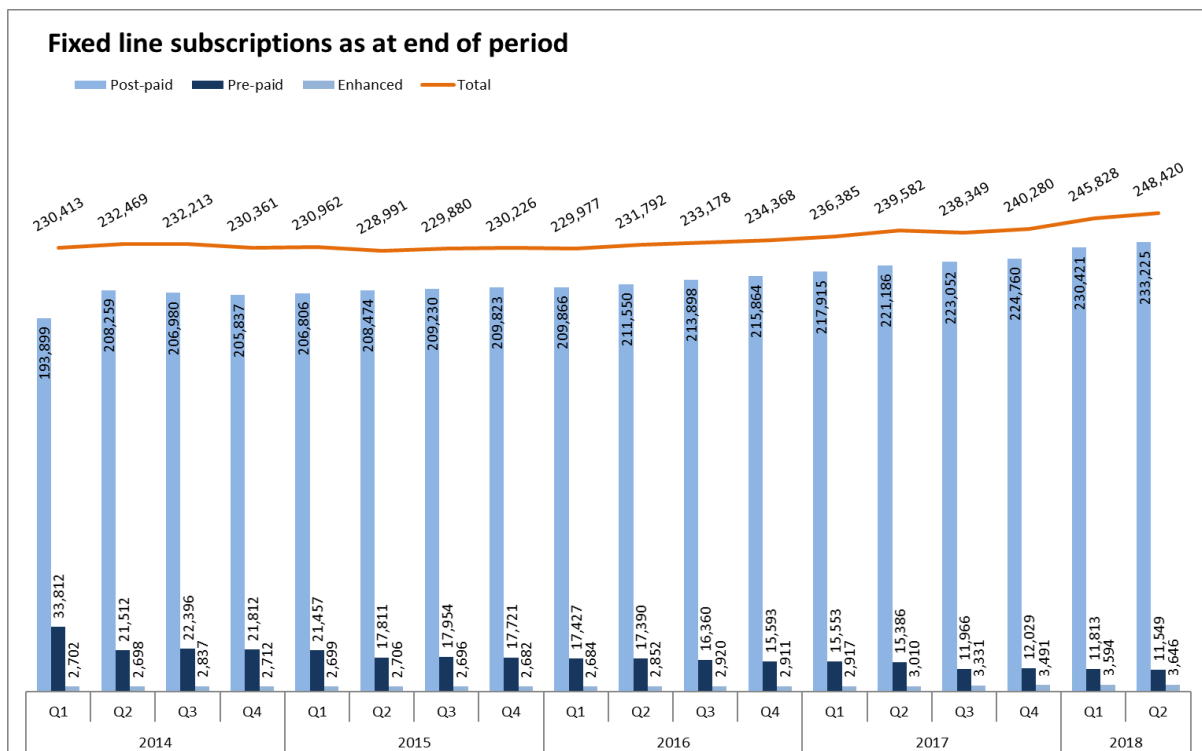


Figure 7: Fixed line telephony subscriptions as at end of period

93.9% of all fixed line telephony subscriptions recorded at the end of June 2018 were on a standard post-paid contract, representing a 1.6 percentage point increase, year-on-year. Meanwhile, pre-paid

subscriptions accounted for just 4.7% of the local fixed telephony subscriber base, down from 6.4% a year earlier. The proportion of the fixed telephony subscriber base attributed to the 'enhanced' segment stood at 1.5% by the end of June 2018.

4.2. Subscriptions on a bundle

69.5% of all subscriptions reported by the end of June 2018 were in a bundle, which is up by four percentage points compared to the end of June 2017⁵.

| Fixed line telephony subscriptions in a bundle | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|--------------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 |
| Fixed & Mobile | 13,427 | 11,112 | 8,985 | 7,850 | 7,502 | 7,258 | 6,597 | 6,092 | 5,555 |
| Fixed & Internet | 15,979 | 29,890 | 36,927 | 44,179 | 49,622 | 54,413 | 55,227 | 55,793 | 55,649 |
| Fixed & TV | 9,731 | 6,946 | 6,318 | 5,841 | 5,720 | 5,544 | 5,296 | 5,047 | 4,705 |
| 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 |
| Fixed & Mobile & Internet | 312 | 620 | 630 | 139 | 84 | 58 | 37 | 24 | 16 |
| Fixed & TV & Internet | 22,165 | 24,870 | 26,088 | 27,386 | 28,529 | 30,482 | 40,638 | 46,835 | 55,048 |
| Fixed telephony subscriptions on a quad-play contract | 44,069 | 44,429 | 45,683 | - | 48,075 | 49,900 | 49,175 | 49,785 | 51,691 |
| Fixed telephony + fixed broadband + pay-TV + mobile telephony | 44,069 | 44,429 | 45,683 | - | 48,075 | 49,900 | 49,175 | 49,785 | 51,691 |
| Total number of fixed telephony subscriptions in a bundle | 105,683 | 117,867 | 124,631 | 85,395 | 139,532 | 147,655 | 156,970 | 163,576 | 172,664 |
| 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 |
| Percentage of fixed telephony subscribers in a bundle | 45.46% | 51.17% | 54.43% | 37.09% | 60.20% | 63.00% | 65.52% | 68.08% | 69.50% |

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 15,694 (or 10.0%) year-on-year, from 156,970 at the end of June 2017 to 172,664 at the end of June 2018.

4.3. Fixed line inward portings

1,270 fixed line inward portings⁶ were reported in the first half of 2018, marginally down from 1,290 portings reported in the first half of the previous year.

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

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.

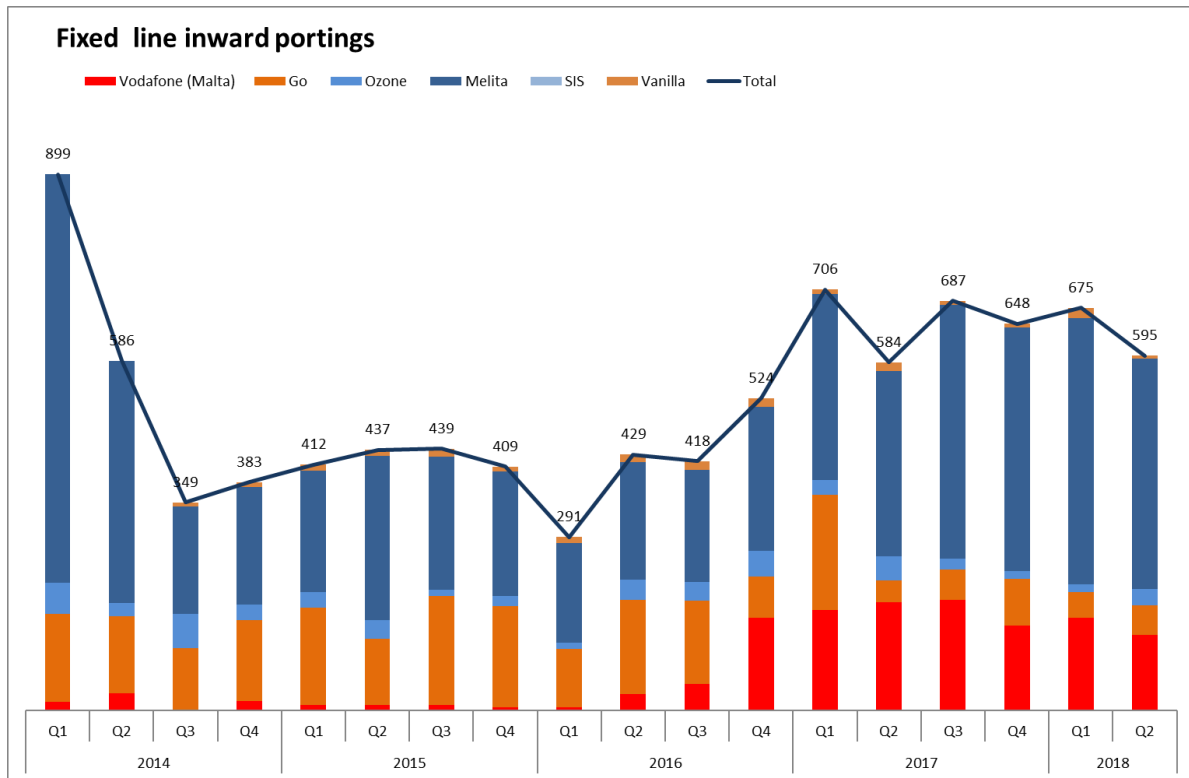


Figure 8: Fixed line number portability - number of inward portings

Melita accounted for the biggest chunk of inward portings in the current review period, at 65.6% of the total, followed by Vodafone Malta at 22.3% and GO at 7.2%. During the same period, Ozone Malta and Vanilla Telecoms accounted for 3.1% and 1.7% of inward portings respectively.

4.4. Usage trends for fixed line telephony

Fixed voice traffic volumes in the first half of 2018 were down compared to the same period in the previous years. The number of fixed voice calls was down by 5.0 million (or by 7.6%) to 61.1 million from 66.1 million whilst the number of voice call minutes was down by 15.0 million (or by 6.3%), from 238.0 million to 223.0 million.

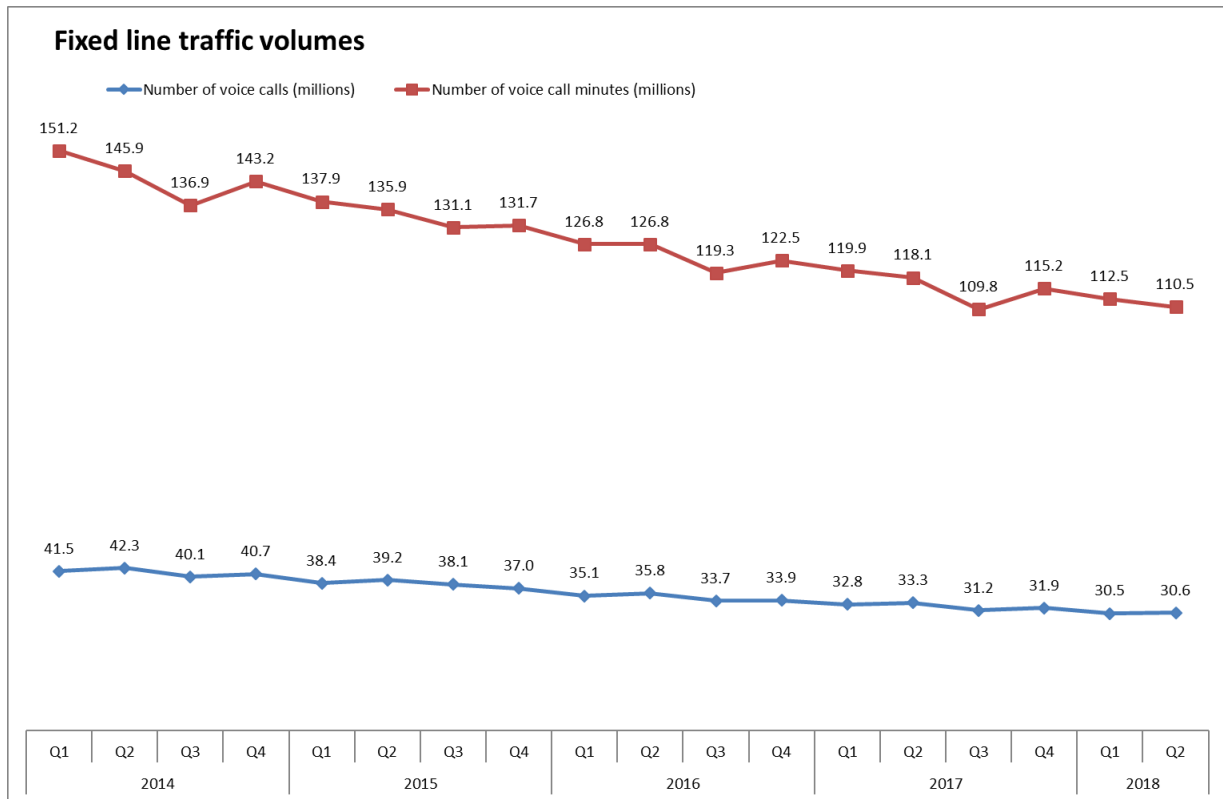


Figure 9: Voice traffic originating from local fixed line networks

Fixed traffic volumes observed in Figure 9 above encompass both 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 first half of 2018 comprises 59.4 million voice calls and 213.3 million voice call minutes. This means that, on average in the first half of 2018, each fixed telephony subscription accounts for approximately 239 national voice calls and 859 national voice call minutes.

National voice calls

Traffic volumes in this segment totalled 59.4 million in the first half of 2018, down by 4.5 million (or by 7.0%) from 63.9 million recorded in the corresponding period a year earlier.

A further drill down of these figures would show that most of the components of the national traffic segment registered a drop in usage when comparing the first half of 2017 to the first half of 2018.

The number of on-net FTF calls was down by 4.3 million (or by 12.8%), from 32.6 million to 28.7 million, whilst the number of off-net FTF calls was down by 0.7 million (or by 5.2%), from 13.4 million to 12.7 million. Meanwhile, the 'other' national calls component⁷ saw a 0.1% drop in traffic volumes.

| Fixed voice calls (national) | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|---------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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

Conversely to the declines highlighted above, the number of FTM calls was up by 0.2 million (or by 1.2%), from 16.5 million to 16.7 million.

National voice call minutes

In terms of national voice call minutes, traffic volumes in the first half of 2018 totalled 213.3 million, which is down by 12.4 million (or by 5.5%) from the first half of 2017.

The number of on-net FTF traffic voice call minutes was down by 12.7 million (or by 9.3%), from 137.2 million in the first half of 2017 to 124.5 million in the first half of 2018. During the same period, the number of off-net FTF minutes was down by 1.6 million (or by 2.8%), from 57.5 million to 55.9 million.

| Fixed voice call minutes (national) | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

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 up by 1.4 million (or by 5.1%), from 27.2 million minutes to 28.6 million, whilst the number of 'other' national voice call minutes was up by 0.6 million (or by 16.2%), from 3.8 million to 4.3 million.

4.4.2. International voice traffic volumes

1.7 million fixed-to-international (FTI) voice calls and 9.6 million FTI voice call minutes were reported in the first half of 2018. On average for the period, these figures translate into approximately 7 international voice calls and around 39 international voice call minutes per active fixed telephony subscription during this period.

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

Compared to the same period of 2017, the number of FTI voice calls was down by 0.5 million (or by 22.7%), whilst the number of international voice call minutes was down by 2.7 million (or by 21.1%).

4.5. Activity levels and call duration

Declining voice traffic volumes in combination with a rise in fixed telephony subscriptions explain the lower activity levels per active subscription recorded in the first half of 2018 when compared to the same period a year earlier.

The average number of voice calls and the average number of voice call minutes per active fixed line subscription in the first half of 2018 stood at 250 and 898 respectively. This is down from an average of 279 voice calls and 994 voice call minutes per subscription in the first half of 2017.

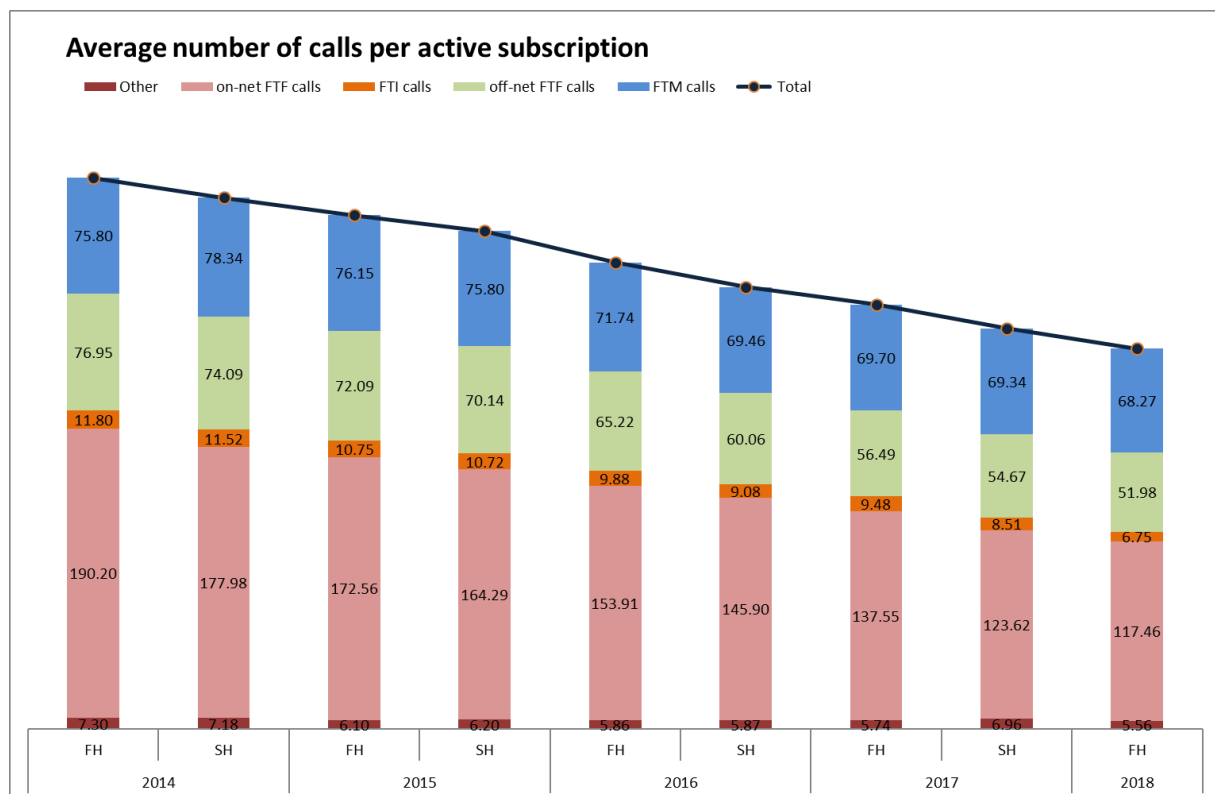


Figure 10: Average number of calls per active subscription

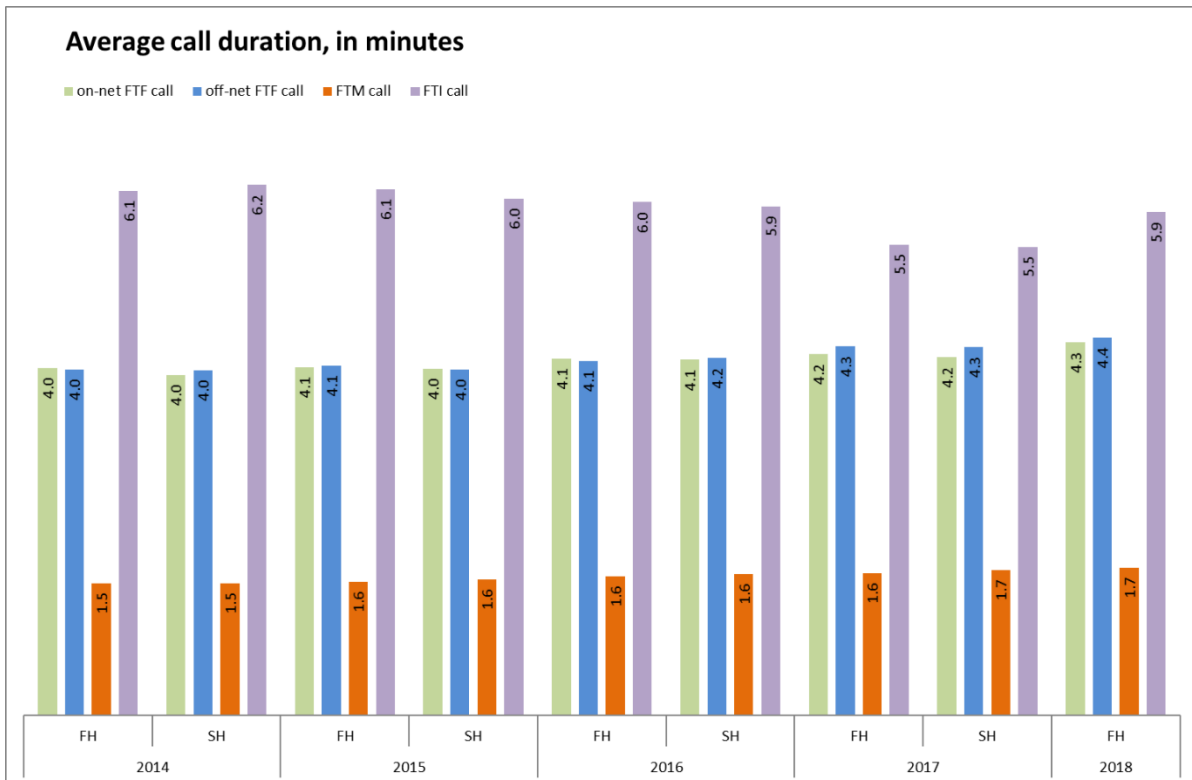


Figure 11: Average duration of an outgoing fixed line call

On average, a fixed line call generally lasted 4 minutes and 6 seconds during the first half of 2018, which is 12 seconds 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 €67.22 in the first half of 2018, which is down by 2.3% from €68.77 recorded in the first 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 subscriptions⁸.

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.

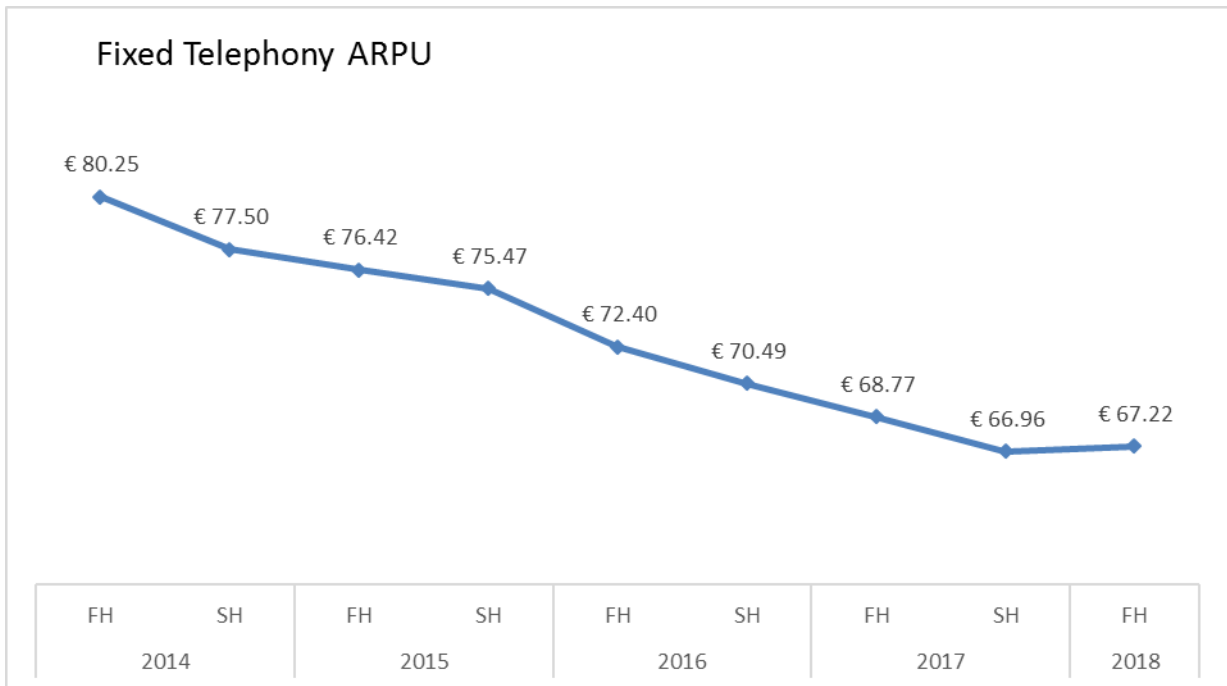


Figure 12: Average revenue per fixed line user

The drop in ARPU for the fixed telephony sector reflects the continued substitution of voice traffic from fixed to mobile and the rise in subscriptions. These changes materialised alongside the continued bundling trends, with the typical discounted access fees that are involved with the purchase of such subscriptions.

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.

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 also 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. This would affect the outcome for the average rate per minute of fixed line communications

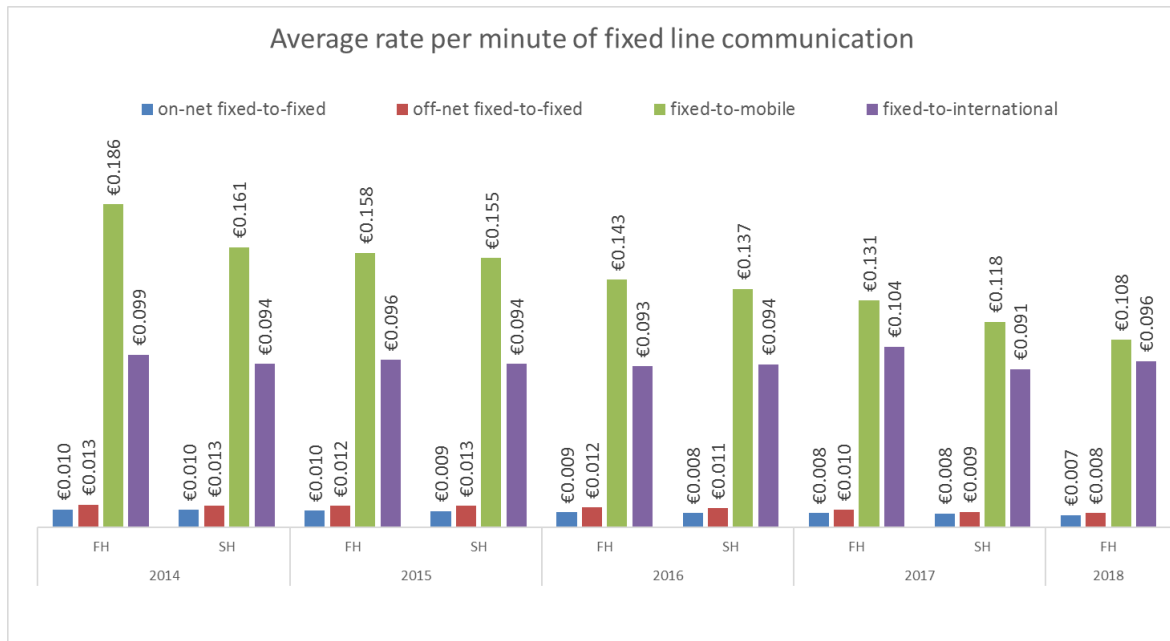


Figure 13: Average cost of a fixed line call derived from revenue-based workings

The first half of 2018 has seen a drop in the overall ARPM of a fixed line of €0.004 (or by 14.3%) from €0.028 to €0.024. The ARPM of FTM calls was down by 17.6%, from €0.13 in the first 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 first half of 2018, relatively unchanged from the corresponding rate observed in the first half of 2017. This change coincides with increasing take-up of post-paid fixed telephony subscriptions in a bundle, which feature better FTF and FTM call allowances.

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 hit new highs when it comes to take-up and usage of related services. The rising popularity of post-paid plans underlines the expansion in the mobile telephony subscriber base, as local service providers registered around 13,000 new clients for contract-based plans in the 12-month period ending in June 2018. Alongside this, usage of mobile-based voice and data services surged ahead in the form of bigger minute and data volumes consumed by end-users. These trends are partly a result of improved minute and data allowances, particularly for post-paid plans. Service providers did however seek to safeguard their revenue base by implementing upward changes in the monthly access fees. However, it seems that the end-user was still better off as the latter increases did not translate into higher mobile telephony ARPU. Indeed, ARPU in the first half of 2018 was slightly lower than ARPU in the first half of 2017, which suggests that the three-player market scenario (with three large players having their own network infrastructure in place) has contributed to a situation where end-users get more in terms of value for every euro they spend.

5.1. Subscriptions

The number of mobile telephony subscriptions¹⁰ totalled 615,423 at the end of June 2018, up by 14,324 (or by 2.4%) from 601,099 a year earlier. This increase has been mainly driven by rising take-up of contract-based plans, better known as post-paid plans. In fact, year-on-year, the number of mobile subscriptions on a post-paid contract was up by 13,015 (or by 6.4%) year-on-year, from 204,640 at the end of June 2017 to 217,655 at the end of June 2018. The latter increase signals the effectiveness of both voice and data allowances in meeting the daily requirements of end-users.

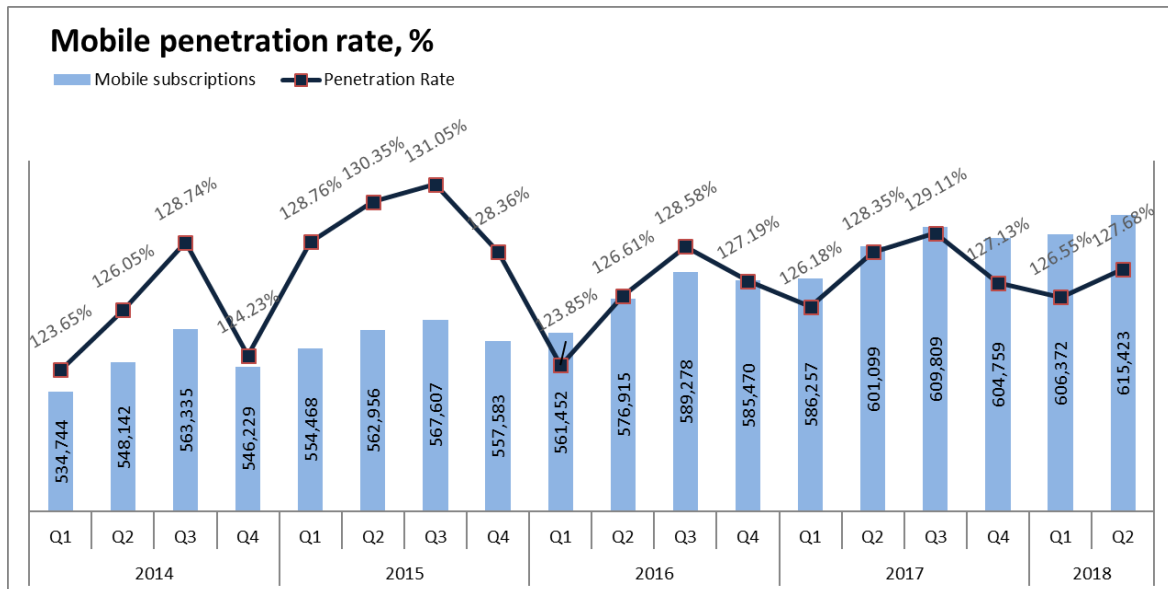


Figure 14: Mobile penetration in Malta

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.

The pre-paid segment also witnessed a year-on-year increase in subscriptions during the same period, in this case by 1,256 (or by 0.3%).

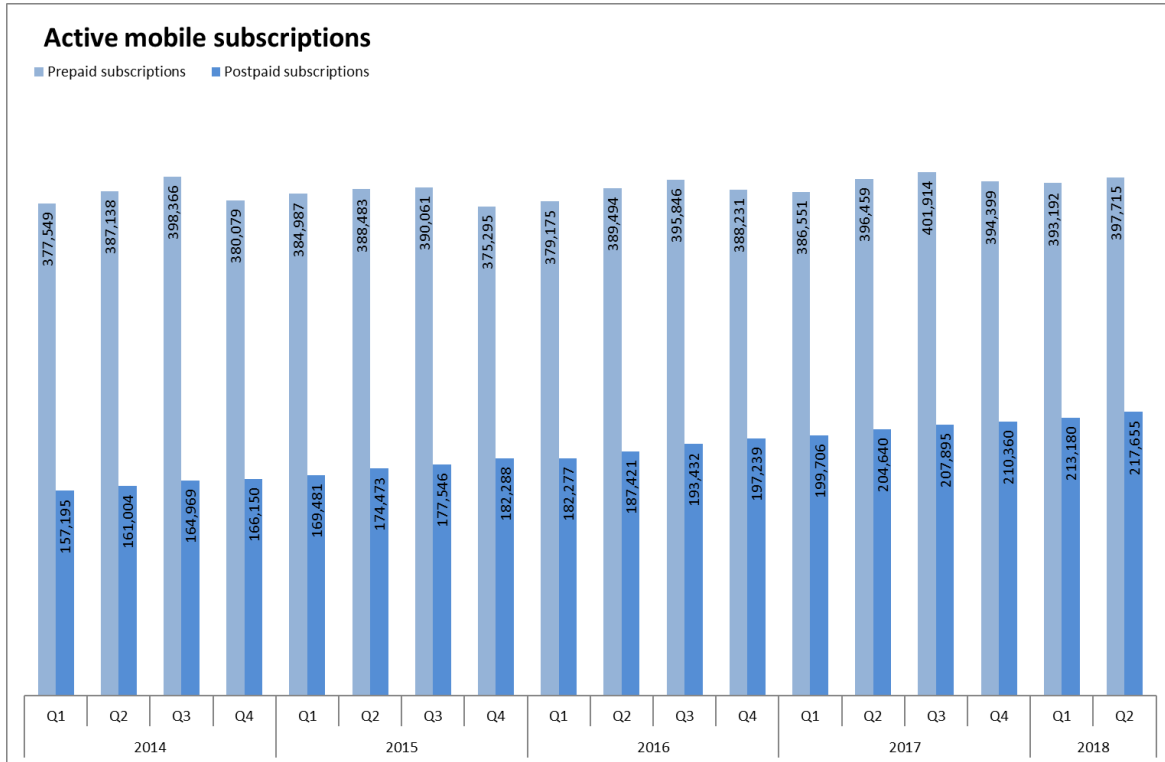


Figure 15: Mobile telephony subscriptions as at end of period

Notwithstanding the bigger increase in subscriptions for post-paid, almost 65% of the local mobile telephony subscriber base at the end of June 2018 had a pre-paid connection.

Year-on-year, the mobile penetration rate dropped slightly by a 0.7 percentage point, from 128.35% at the end of June 2017 to 127.68 % at the end of June 2018.

Subscriptions on a bundle

Consumers tend to personalise their mobile subscription and are therefore not keen to purchase the service in a bundle, also considering that the latter kind of product is more attuned to address the needs of a household rather than individual requirements. Table 9 below shows that just 9.3% of all local mobile telephony subscriptions were purchased in a bundle at the end of June 2018.

In absolute terms, the number of mobile telephony subscriptions purchased in a bundle totalled 57,262 at the end of June 2018, which is up by 1,453 (or by 2.6%) year-on-year.

| Mobile telephony subscriptions in a bundle | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|-----------------------------------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| Mobile telephony subscriptions on a dual play contract | 12,156 | 12,443 | 13,427 | 11,112 | 8,985 | 7,850 | 7,502 | 7,258 | 6,597 | 6,092 | 5,555 |
| Mobile telephony + fixed telephony | 12,156 | 12,443 | 13,427 | 11,112 | 8,985 | 7,850 | 7,502 | 7,258 | 6,597 | 6,092 | 5,555 |
| Mobile telephony subscriptions on a triple contract | 344 | 289 | 312 | 620 | 630 | 139 | 84 | 58 | 37 | 24 | 16 |
| Mobile telephony + fixed telephony + fixed broadband | 344 | 289 | 312 | 620 | 630 | 139 | 84 | 58 | 37 | 24 | 16 |
| Mobile telephony subscriptions on a quad play contract | 41,339 | 42,486 | 44,069 | 44,429 | 45,683 | 46,988 | 48,075 | 49,900 | 49,175 | 49,785 | 51,691 |
| Mobile telephony + fixed telephony + fixed broadband + pay TV | 41,339 | 42,486 | 44,069 | 44,429 | 45,683 | 46,988 | 48,075 | 49,900 | 49,175 | 49,785 | 51,691 |
| Total number of mobile telephony subscriptions in a bundle | 53,839 | 55,218 | 57,808 | 56,161 | 55,298 | 54,977 | 55,661 | 57,216 | 55,809 | 55,901 | 57,262 |
| Total number of mobile telephony subscriptions at end of period | 554,703 | 556,652 | 548,142 | 546,229 | 562,956 | 557,583 | 576,915 | 585,470 | 601,065 | 604,725 | 615,423 |
| Percentage of fixed telephony subscriptions in a bundle | 9.71% | 9.92% | 10.55% | 10.28% | 9.82% | 9.86% | 9.65% | 9.77% | 9.29% | 9.24% | 9.30% |

Table 9: Mobile subscriptions on a bundled offer

5.2. Mobile inward portings

There were 14,911 mobile inward portings¹¹ in the first half of 2018, down by 1,190 (or by 7.4%) compared to the same period a year earlier.

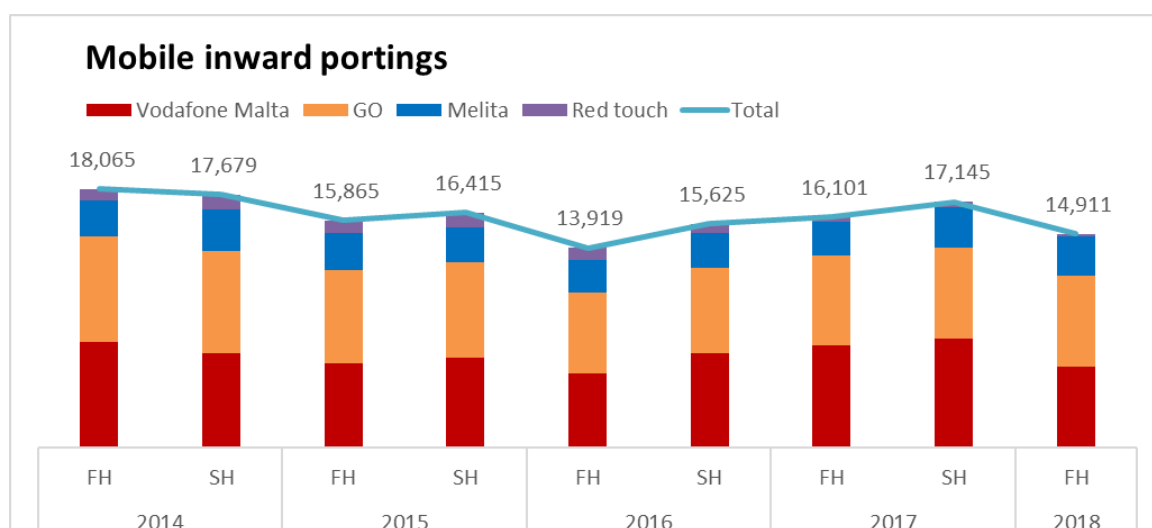


Figure 16: Mobile number portability - number of mobile portings

42.6% of all inward portings reported in the current review period took place on GO's network, followed by 37.7% for Vodafone Malta and 18.3% for Melita. Redtouch fone accounted for the remaining 1.4% of all inward portings reported during the review period.

5.3. Voice usage trends for mobile telephony

Once again fixed-to-mobile (FTM) substitution continues to be prevalent to in the current review period. In this regard, Figure 17 shows that end-users are increasingly making use of mobile voice calling rather than fixed line calling. It is noted that the number of mobile-originated voice call minutes has been exceeding the number of fixed-originated voice call minutes since 2013¹². The gap between the two continued to widen in the current review period.

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.

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.

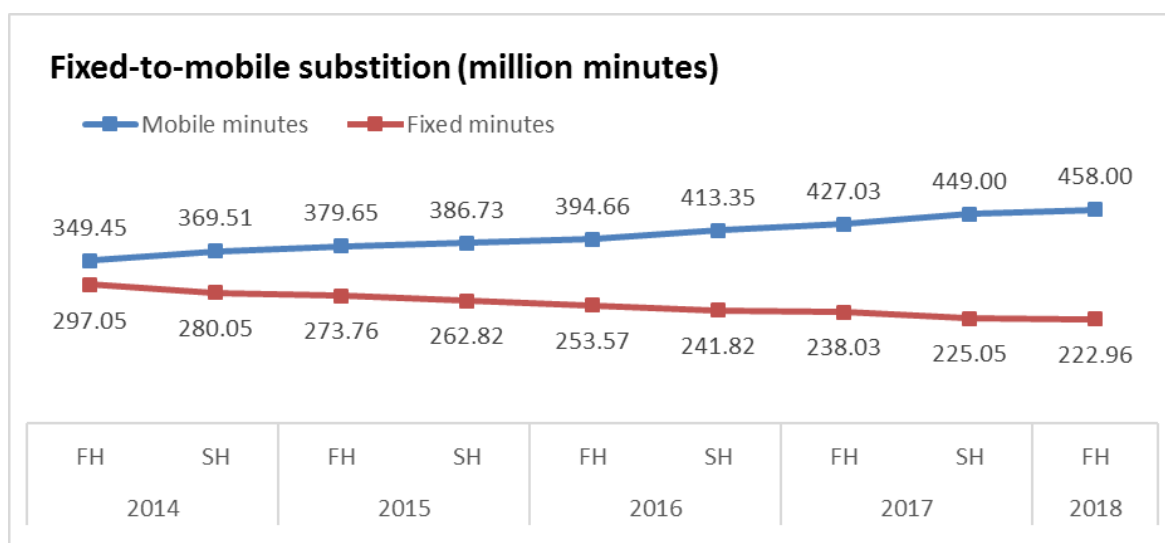


Figure 17: Fixed-to-mobile substitution

Another important trend observed in recent years, is the rapid rise in mobile voice minute volumes in contrast to the decline in the number of mobile voice calls. This trend goes to suggest that end-users are increasingly making calls that are of a longer duration, primarily as a result of falling rates per minute of mobile voice communication brought about by improved voice minute allowances.

5.3.1. Voice calls

The number of mobile voice calls reported in the first half of 2018 amounted to 228.9 million, which is up by 1.5 million (or by 0.6%) from 227.4 million reported in the first half of 2017.

| Mobile voice calls | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 |
| Mobile-to-mobile calls | 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 |
| 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 |
| 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 |
| Mobile-to-fixed calls | 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 |
| 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 |

Table 10: Outgoing mobile traffic - number of voice calls

The larger volume of mobile voice calls is explained by developments for the mobile-to-international (MTI) segment, the off-net mobile-to-mobile (MTM) segment, and the mobile-to-fixed (MTF) segment. Voice call volumes under these headings were up by 2.8 million, 2.3 million and 1.0 million respectively. These increases together outweighed a decline of 4.5 million on-net MTM voice calls recorded during the same period.

5.3.2. Voice call minutes

The number of mobile voice call minutes totalled 458.0 million in the first half of 2018, up by 31.0 million (or by 7.3%) from 427.0 million in the first half of 2017.

| Mobile voice call minutes | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|-------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 | 458,000,106 |
| Mobile-to-mobile calls | 302,343,734 | 318,839,211 | 328,242,026 | 332,491,267 | 342,331,655 | 355,905,501 | 369,606,725 | 381,318,473 | 392,614,001 |
| 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 | 253,992,662 |
| 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 |
| Mobile-to-fixed calls | 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 |
| 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 |

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 8.1 million (or by 3.3%) and 14.9 million (or by 12.1%) respectively. The number of MTF minutes was also up by 3.5 million (or by 8%) and the number of MTI minutes was up by 4.4 million (or by 33.7%).

5.4. SMS and MMS usage trends

The popularity of text messaging and MMSing dwindled further in the current review period. In fact, SMS traffic volumes were down by almost 24.9 million (or by 15.2%) in the first half of 2018 compared to the corresponding period a year earlier. MMS volumes were also down.

As already noted in previous CMR publications, these volumes are a reflection of a shift in preferences of the end-users, as these increasingly use voice call services, alongside indications from various quarters pointing to the rising popularity of OTT-based services. Of significance is the improved voice allowances and other innovative price plans, such as in the case of plans of the 'Flow' and 'Mix' plans offered by Melita and Vodafone respectively. These plans feature increased customisation that allows for a number of monthly units to be utilised for calls, SMSs or data according to the specific requirements of the end-user¹³.

5.4.1. SMSs

139.7 million SMSs were recorded in the first half of 2018, down by 24.9 million (or by 15.2%) when compared to 164.7 million SMSs recorded in the same period of 2017¹⁴.

All segments of the SMS traffic activity followed a negative trend, with on-net volumes recording the biggest decline. Upon comparing the first half of 2018 with the first half of 2017, the number of on-net SMSs was down by 22.7 million (or by 21.8%) to 104.3 million. Meanwhile, the number of off-net SMSs was down by 1.1 million (or by 1.9%), from 54.0 million to 52.9 million, whilst the number of premium SMSs and SMSs sent from internal portals was down by 10,732 (or by 7.4%) and 0.8 million (or by 20.3%) respectively.

¹³ Melita's 'Flow' plans have unlimited SMS as an allowance so consumers choose between making calls or using data.

¹⁴ Including on-net SMSs, off-net SMSs, SMSs sent to foreign mobile networks, SMSs sent from Internet Portal and premium SMSs.

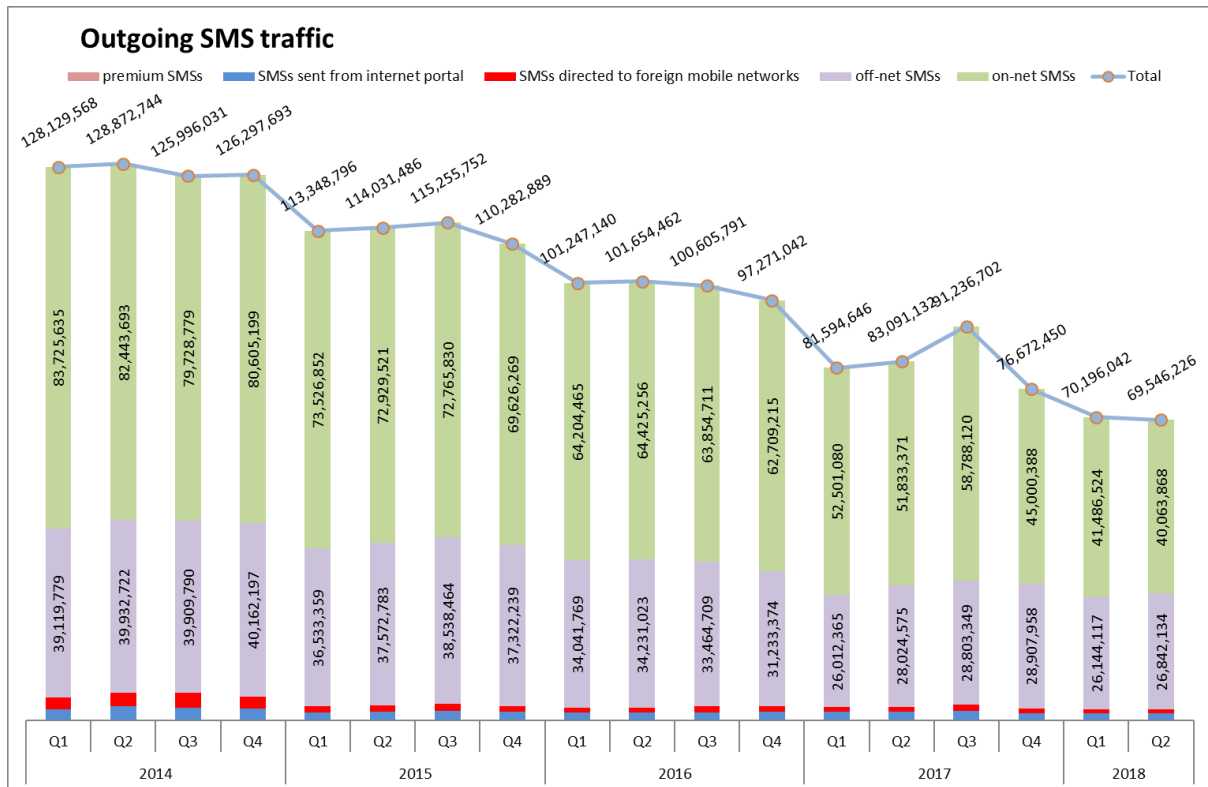


Figure 18: SMS activity - number of outgoing SMSs (1)

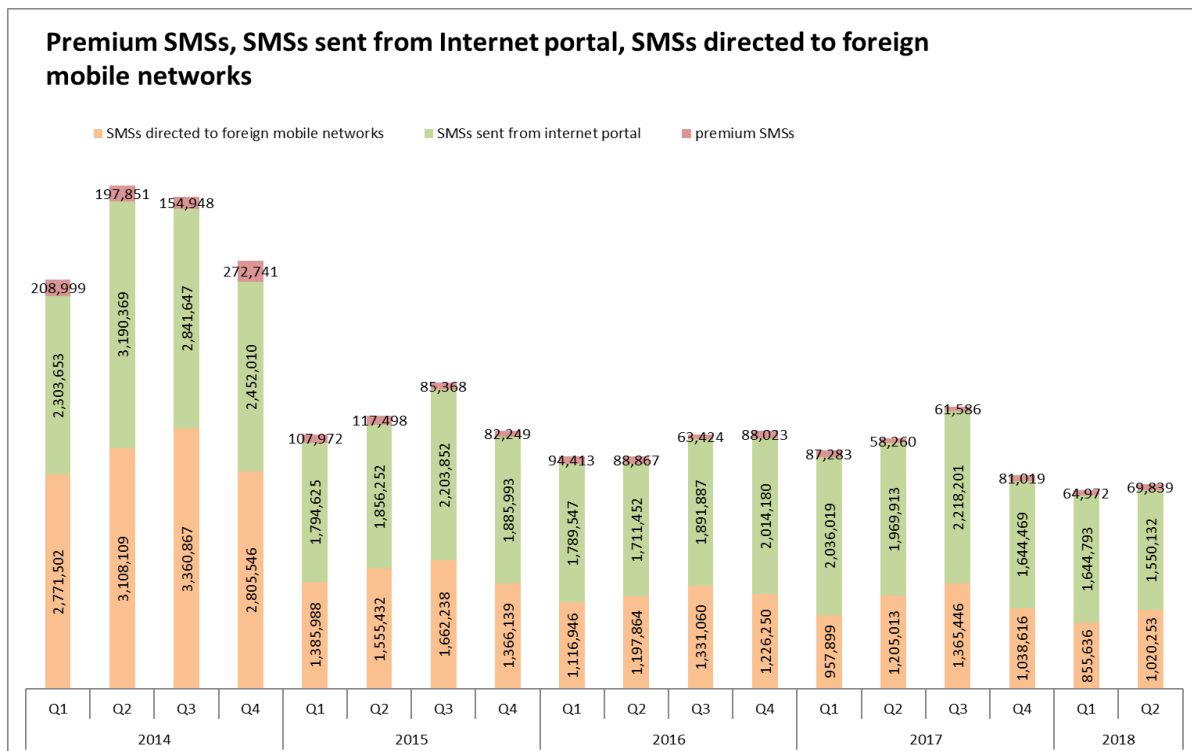


Figure 19: SMS activity - number of outgoing SMSs (2)

The number of SMSs directed to foreign mobile networks was down by 0.3 million (or by 13%), from 2.1 million in the first half of 2017 to 1.9 million in the first half of 2018.

5.4.2. MMSs

The number of MMSs in the first half of 2018 totalled to 77,541. This figure is down by 8.5% from 84,784 MMSs recorded in the first half of the previous year.

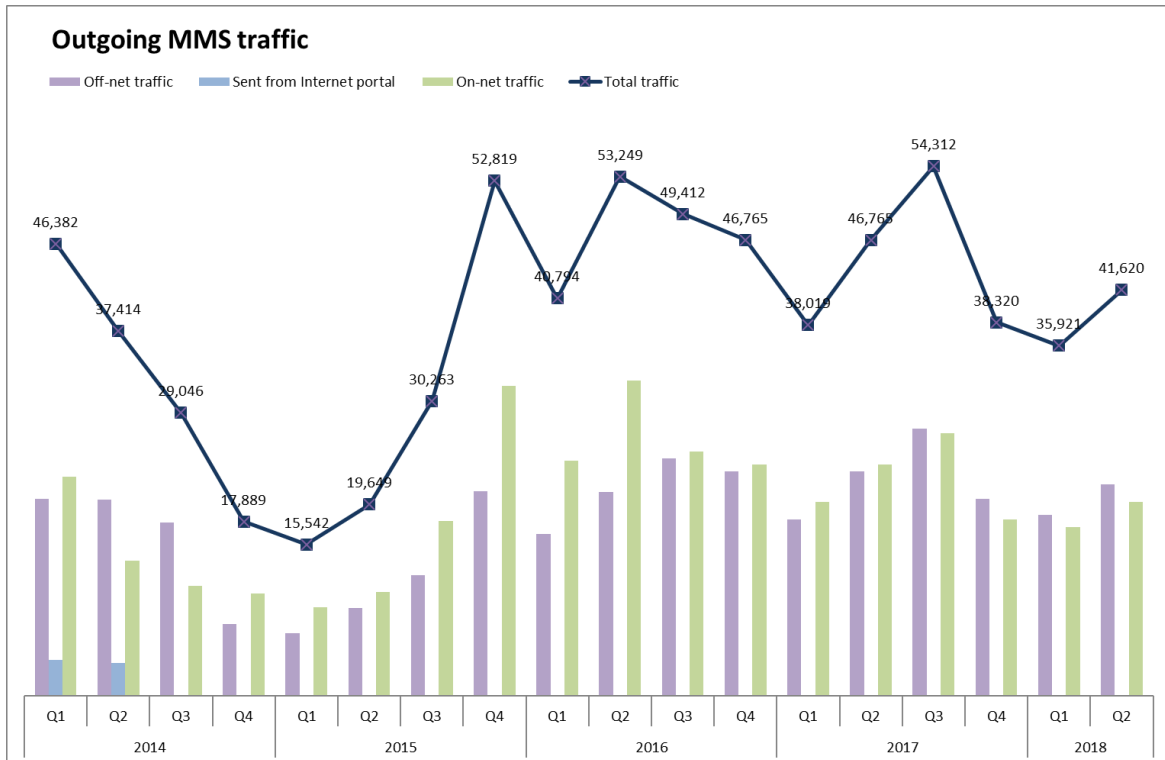


Figure 20: MMS activity - number of outgoing MMSs

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

Growth recorded in voice call minute volumes outpaced subscriber growth in the current review period in all segments. Indeed, the average number of on-net MTM voice call minutes per subscription totalled 416 in the first half of 2018, up from 414 in the first half of 2017. Meanwhile, the average number of MTM voice call minutes taking place off-net per subscription was up from 209 in the first half of 2017 to 227 in the first half of 2018.

Voice minute activity levels were also up for MTF calls. In this case, an average of 78 calls per subscription were recorded in the first half of 2018, up from 75 calls per subscription in the same

period a year earlier. Meanwhile, the average number of MTI voice call minutes per subscription taking place in the first half of 2018 totalled 29 minutes, up from 22 minutes in the first half of 2017.

In contrast to the above, the average number of voice calls per subscription was down in the first half of 2018 compared to the first half of 2017. This is a result of the downward trend in the average number of on-net MTM voice calls, which outweighed bigger traffic reported for other voice call segments, namely the MTI, the MTF and the off-net MTM voice call segments.

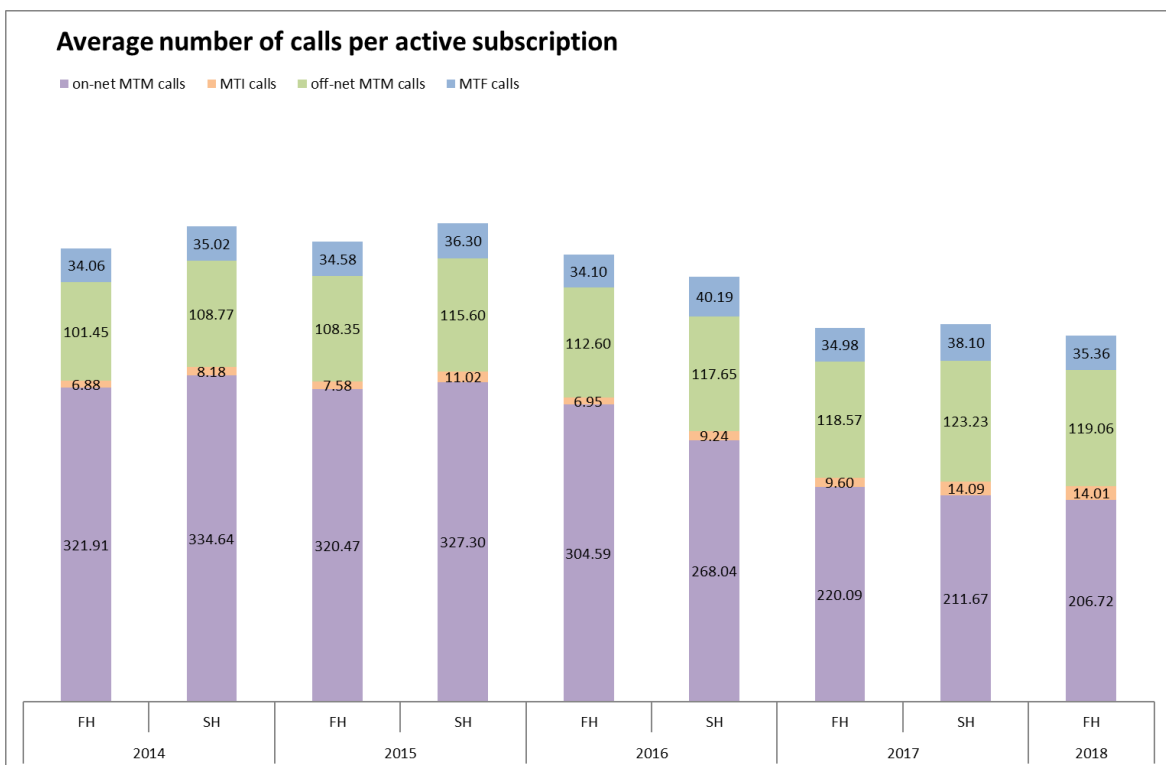


Figure 21: Average number of calls per active subscription

5.5.2. SMS activity levels per subscription

SMS traffic volumes maintained a downward trajectory in the first half of 2018, with SMS volumes during this period being less than volumes recorded in the first half of 2017. This drop reflects the increased usage of voice calling by end-users, mainly brought about by improved voice minute allowances and the resulting drop in the average rate per minute of mobile voice communication. This, in combination with a growing subscriber base, led to a drop in SMS activity levels per subscription.

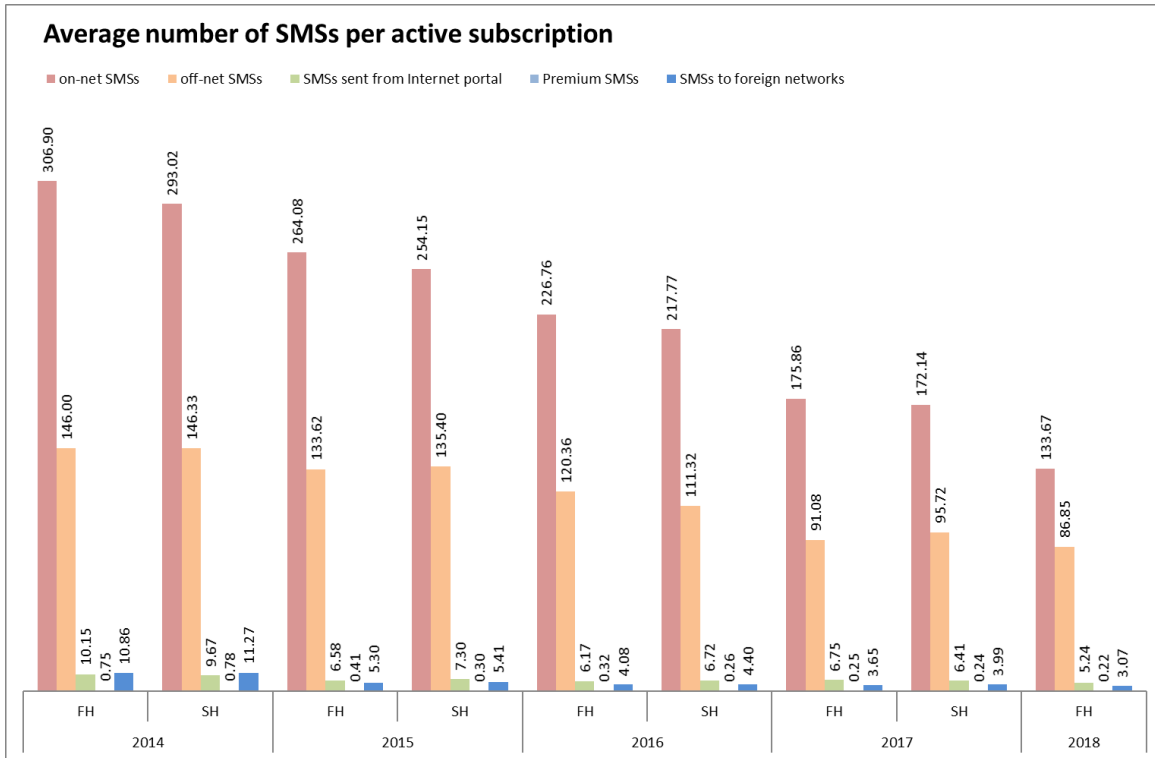


Figure 22: Subscriber activity - average number of SMSs per active subscription

The number of SMSs per active subscription in the first half of 2018 amounted to 229, down from 278 in the first half of 2017. At a more disaggregated level, Figure 22 shows that all SMS traffic segments recorded a drop in activity in the first half of 2018 compared to activity registered in the same period a year earlier.

5.6. Average mobile call duration

Mobile-originated voice calls are lasting longer on average, mainly due to the wider availability of voice minute allowances, particularly when it comes to the on-net MTM segment. On average, a mobile call lasted around 2 minutes in the first half of 2018 which is 12 seconds longer when compared to the first half of 2017. On a disaggregate level, the average duration of an on-net MTM call and an off-net MTM call in the first half of 2018 was up by 0.13 seconds and by 0.15 seconds respectively when compared to the first half of 2017.

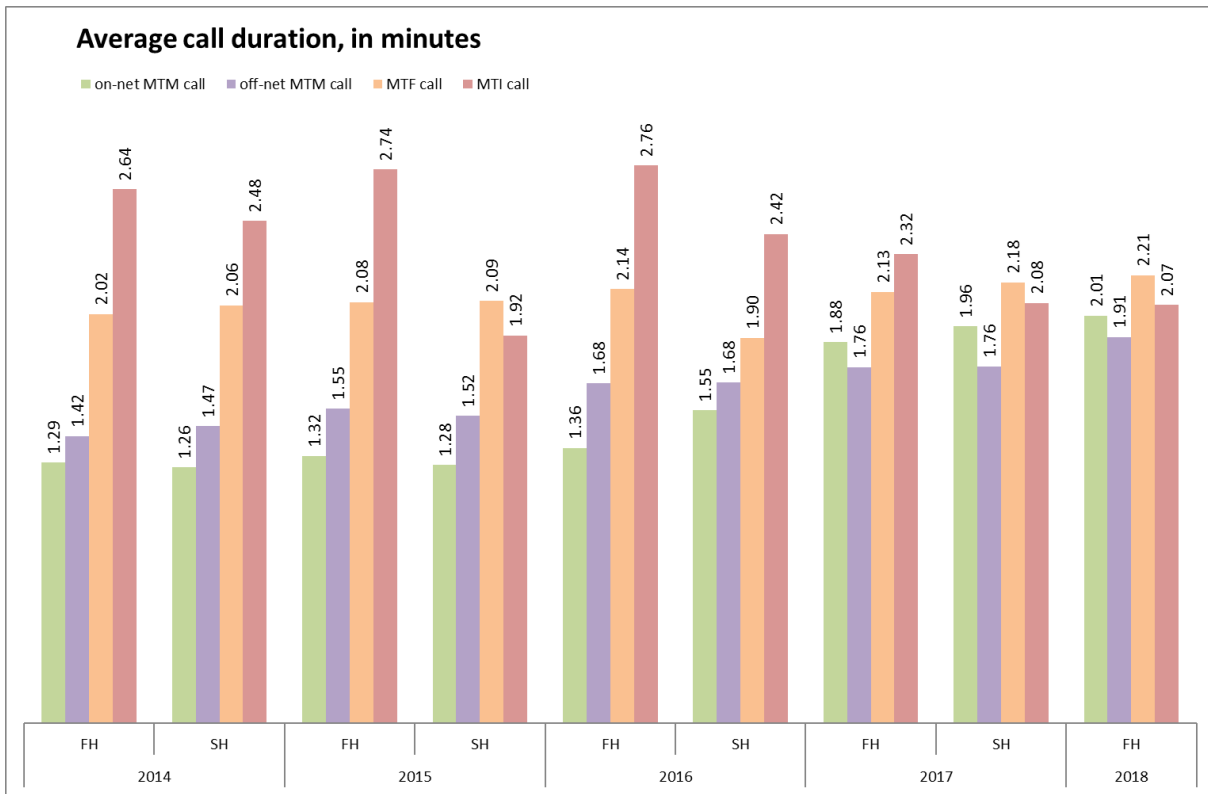


Figure 23: Average duration of an outgoing mobile call

5.7. International roaming usage trends

The level of international roaming activity¹⁵ 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. It is of relevance to underline here that Malta continues to experience a consistently higher activity in terms of tourist numbers. Meanwhile, the number of Maltese travelling abroad has 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. There has been a notable rise in roaming traffic volumes in the first year following the implementation of the new roaming regulations.

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.

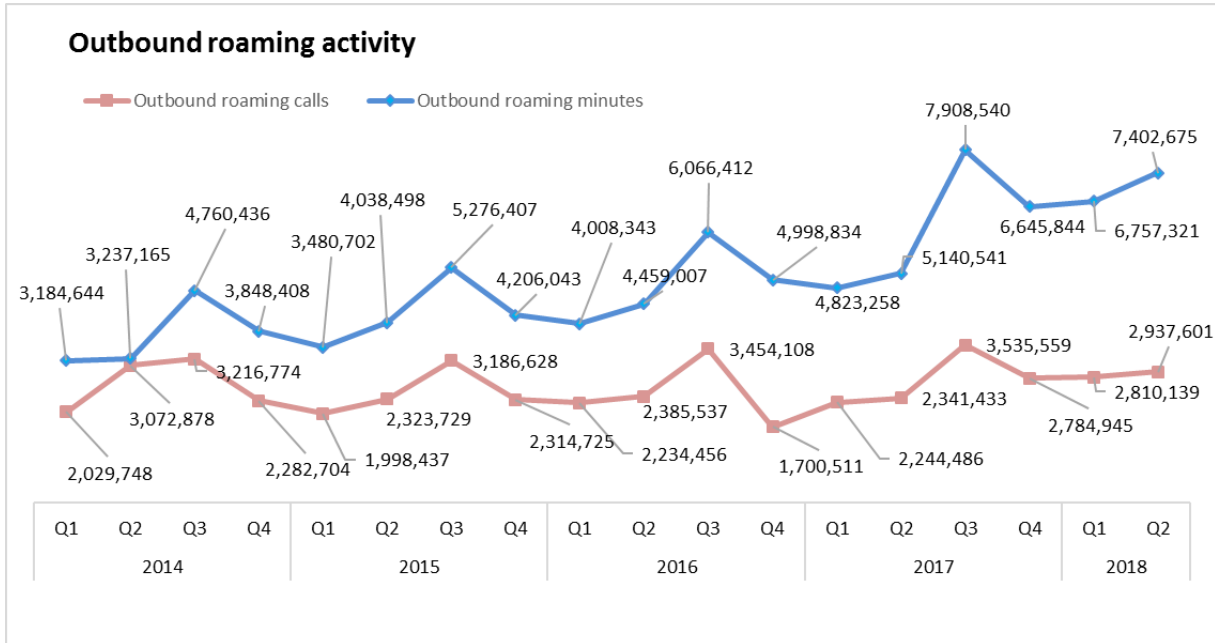


Figure 24: Outbound roaming activity

Outbound roaming calls totalled to 5.7 million in the first half of 2018, up 25% when compared to the same period last year. Outbound roaming minutes experienced an even greater increase, whereby in this case volumes were up by 4.3 million (or by 43.4%), from 9.9 million to 14.2 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 23.6 million in the first half of 2018, up by 10.4 million (or by 78.5%) from 13.2 million in the corresponding period a year earlier.

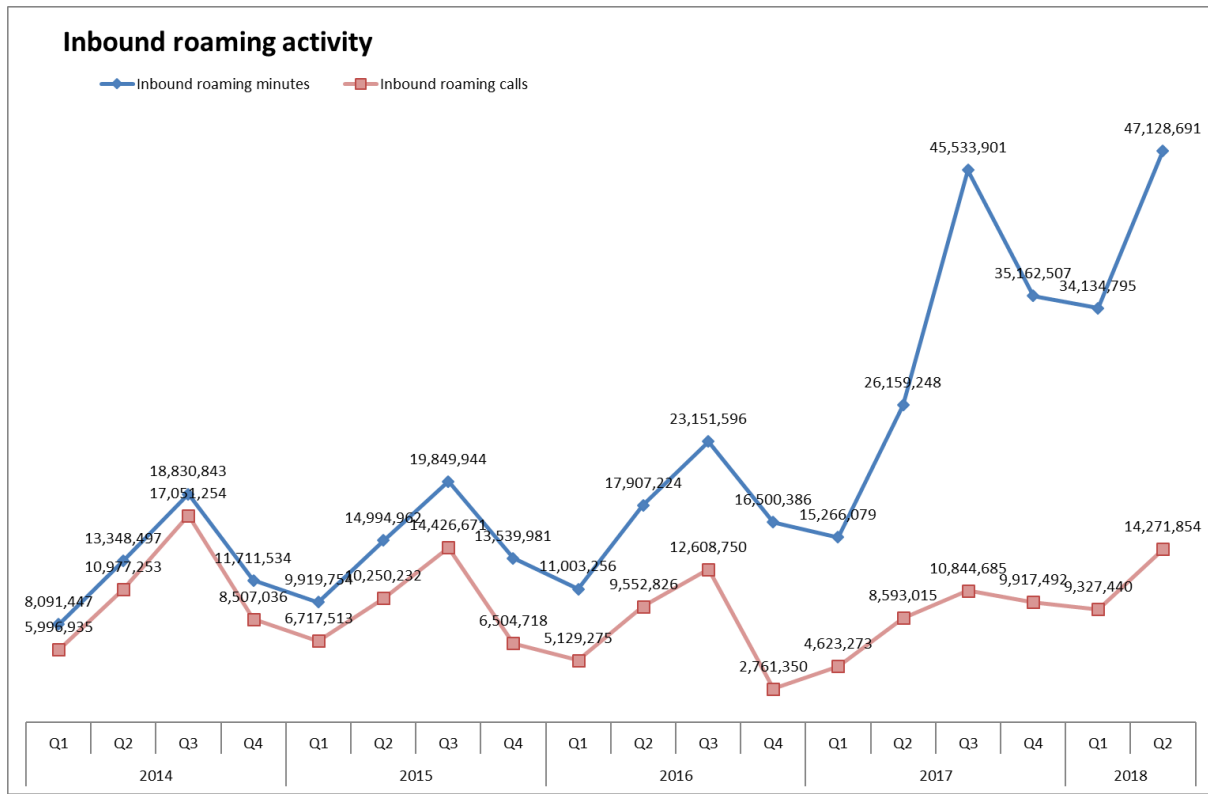


Figure 25: Inbound roaming activity

At the same time, the number of inbound roaming minutes went up by 40 million (or by 96.2%), from 41.4 million in the first half of 2017 to 81.2 million in the first half of 2018.

5.8. Mobile ARPU

Mobile telephony ARPU totalled €85.43 in the first half of 2018, slightly down by 1.6% from €86.86 in the first half of 2017. These figures are derived by dividing total revenues of mobile service providers, including access and activity revenues related to voice, SMS, MMS and data traffic¹⁶, by the average number of active subscriptions¹⁷, during a given period.

¹⁶ But excluding revenues from interconnection and inbound roaming activity.

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.

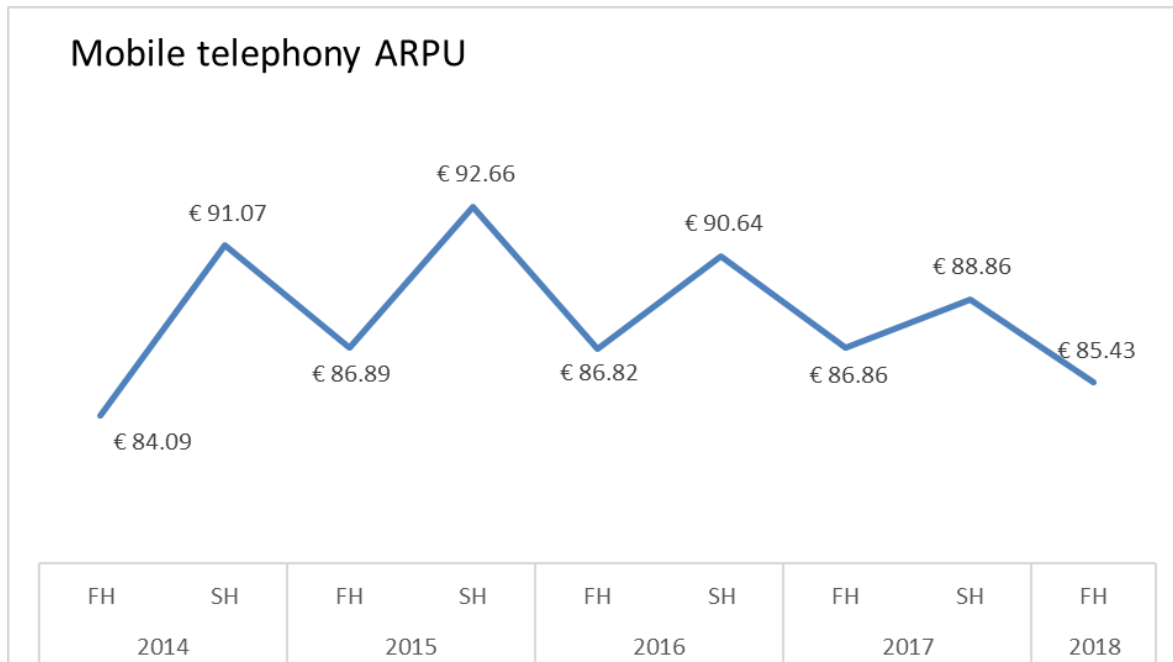


Figure 26: Average revenue per mobile user

The increased take-up of post-paid plans have somewhat attributed to the decline observed in the mobile telephony ARPU. End-users opting for post-paid plans generally benefit from improved allowances such as voice, SMS and data allowances, which would bring the average rate paid per unit of consumption. Hence, on a per user level, revenues of local service providers have been going down on average.

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 providers¹⁸.

Figure 27 shows that, overall, the average rate per minute (ARPM) of mobile communication has been steadily declining over the years with 2018 being no exception. Indeed, ARPM for the first half of 2018 was down compared to the ARPM recorded a year earlier. This decline is attributed to several factors, but most importantly the increased availability and take-up of voice minute allowances, particularly in view of changes to the post-paid line-up.

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 first half of 2018, down by almost 7.7% from an average of €0.065 in the first half of 2017¹⁹.

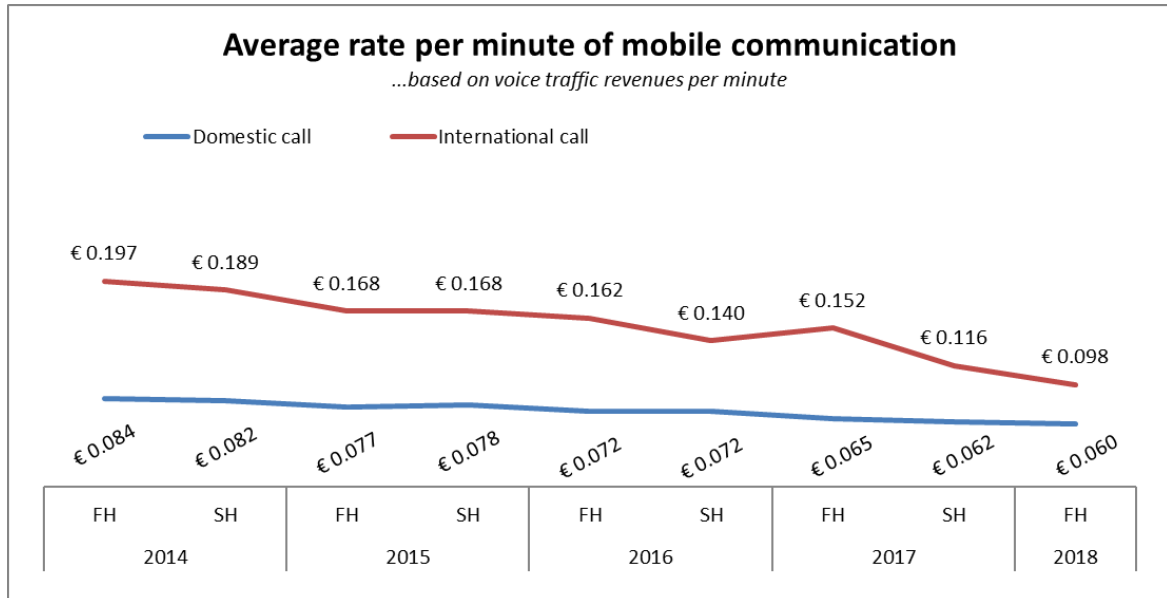


Figure 27: Average rate per minute of mobile communications

Similarly, the average rate per minute of mobile communication for an international call was also down, this time by 35.5%, from €0.152 in the first half of 2017 to €0.098 in the first 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.

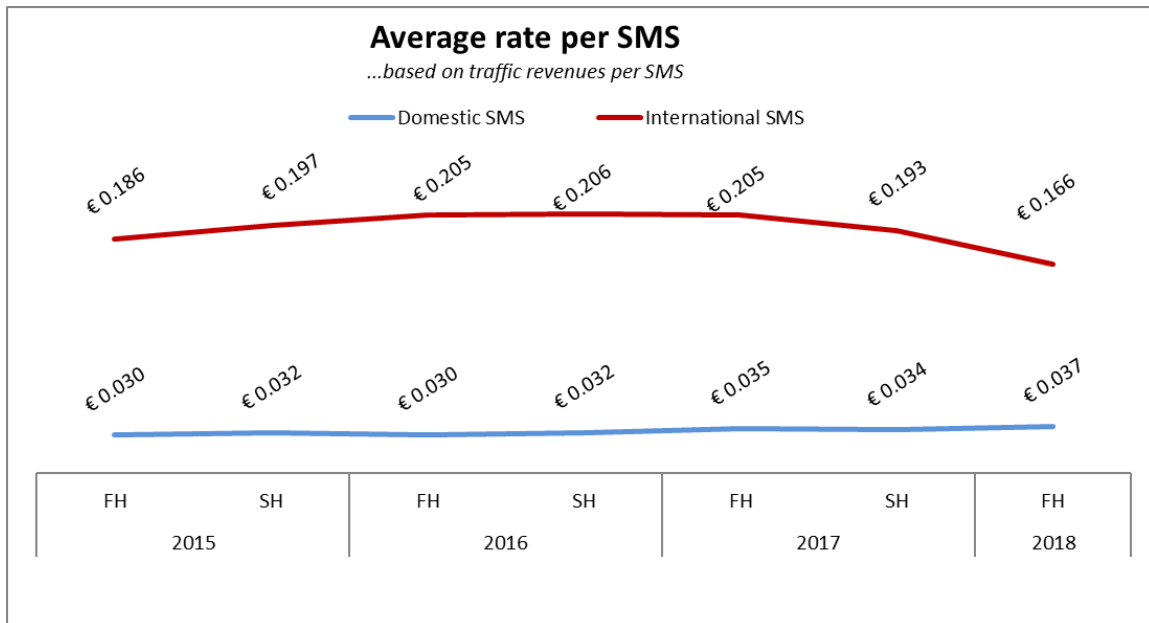


Figure 28: Average rate per domestic and international SMS

In terms of the average rate per SMS, Figure 28 illustrates that, in the first half of 2018, the end-user on average paid €0.037 for a domestically bound SMS and €0.17 for an internationally bound SMS²⁰.

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

6. Fixed and mobile broadband

The growth story for fixed broadband has been ongoing for several years now, with developments in the first half of 2018 evolving well in line with long-term market changes. More significantly, growth in take-up of fast and ultrafast fixed broadband subscriptions throughout the review period was somewhat pronounced, with the number of subscriptions supporting download speeds of at least 100Mbps going up by 40% between January and June 2018. This outcome can to an extent be attributed to the bigger demand for online video streaming services and, quite plausibly, to the ongoing efforts by service providers to shift demand for the service to the bundle configuration, with a constant stream of promotional offers having been observed in this respect. Rising superfast broadband take-up is driving revenue growth for service providers, hence the improved ARPU in the first half of 2019 compared to the same period a year earlier.

Mobile broadband penetration is also on the rise, underscored initially by an ever increasing number of mobile telephony users accessing 3G/4G data services over their mobile handsets and, more recently, to more subscriptions for cards/USB dongles/keys and modems. Also of significance is the rising average consumption of mobile data per active mobile broadband user. This when considering the intrinsic rise in demand observed in this segment and the more advantageous data plans offered by local operators, which entice end-users to access mobile data services.

6.1. Fixed broadband subscriptions

The number of fixed broadband subscriptions totalled 188,004 at the end of June 2018, which is up by 10,677 (or by 6.0%) from 177,327 fixed broadband subscriptions recorded at the end of June 2017²¹. As a result, the fixed broadband penetration rate went up to 39.0% by the end of the current reporting period, which represents an increase of 1.1 percentage point year-on-year.

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.

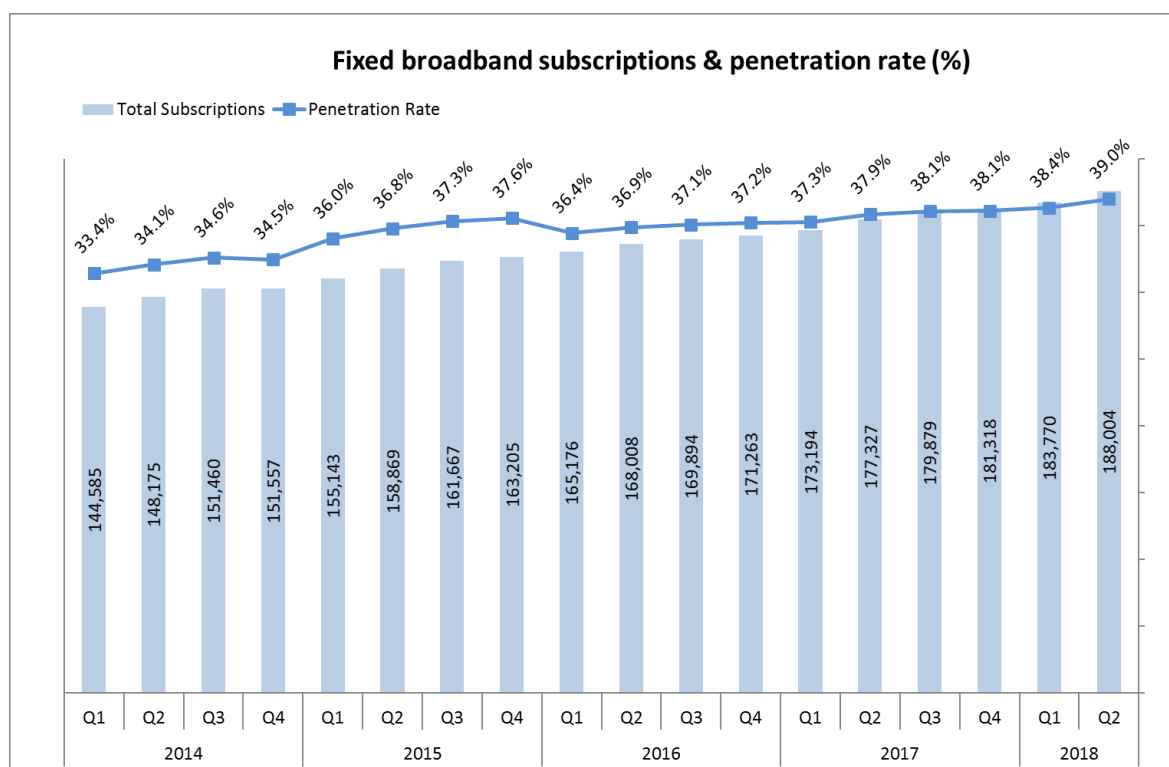


Figure 29: Take-up of fixed broadband and fixed broadband penetration

| Fixed broadband subscriptions in a bundle | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|--------------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 |
| Fixed broadband + fixed telephony | 15,979 | 29,890 | 36,927 | 44,179 | 49,622 | 54,413 | 55,227 | 55,793 | 55,649 |
| 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 |
| Fixed broadband + fixed telephony + mobile telephony | 312 | 620 | 630 | 139 | 84 | 58 | 37 | 24 | 16 |
| Fixed broadband + fixed telephony + pay-TV | 22,165 | 24,870 | 26,088 | 27,386 | 28,529 | 30,482 | 40,638 | 46,835 | 55,048 |
| Fixed broadband subscriptions on a quad play contract | 44,069 | 44,429 | 45,683 | 46,988 | 48,075 | 49,900 | 49,175 | 49,785 | 51,691 |
| 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 |
| 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 |
| Number of fixed broadband subscriptions as at end of period | 148,175 | 151,557 | 158,869 | 163,205 | 168,008 | 171,263 | 177,327 | 181,318 | 188,004 |
| Percentage of fixed broadband subscriptions in a bundle | 55.69% | 65.86% | 68.82% | 72.73% | 75.18% | 78.74% | 81.81% | 84.07% | 86.38% |

Table 12: Fixed broadband subscriptions purchased in a bundle

86.4% of all fixed broadband subscriptions recorded at the end of June 2018 were purchased in a bundle, representing a 4.6 percentage point increase in this type of subscriptions year-on-year. This change is a result of service providers incorporating fast and ultrafast broadband speeds in bundles with bundled offers allowing subscribers to get a better deal, pricewise, for the different bundle services compared to when such services are purchased stand-alone.

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. There were 89,988 cable-based broadband subscriptions at the end of the current reporting period. Simultaneously, DSL-based subscriptions

and FTTH-based subscriptions totalled 70,583 and 17,689 respectively and subscriptions on the fixed wireless platform totalled 9,734.

Year-on-year, the biggest increase in subscriber numbers (i.e. absolute change) was registered for fibre, followed by cable and fixed wireless. In fact, the number of FTTH-based subscriptions was up by 6,013 (or by almost 51.5%) in the 12-month period ending June 2018, whilst the number of cable-based subscriptions was up by 6,305 (or by 7.5%). Meanwhile, the number of wireless-based subscriptions was up by 3,207 (or by 49.13%). In contrast, the number of DSL-based subscriptions was down by 4,848 (or by 6.4%), given the continued switching from legacy plans to fibre-based plans.

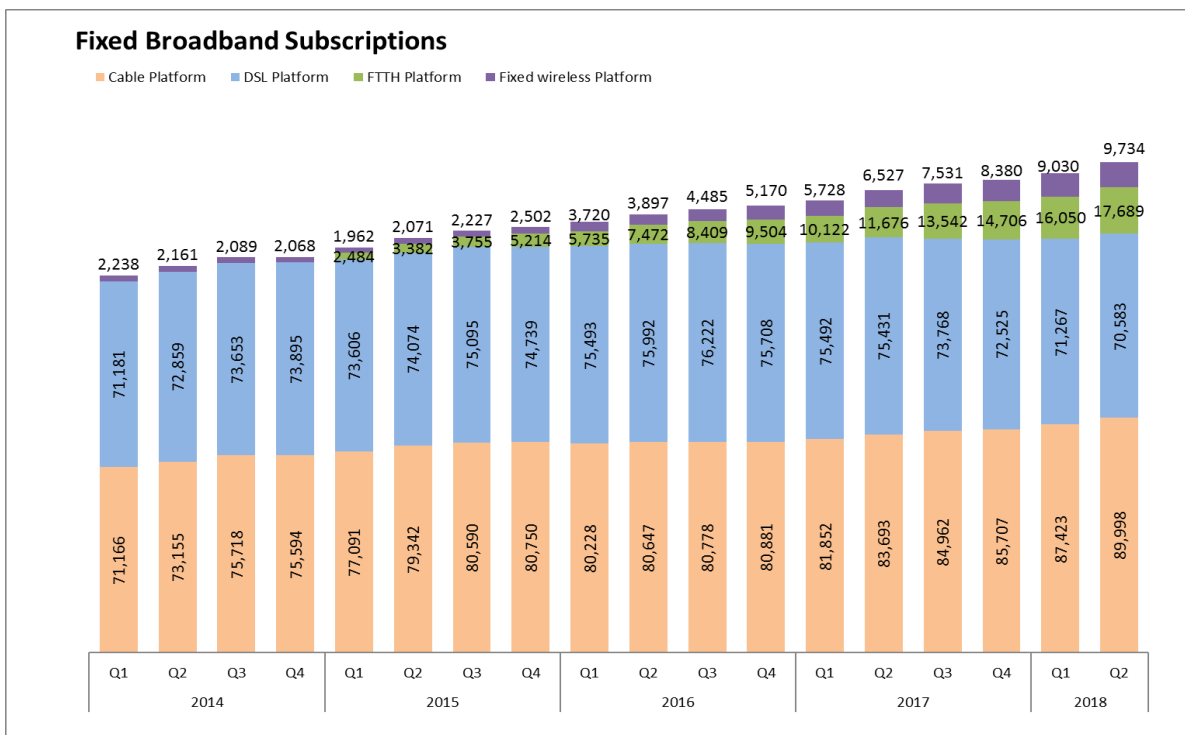


Figure 30: Fixed broadband subscriptions as at end of period - by technology

By the end of the current reporting period, the cable platform accounted for 47.9% of the local fixed broadband subscriber base, followed by DSL at 37.5%, FTTH at 9.4% and fixed wireless at 5.2%.

6.3. Fixed broadband subscriptions by download speed²²

The reported increase in take-up of fast and ultra-fast broadband in the 12-month period leading to June 2018 is mainly a result of new fixed broadband clients generally opting for these products and the continued switching of existent clients. The number of fixed broadband subscriptions supporting download speeds of 100Mbps or more was up by 27,077 (or by 111.89%) during this period, from 24,200 at the end of June 2017 to 51,277 at the end of June 2018. Meanwhile, the number of fixed

²² Quoted figures refer to advertised speeds.

broadband subscriptions allowing for a download speed of 30Mbps but less than 100Mbps was up by 18,183 (or by 18.6%), from 94,843 to 113,026.

In contrast, the number of fixed broadband subscriptions supporting a download speed of less than 30Mbps stood at 23,701 by the end of June 2018, which is down by 34,583 (or by 59.3%) year-on-year.

As at the end of the current reporting period, fast and ultra-fast broadband subscriptions accounted for 71.6% of the local fixed broadband subscriber base.

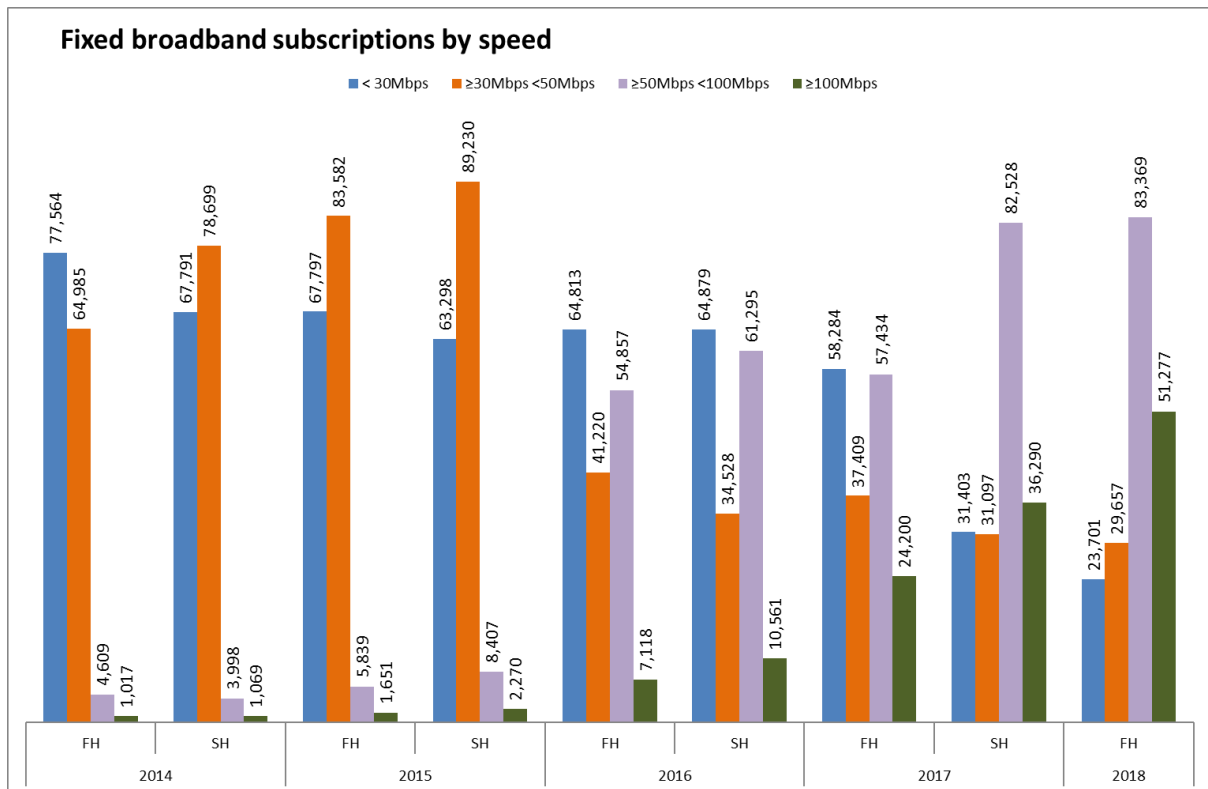


Figure 31: Fixed broadband subscriptions as at end of period, by speed

6.4. Fixed broadband subscriptions by access technology and download speed

As for the type of subscriptions by technology platform, it is noted that DOCSIS cable features the biggest share of subscriptions that support ultrafast download speeds. Indeed, at the end of June 2018, 50.7% of cable-based fixed broadband subscriptions supported a download speed of 100Mbps or more. Meanwhile, 43.6% of cable-based subscriptions allowed for a download speed of 50Mbps but less than 100Mbps. The remaining 5.8% of all cable connections supported a download speed greater or equal to 30Mbps but less than 50Mbps.

When it comes to FTTH, 32% of subscriptions supported a download speed of 100Mbps or more and 55.6% supported a download speed of 30Mbps but less than 100Mbps. The remaining 18.6% allowed for a download speed of less than 30Mbps.

With respect to DSL, none of the connections supported a download speed of 100Mbps or more, but 51.6% of DSL-based subscriptions allowed for a download speed of between 50Mbps and 100Mbps and 18.6% supported a download speed of 30Mbps but less than 50Mbps. 29.8% of all subscriptions on this platform supported a download speed of less than 30Mbps.

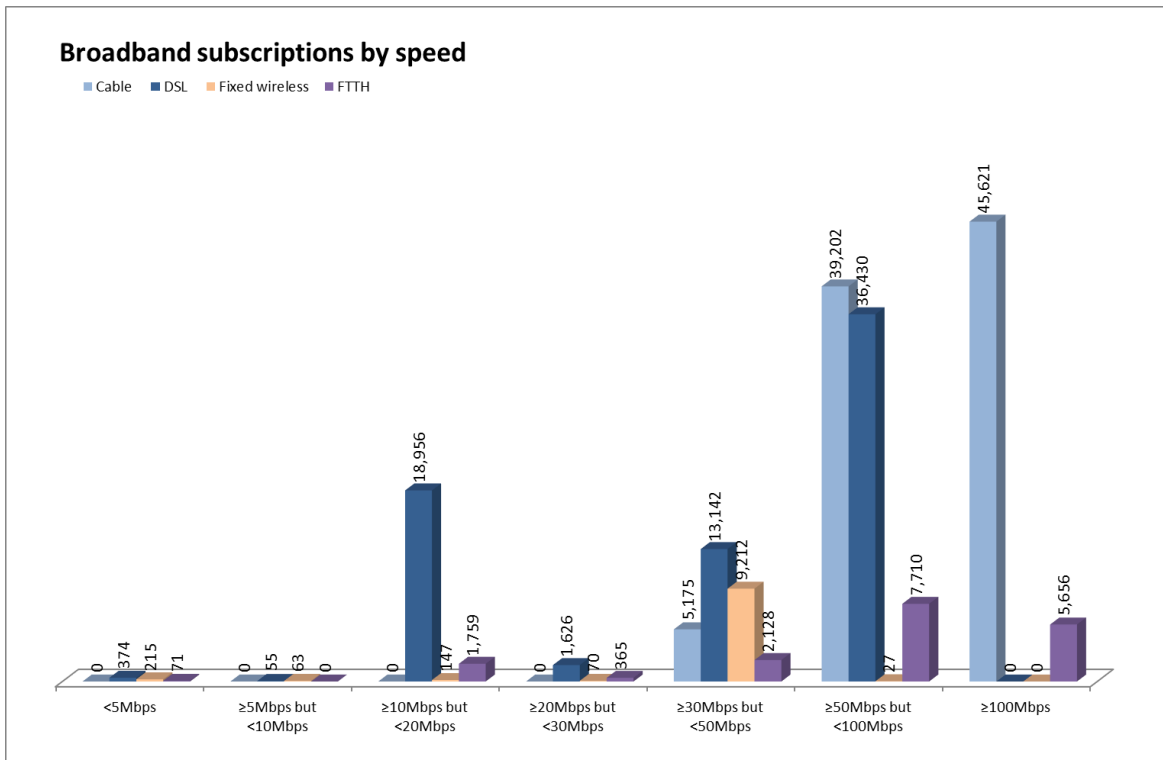


Figure 32: Broadband Internet subscriptions as at end of period - by technology & connection speed

As for the download speeds supported over fixed wireless platforms, 94.6% of all subscriptions had download speeds of 30Mbps but less than 50Mbps and 0.3% supported a download speed of 50Mbps or more. Meanwhile, the remaining share of FWA subscriptions, at 5.1%, allowed for a download speed of less than 30Mbps.

6.5. Fixed broadband ARPU

Fixed broadband ARPU in the first half of 2018 totalled €113.69, up by 6.4% from €106.9 in the same period a year earlier. These ARPU figures are derived by dividing the total retail revenues of fixed broadband service providers (in terms of monthly access fees excluding installation costs) by the total number of subscriptions²³, during a given period. The revenue element is composed of the total retail revenues from subscriptions to fixed broadband services, excluding revenues from installation and connection fees.

²³ 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.

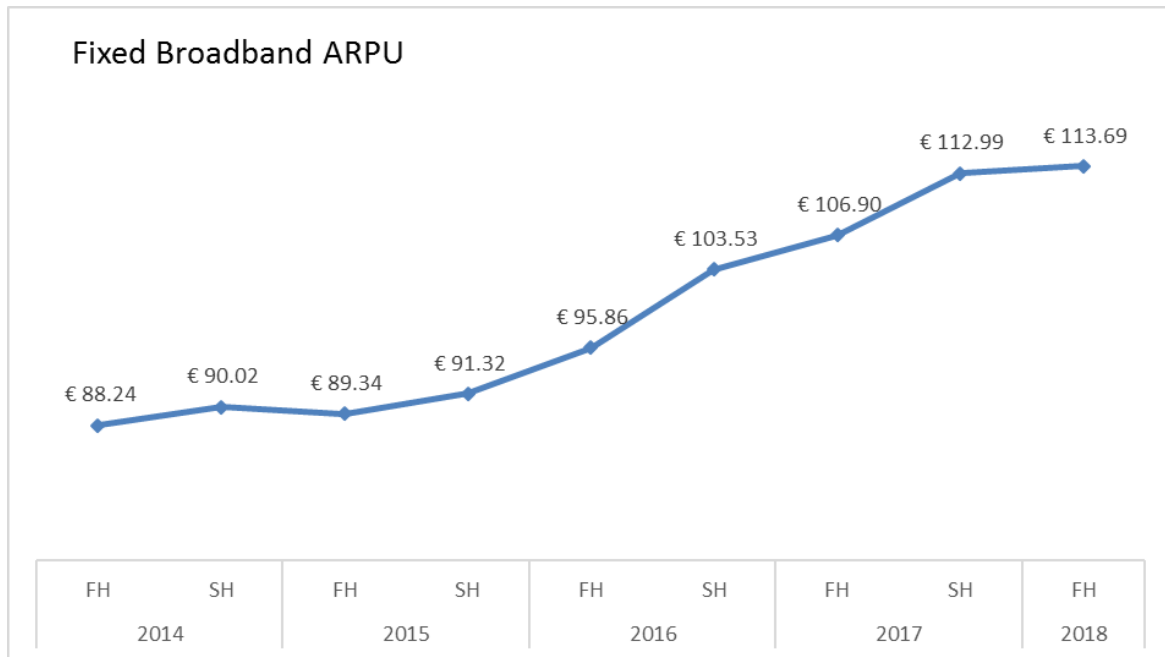


Figure 33: Average revenue per fixed broadband user

The increase in fixed broadband ARPU is a product of several developments, including the gradual rise in entry-level access fees and the surging demand for high-quality video content. As download speeds improved, the financial outlays per month in terms of access fees went up, which explains why fixed broadband ARPU improved despite the observed decline in the average rate per Mbps (see below).

6.6. Average rate per Mbps

As end-user preferences shift toward higher-value fixed broadband services, price developments provide an important indication as to how competition in this area is evolving. In this regard, the rate (or access fee) paid by the end-user per Mbps gets significant attention, given that it takes into account the quality-to-cost relationship of the local product line-up.

It is relevant to underline that the rate per Mbps has gone down significantly over the years, particularly with the onset of fast and ultra-fast fixed broadband plans. This, notwithstanding the rise in entry-level prices as download speeds improved. The greater the download speed, the less the end-user would typically pay at a per Mbit rate.

The average rate per Mbps in the first half of 2018 stood at €0.91, down by 7.1% when compared to an average rate of €0.98 in the first half of the previous year²⁴.

²⁴ 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.

Figure 34 illustrates that, in the first half of 2018, a fixed broadband subscription supporting a download speed of 'less than 5Mbps' and a download speed 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.

In case of fixed broadband products supporting download speeds of '10Mbps but less than 20Mbps', the average rate per Mbps stood at €1.78 in the current reporting period, unchanged from the rate prevailing in the same period a year earlier. An unchanged rate per Mbps of €2.01 was also determined for products supporting download speeds of '20Mbps but less than 30Mbps'. It is noted that only a few plans supporting a download speed less than 30Mbps are available on the local fixed broadband market. Also unchanged was the average rate per Mbps for fixed broadband products supporting download speeds of '30Mbps but less than 50Mbps' at €0.80 during this reporting period.

A change in the average rate per Mbps was observed for products supporting a download speed of 50Mbps or more. In this respect, the average rate per Mbps for fixed broadband products supporting download speeds of '50Mbps but less than 100Mbps' has dropped by 2.6% from €0.62 in the first half of 2017 to €0.61 in the current review period.

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%, from €0.39 in the first half of 2017 to €0.36 in the first half of 2018. The drop in the average rate per Mbps for this segment was a result of the introduction of Melita's 'Business Flexi Duo' plans introduced in late 2017.

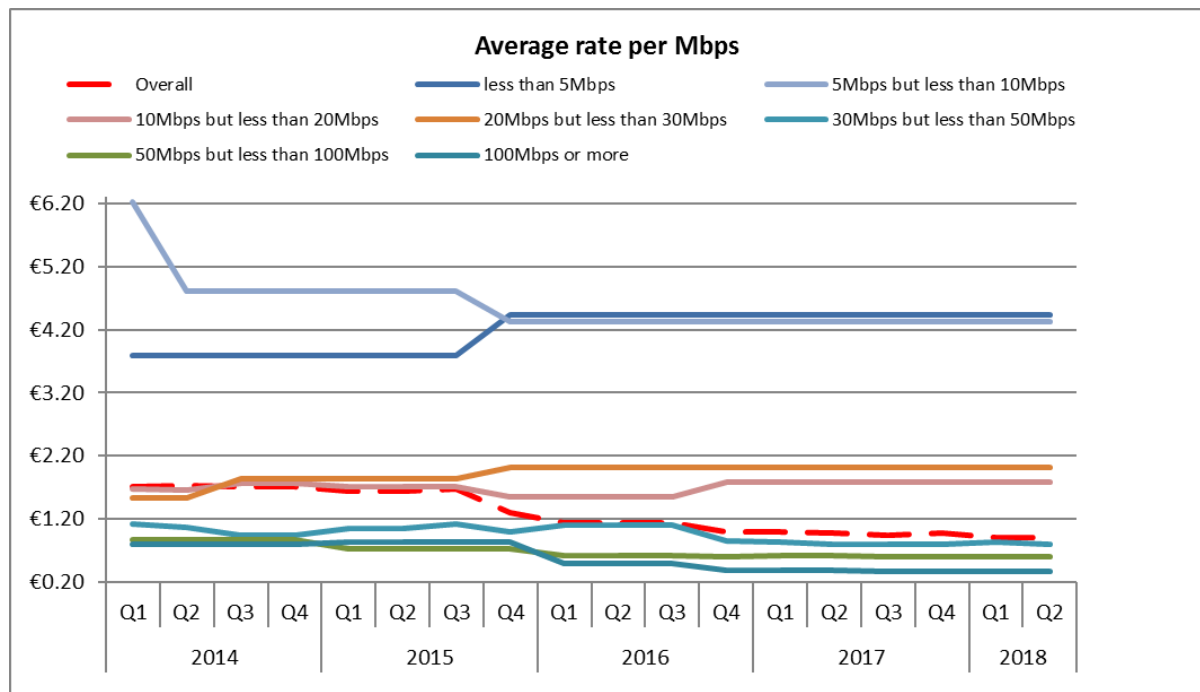


Figure 34: Average price per Mbps of fixed broadband for packages

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 EU²⁵.

Figure 35 illustrates that the number of end-users actively accessing mobile broadband services via 3G and 4G-enabled mobile subscriptions totalled 441,651 at the end of June 2018. This figure is up by 36,789 (or by 9.1%) from 404,862 at the end of June 2017.

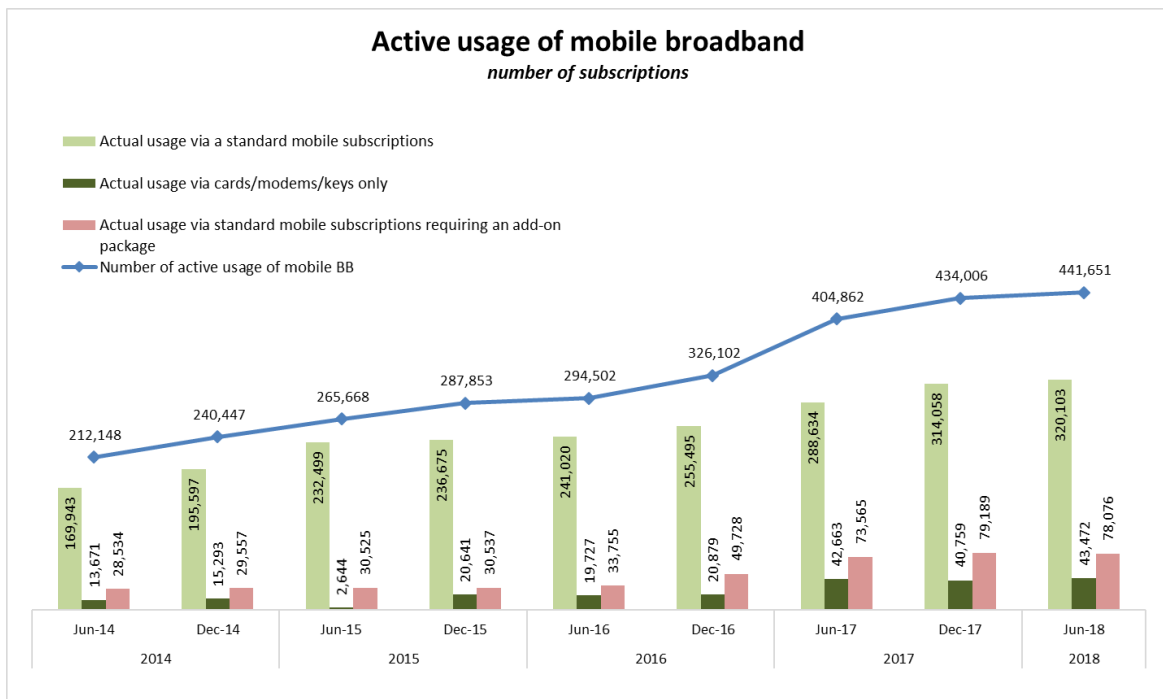


Figure 35: Mobile broadband active connections as at end of period

The increased active usage of mobile broadband reflects developments across all types of access for mobile broadband services. 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 42,633 at the end of June 2017 to 43,472 at the end of June 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

²⁵ 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.

31,469 (or by 10.9%) from 288,634 at the end of June 2017 to 320,103 at the end of June 2018. Meanwhile, the number of active users making use of mobile data services through mobile telephony add-ons was up by 4,511, from 73,565 at the end of June 2017 to 78,076 at the end of June 2018.

6.8. Mobile data usage

The increased availability of smartphones as well as the shift to post-paid plans and the improved monthly allowances have allowed consumers to make bigger use of mobile data services.²⁶ Figure 36 illustrates that the consumption of mobile data climbed significantly over the years. Comparing the first half of 2018 to the first half of 2017, mobile data volumes consumed in Malta were up by almost 700,000GB (or 32.9%), from 2.1 million GB to 2.8 million.

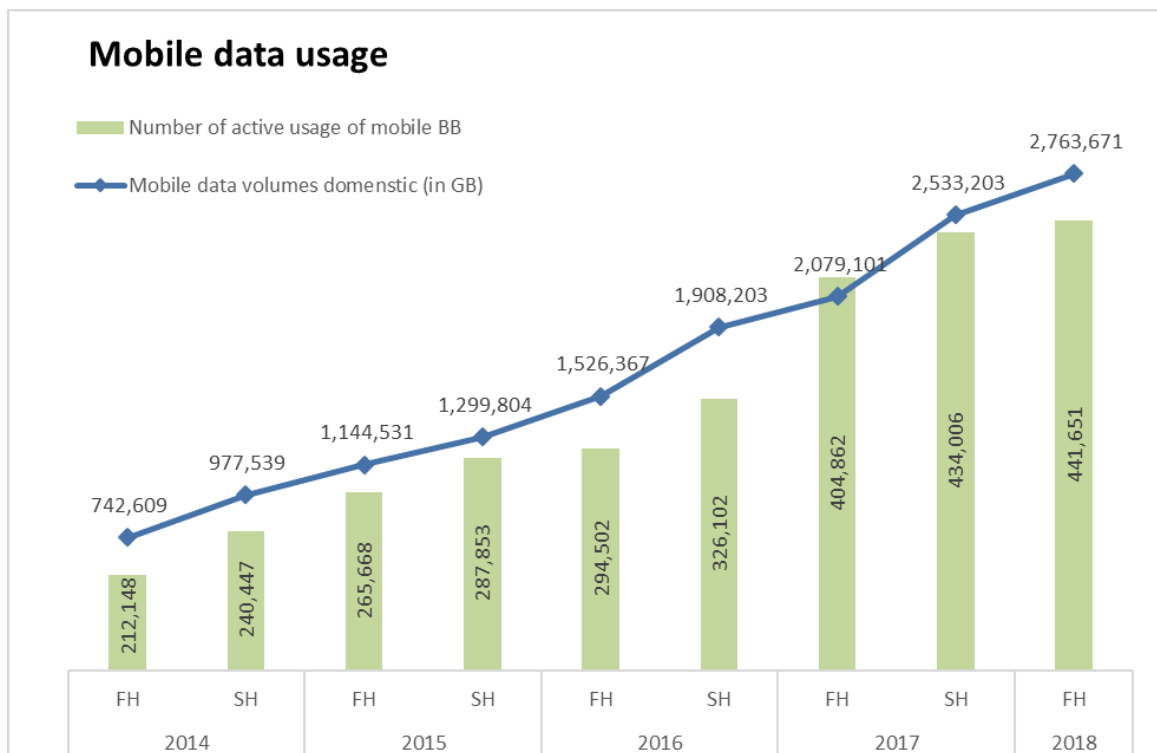


Figure 36: Mobile data usage as at end of period

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 6.3GB of data in the first 6 months of 2018, which is up by 1.2GB (or by 23.5%) than what was consumed in the first half of 2017 at 5.1GB.

²⁶ It is relevant to underline that these figures do not take into account active mobile data users via paid

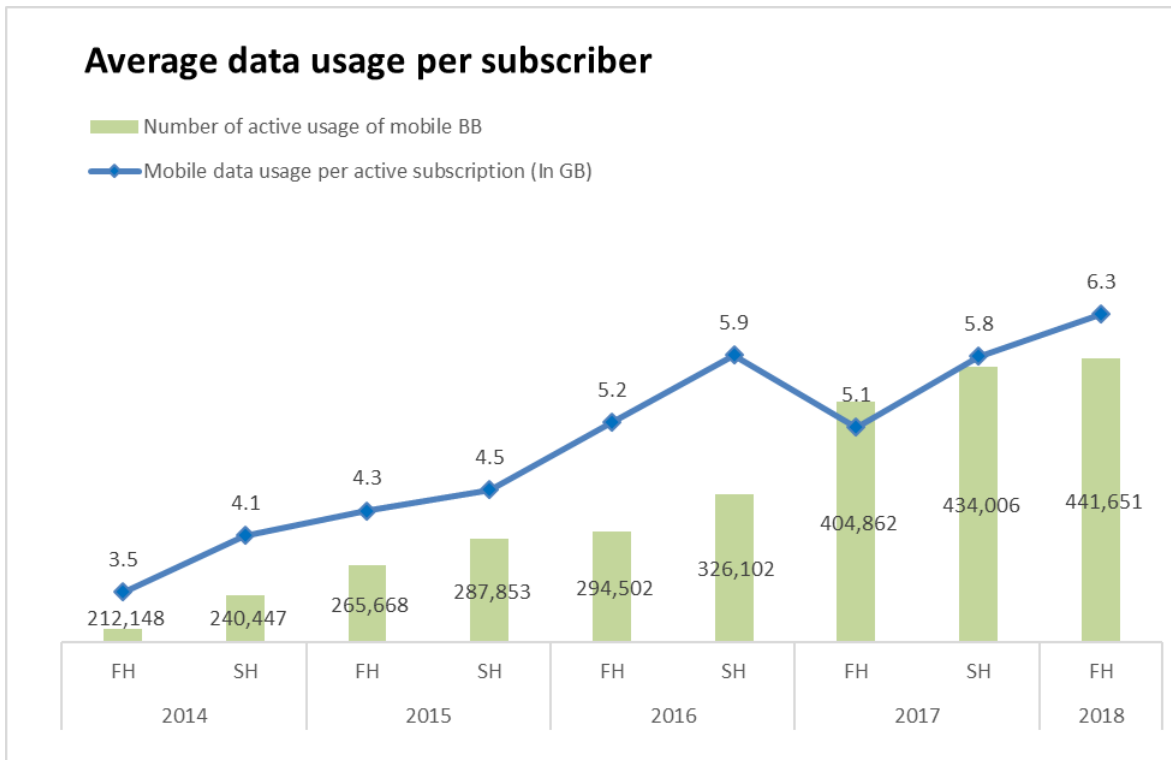
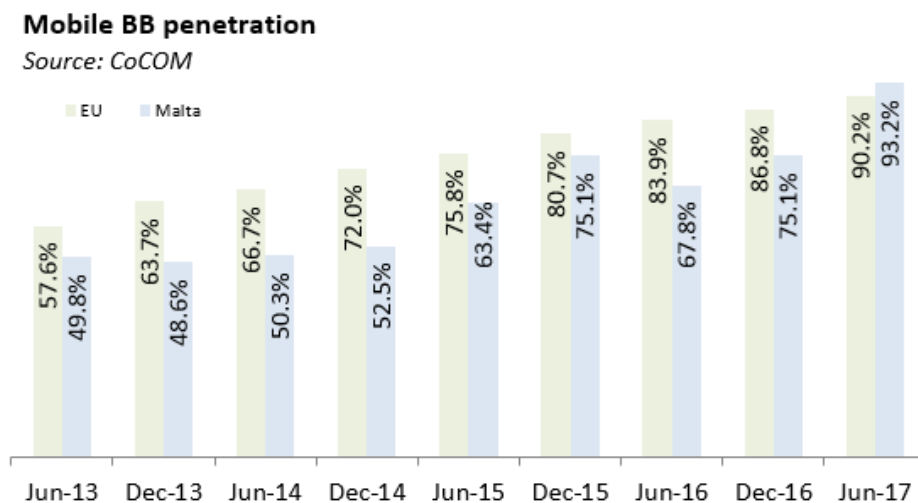


Figure 37: Active data usage at end of period

6.10. Mobile broadband penetration

The latest data for Malta from the EU’s Digital Agenda Scoreboard shows a significant improvement in mobile broadband penetration, which stood at 93.2% in June 2017 and therefore above the EU average of 90.2%.²⁷ Data for June 2018 was not available by the time the drafting of this report was concluded.



²⁷ Data beyond June 2017 is currently not available on the Commission’s Digital Agenda Scoreboard.

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

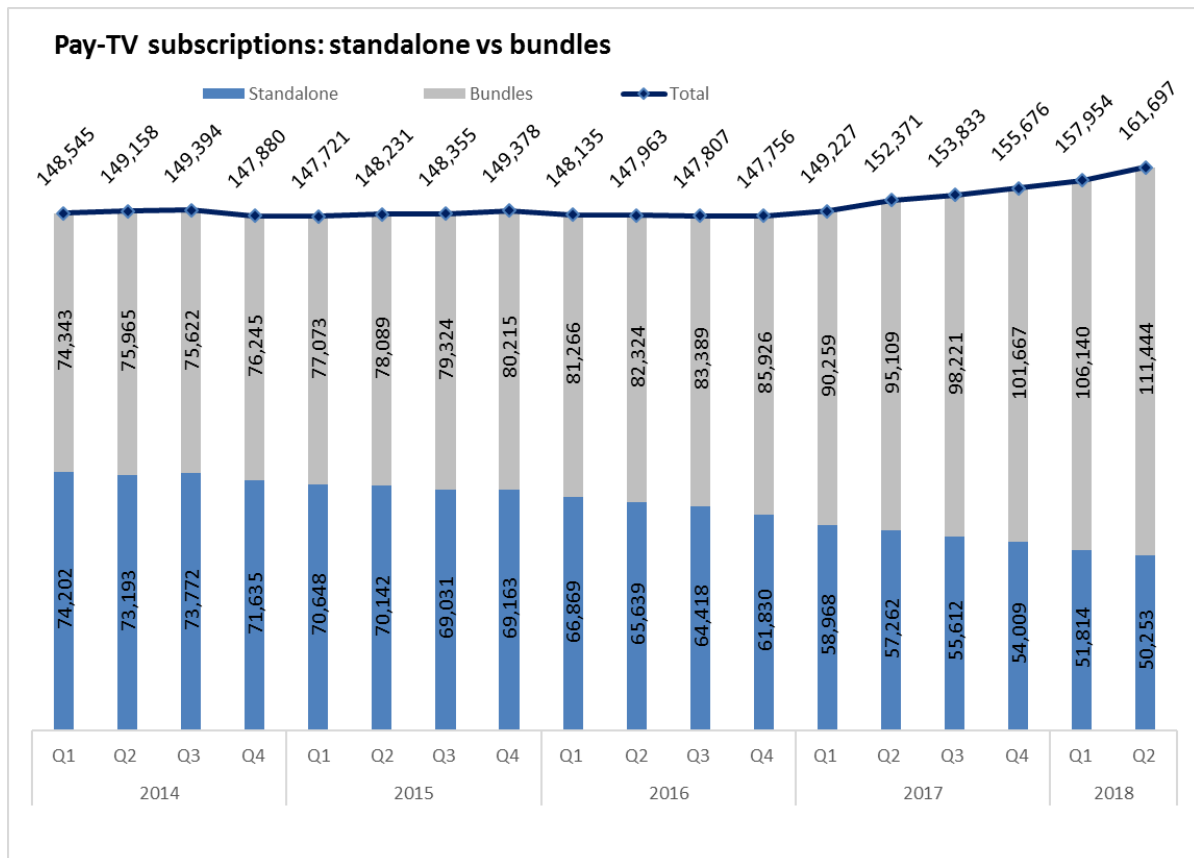
7. Pay-TV

The number of pay-TV subscriptions was up by roughly 9,000 year-on-year, with most of these new subscriptions being purchased in dual play and triple play bundles encompassing fixed broadband. Significantly, the number of pay-TV clients moving to a bundled subscription in the review period totalled 16,000 as the two operators offering pay-TV services consolidate their strategy to ‘bundle’ the electronic communications market.

Whilst bundling remains the strategy of growth for all large players, pay-TV exhibits a pattern of falling ARPU throughout the 12-month period till the end of June 2018. This decline has therefore to be seen in the context of an access fee that has to be distributed across different services comprising a bundled subscription.

7.1. Pay-TV subscriptions

The number of pay-TV subscriptions totalled 161,697 at the end of June 2018, which is up by 9,326 (or by 6.1%) year-on-year.²⁸



²⁸ 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

7.2. Pay-TV subscriptions by technology platform

Pay-TV is offered in Malta by two operators over four technology platforms. Pay-TV services over the digital terrestrial television (DTTV) platform and the Internet Protocol television (IPTV) platform are supplied by GO. Melita offers its pay-TV services over the analogue cable TV and digital cable TV platforms. However, it is noted that Melita discontinued the analogue platform as from ...

In absolute terms, the digital cable platform and IPTV platforms saw a year-on-year increase in subscriptions of 13,318 and 12,960 respectively. As a result of these increases, the number of digital cable pay-TV subscriptions totalled 91,832 by the end of June 2018 compared to 42,644 IPTV subscriptions.

In contrast, the number of DTTV subscriptions was down by 31,328 year-on-year. Also, as a result of Melita discontinuing the analogue pay-TV service, the number of subscriptions for this category was down from 3,729 at the end of June 2017 to just 15 at the end of 2018.

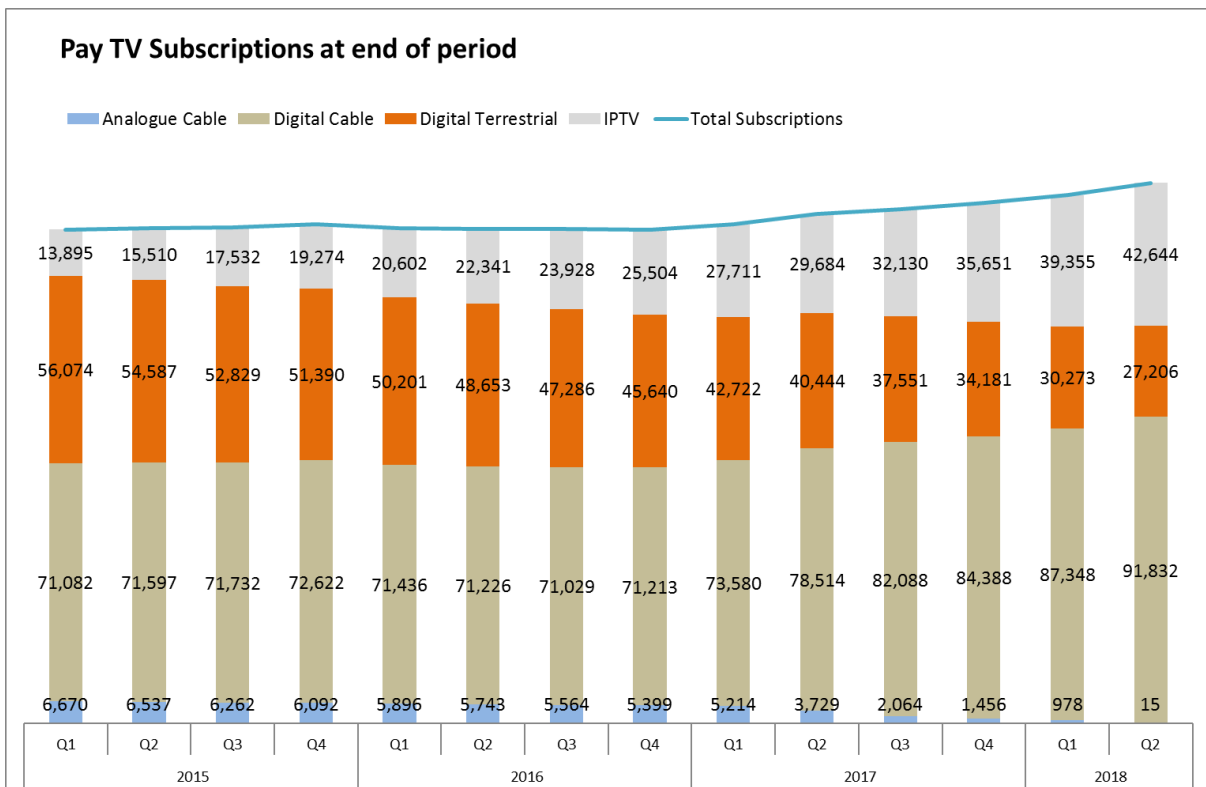


Figure 40: Pay TV subscriptions as at end of period

In view of the above-mentioned changes, the digital cable TV platform accounted for the biggest share of the local pay-TV subscriber base at the end of June 2018, at 56.7%, followed by the Internet Protocol (IP) TV platform, at 26.4%, and the digital terrestrial TV (DTTV) platform, at 16.8%. Year-

on-year, the digital cable platform and the IPTV platform gained 5.2 and 7.0 percentage points respectively in terms of market share. Meanwhile, the market share of DTTV fell by 9.0 percentage points.

7.3. Pay-TV subscriptions in a bundle

Of note is the rise in the number of pay-TV subscriptions purchased in a bundle, from 95,109 at the end of June 2017 to 111,444 at the end of the current review period. This means that almost 69% of all pay-TV subscriptions recorded at the end of June 2018 were purchased in a bundle.

| Pay-TV subscriptions in a bundle | 2014 | | 2015 | | 2016 | | 2017 | | 2018 |
|---------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
| | FH | SH | FH | SH | FH | SH | FH | SH | FH |
| 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 |
| Pay TV + fixed telephony | 9,731 | 6,946 | 6,318 | 5,841 | 5,720 | 5,544 | 5,296 | 5,047 | 4,705 |
| 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 |
| Pay-TV fixed telephony + fixed broadband | 22,165 | 24,870 | 26,088 | 27,386 | 28,529 | 30,482 | 40,638 | 46,835 | 55,048 |
| 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 |
| Pay-TV + fixed telephony + fixed broadband + mobile telephony | 44,069 | 44,429 | 45,683 | 46,988 | 48,075 | 49,900 | 49,175 | 49,785 | 51,691 |
| 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 |
| Number of pay-TV subscriptions as at end period | 149,158 | 147,880 | 148,231 | 149,378 | 147,963 | 147,756 | 152,371 | 155,676 | 161,697 |
| Percentage of pay-TV subscriptions in a bundle | 50.93% | 51.56% | 52.68% | 53.70% | 55.64% | 58.15% | 62.42% | 65.31% | 68.92% |

Table 13: Pay TV subscriptions in a bundle

7.4. 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.

The pay-TV ARPU totalled to €86.54 in the first half of 2018, down by 7.5% from €93.52 in the same period a year earlier.

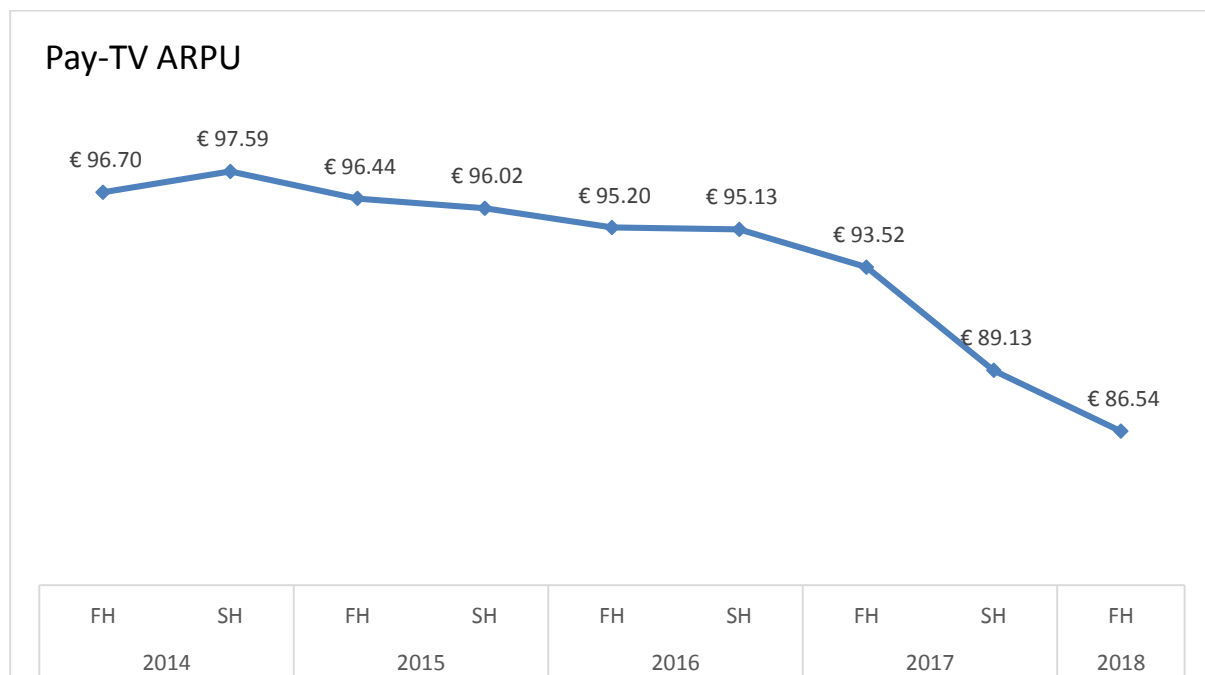


Figure 41: Average revenue per Pay TV user

The drop in pay-TV ARPU observed in recent years tallies with the rise in take-up of the service in a bundle, whereby it has already been remarked that the access fee for a bundle subscription is typically less than the total of access fees that would be incurred if the components of a bundle are purchased on a stand-alone basis.

7.5. 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. The pay-TV categories highlighted in this sections are the following; 'Up to 24 channels', '25 to 49 channels', '50 to 74 channels', '75 to 99 channels' and '100 channels or more'.²⁹

Overall, the average advertised monthly access fee for stand-alone pay-TV stood at €18.00 in the first half of 2018, down by 8.1% from €19.59 at the end of the first half of 2017. It was already reported in the previous CMR that the decline in the average advertised rates is a reflection of both operators updating their stand-alone plans, namely the 'Starter Pack' and the 'Start TV Interactive' plans. Melita introduced its 'Starter Pack' plan in the first half of 2017 whilst GO introduced its own entry-level plan the 'Start TV Interactive' plan in the second half of 2017. A lower overall average advertised market rate was achieved due to the introduction of the 'Starter Pack' and the 'Start TV Interactive' with both carrying a monthly access fee of €10.00 per month. It was noted that despite carrying the same access fee, Melita's entry level plan encompasses less than 24 channels whilst GO's entry level plan features in the '25 to 49 channel' category.

Figure 42 illustrates that the average advertised rate of the pay-TV category encompassing 'up to 24 channels' stood at €10.00 in the first half of 2018 unchanged from the first half of 2017. It is noted that only Melita's 'Starter' plan currently features in this pay-TV category.

On the other hand, the average advertised monthly access fee for the pay-TV category encompassing '25 to 49 channels' went down to €14.66 in the current reporting period, from €17.00 during the same period a year earlier. This is a result of GO launching the 'Start TV Interactive', which features under this pay-TV channel category.

The average advertised monthly access fee for the pay TV channel category encompassing '75 to 99 channels' and '100 channels or more' remains unchanged at €21.99 and €32.00 respectively.

In conclusion, no significant changes were observed in the high-end segment seeing that operators have opted to retain the same line-up for plans in the '75 to 99 channels' category and '100 channels or more' category. Conversely, positive developments have taken place in the 'up to 24 channels' and '25 to 49 channels' segments with the introduction of new entry-level pay-tv line-ups. Lower monthly access fees coupled with a basic TV line-up may prove to be attractive for consumers that solely desire basic content over more expensive pay-TV packages.

²⁹ Calculations for the average advertised monthly access fees for pay-TV only take into account products offered on a stand-alone basis.

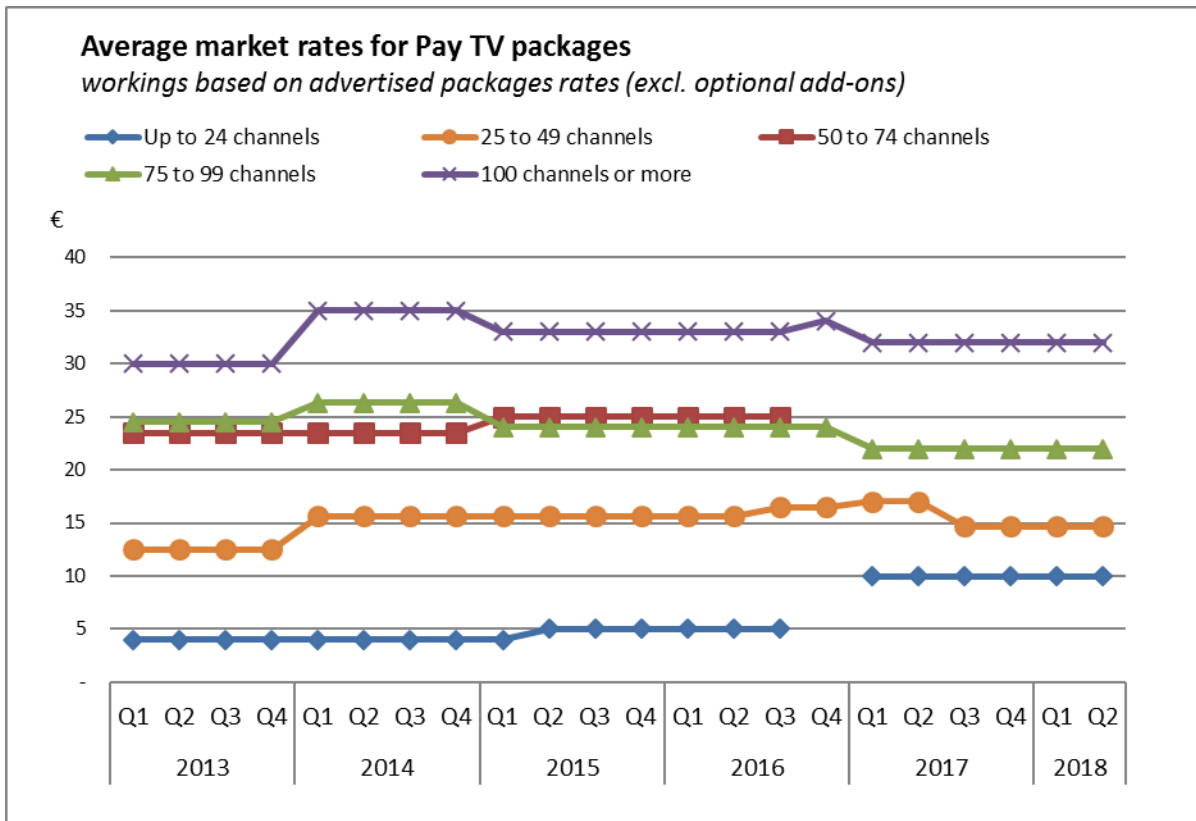


Figure 42: Average market rates for Pay TV packages

It is 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

There has typically been much focus on the observed annual decline in postal mail volumes in Malta. However, the long-term narrative of overall decline need not obscure the ongoing change in the mix of mail, particularly the continued growth in the packets and parcel segments. Interestingly, overall mail volumes in the first half of 2018 were higher than volumes recorded during the same period a year earlier. This development comes on the back of volume growth in inbound cross border mail, which outweighed the volume decline in letter mail.

8.1. Postal mail volumes

The number of postal mail items delivered by local postal operators³⁰ in the first half of 2018 totalled 18.8 million. This figure is up by around 0.2 million (or by 1.1%) from 18.6 million postal mail items delivered in the same period a year earlier.

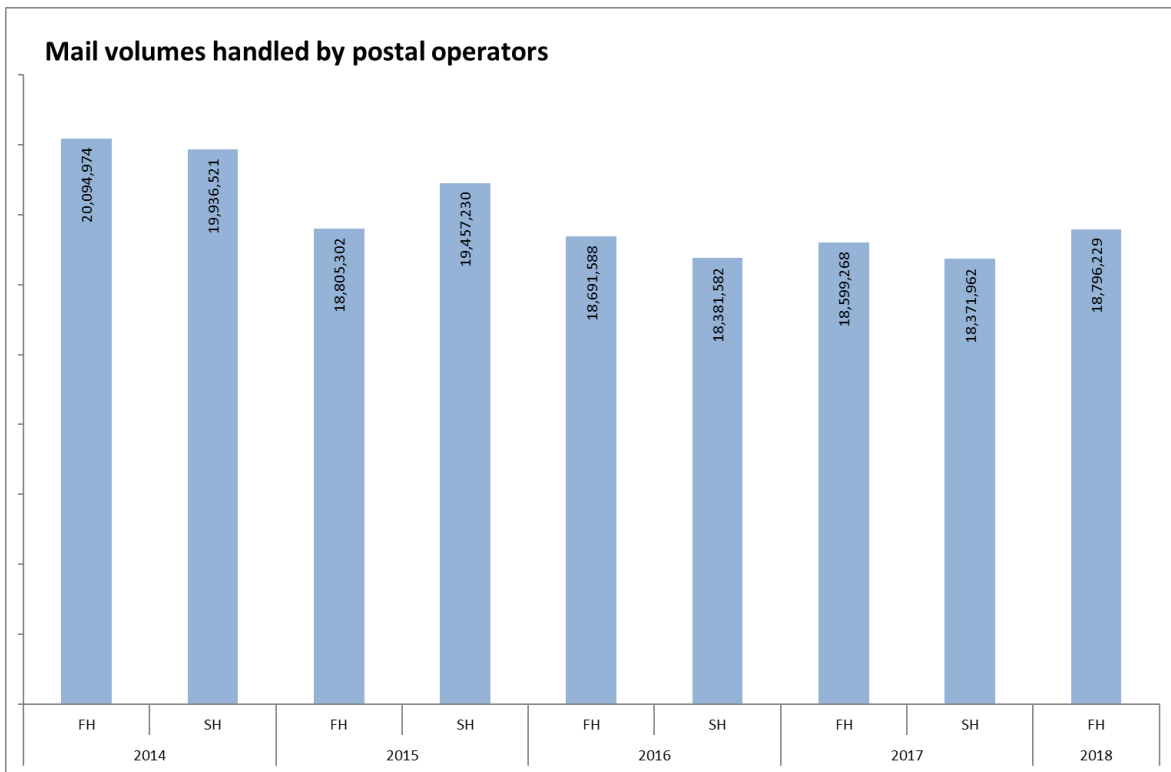


Figure 43: Postal activity - mail volumes handled by local service providers

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 16 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 mail³¹. 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.

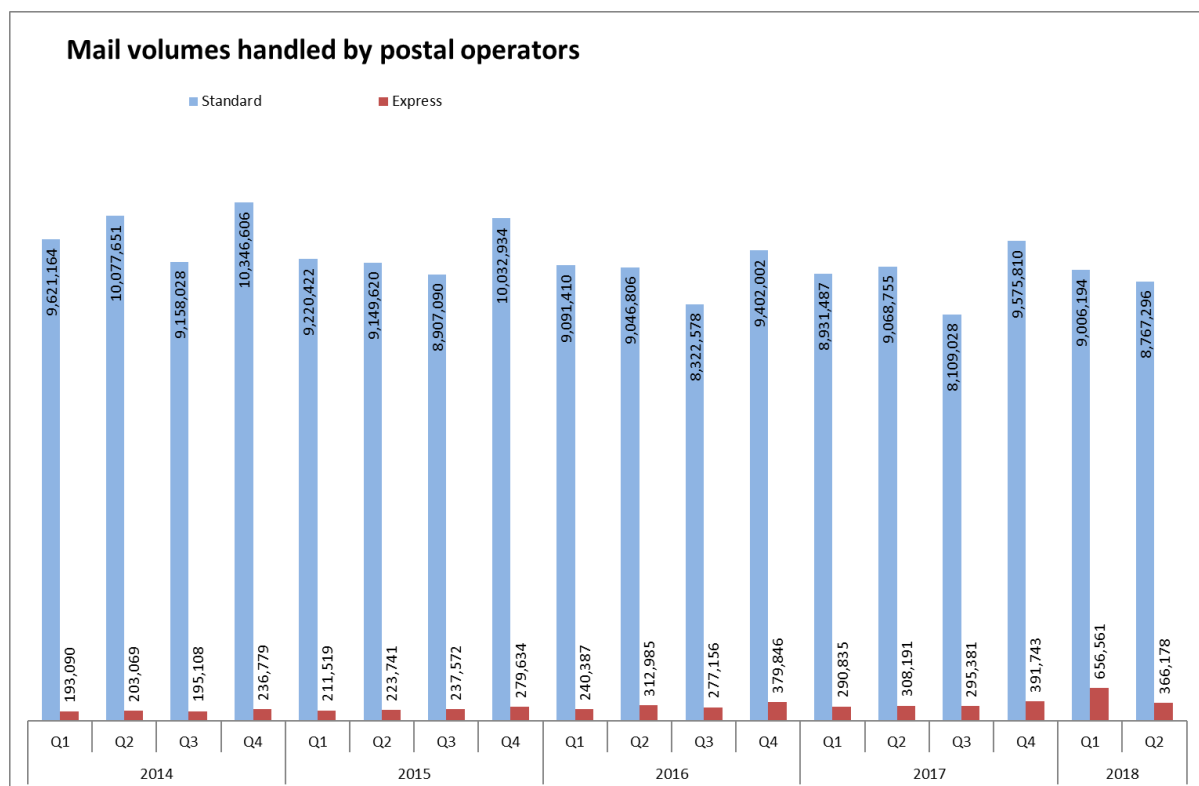


Figure 44: Postal activity - number of handled mail items by type of mail activity

Of note is that standard postal mail accounted for 94.6% of total postal mail volumes delivered in the first half of 2018. Express mail activity accounted for the remaining share, at 5.4%.

In absolute terms, the number of standard postal mail items delivered in the first half of 2018 totalled 17.8 million, which is slightly up compared to the volumes recorded in the same period a year earlier.

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.

Meanwhile, the number of express postal mail items delivered in the current review period was up by 0.6 million (or by 70.7%) when compared to the first half of 2017.

8.2. Postal mail volumes by type of mail

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

Single piece letter-post mail accounted for 34.6% of all postal mail items delivered during the current review period. In absolute terms, the number of single piece letter items totalled 6.5 million in the first half of 2018, which is up by 0.1 million (or by 2.5%) from volumes registered in the first half of 2017.

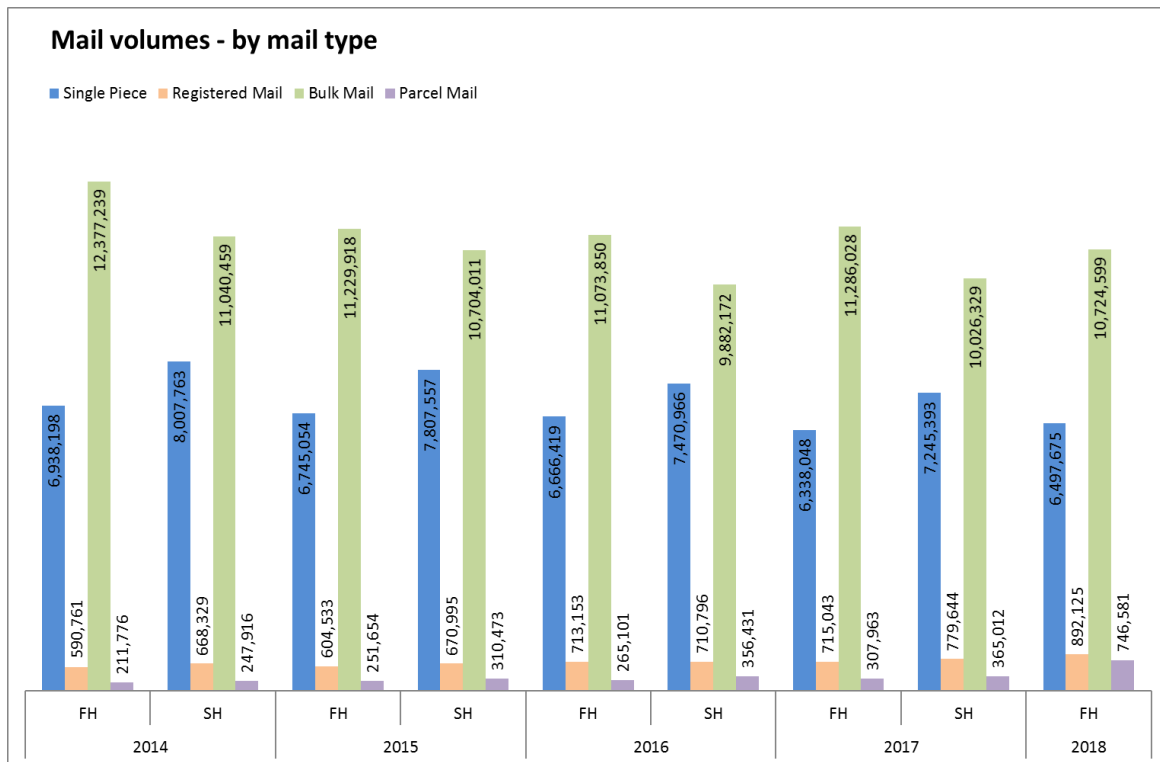


Figure 45: Postal activity - number of handled mail items by type of mail item

Bulk letter mail items totalled 10.7 million in the first half of 2018, which is equivalent to 57.1% of total mail volumes delivered during this period. Compared to volumes recorded in the in first half of 2017, the number of bulk mail items that were delivered was down by 0.5 million (or by 5.0%).

The number of registered mail items delivered in the first 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 first half of 2017, registered mail volumes were up by 177,082 (or by 24.8%).

Parcel mail items totalled 0.7 million in the first half of 2018, which is equivalent to 3.6% of total postal mail volumes recorded during this period. Compared to mail volumes recorded in the first half of 2017, the number of parcel mail items was up by 421,681 (or by 162.1%)³².

8.3. Postal mail volumes by activity heading

This section distinguishes between mail activity according to the destination, namely by outlining developments for domestic mail volumes; outbound cross border mail volumes³³, and inbound cross border mail volumes³⁴.

Domestic mail volumes delivered in the first half of 2018 totalled to 17.7 million items. This figure is down by 1.26% compared to the figure recorded in the same period a year earlier.

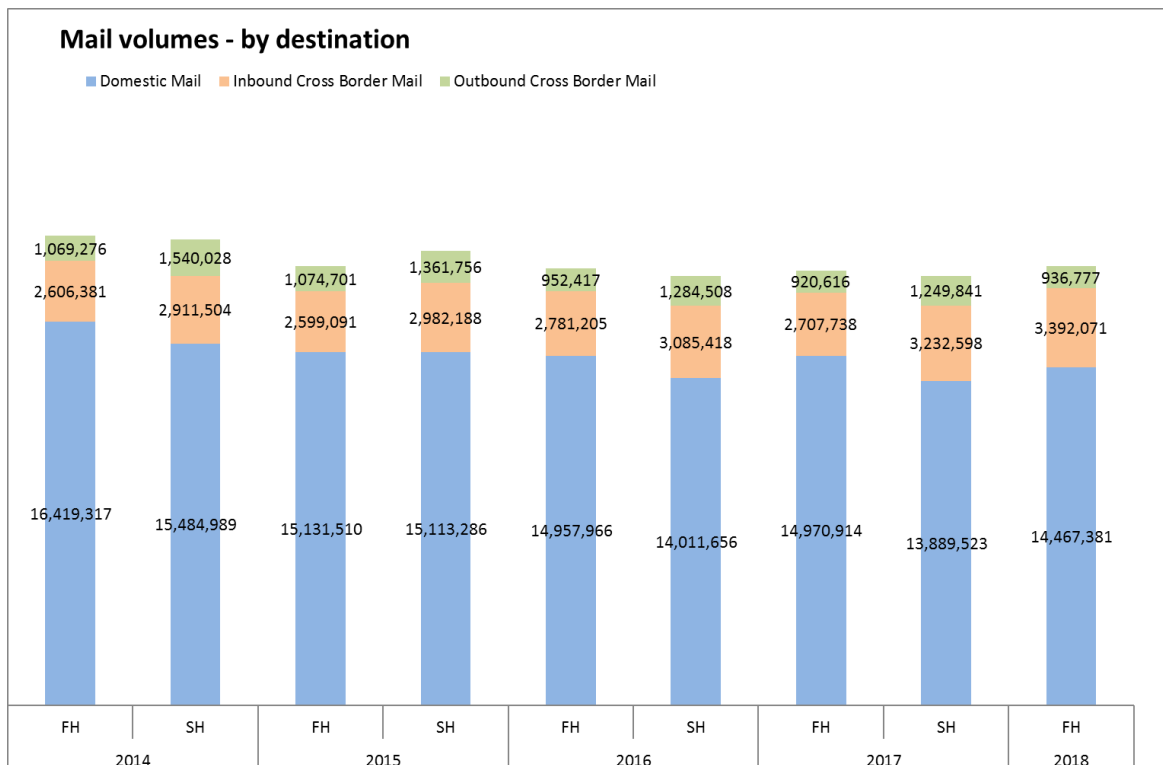


Figure 46: All postal activity - number of handled mail items by destination

Volumes of outbound cross border mail and inbound cross border mail in the first half of 2018 totalled 0.9 million items and 3.4 million items respectively. Figure 47 illustrates that, in the case of inbound cross border mail, volumes recorded in the current reporting period were up by 684,333 items (or by 25.3%), compared to volumes recorded in the first half of 2017. Meanwhile, outbound cross border mail volumes were up by 16,161 (or by 1.76%).

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.

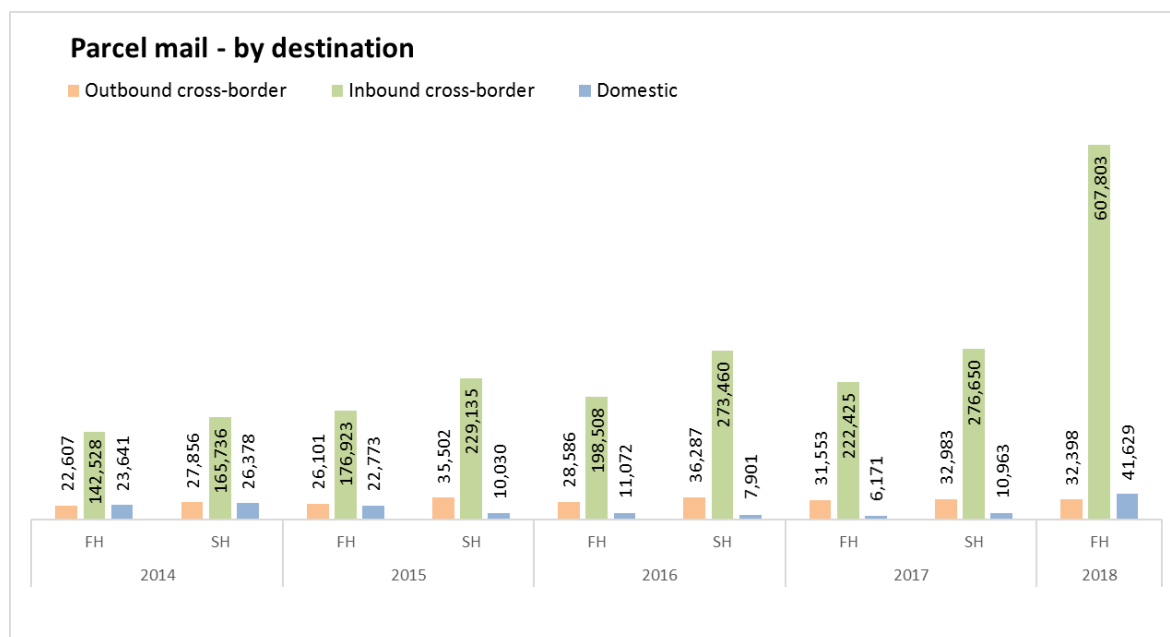


Figure 47: Parcel mail activity - number of handled mail items by destination

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 32,398 items and 607,803 items respectively. In the case of inbound cross border mail, volumes recorded in the current reporting period were up by 173.26%, compared to the same period in 2017. Meanwhile, volumes for outbound cross border mail were up by 9.1%. Domestically, parcel mail segment volumes were up by around 2.7%, when comparing activity reported for the first half of 2018 to that reported in the first half of the previous year.

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 Decision³⁵ on the quality performance measurement of postal items delivered within the defined service standard. QoS data corresponds to the full calendar year³⁶.

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%.

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.

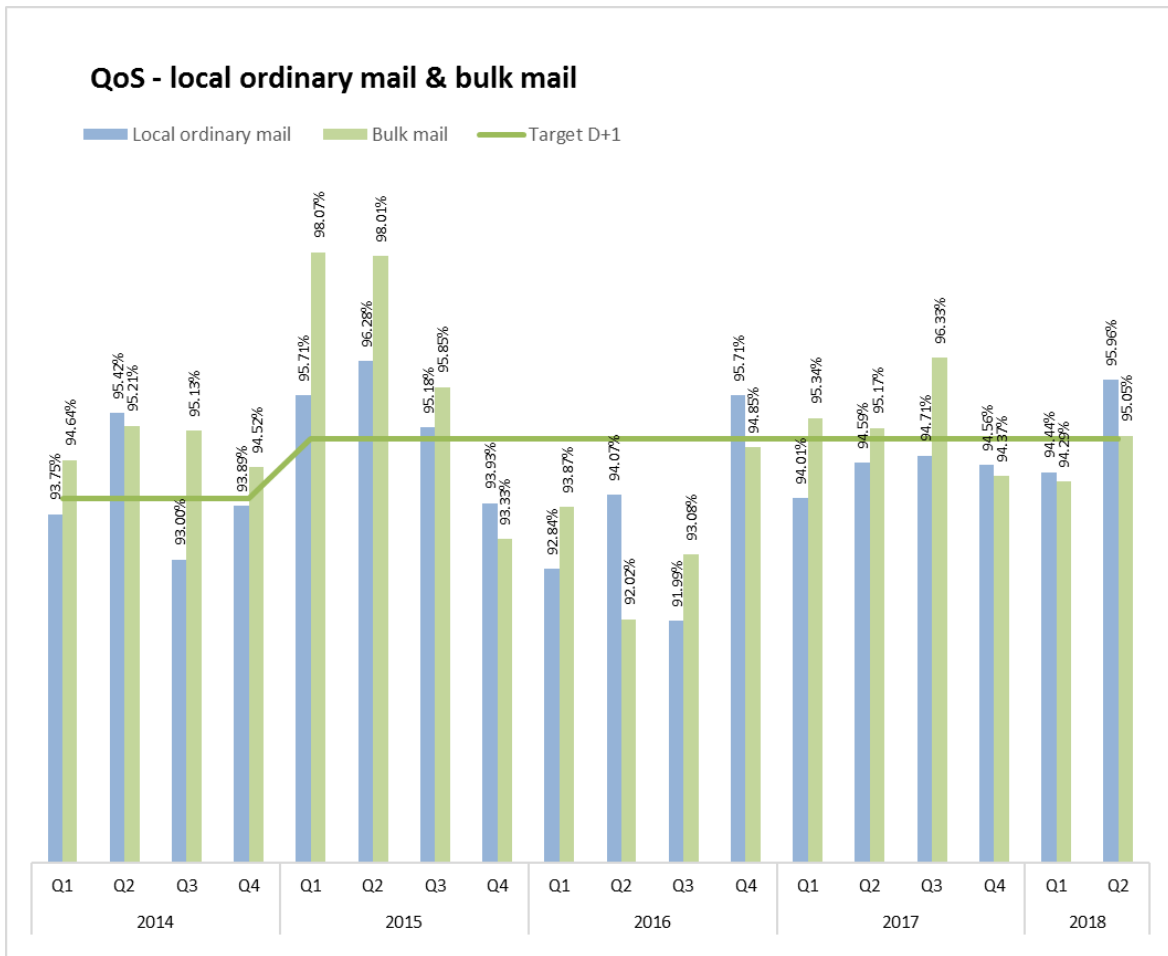


Figure 48: Quality of service - local ordinary and bulk mail

Figure 48 illustrates that Maltapost did reach the established target for both local ordinary mail and bulk mail in the first 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 mail and priority inbound parcels has been set at 98%.

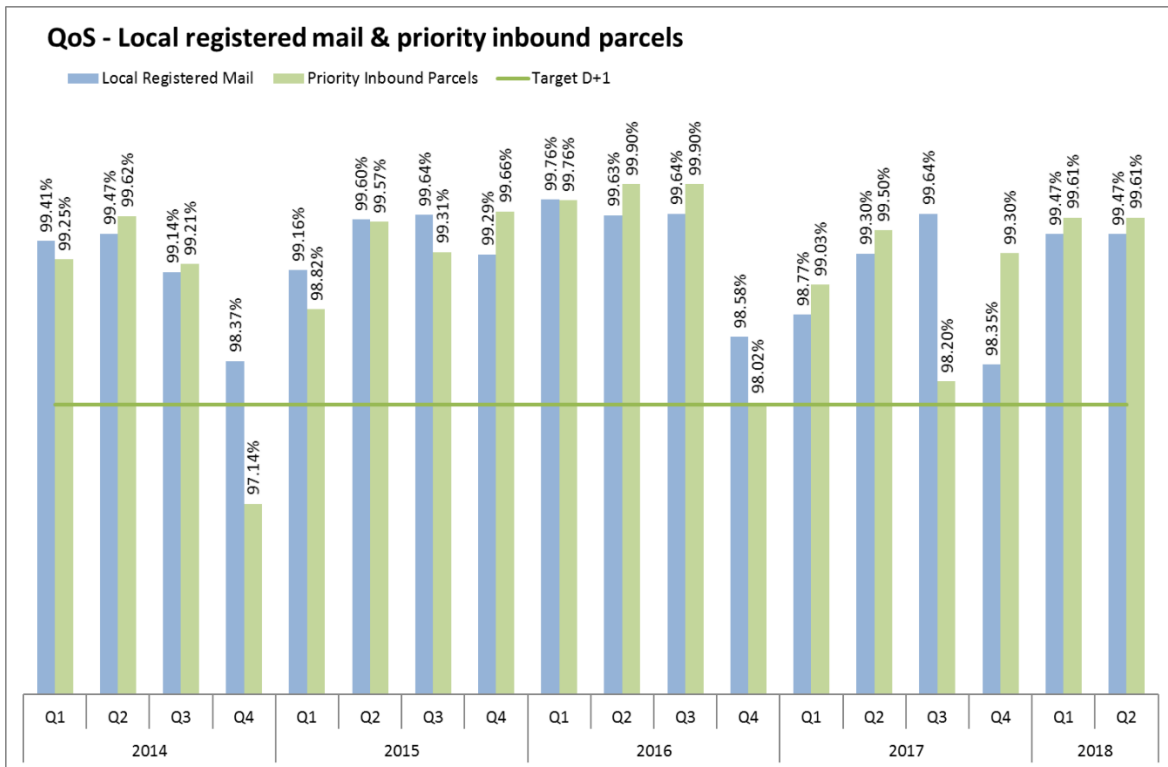


Figure 49: Quality of service - local registered mail and priority inbound parcels

Figure 49 illustrates that, in the first 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 at €0.26 and €0.59 respectively. 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

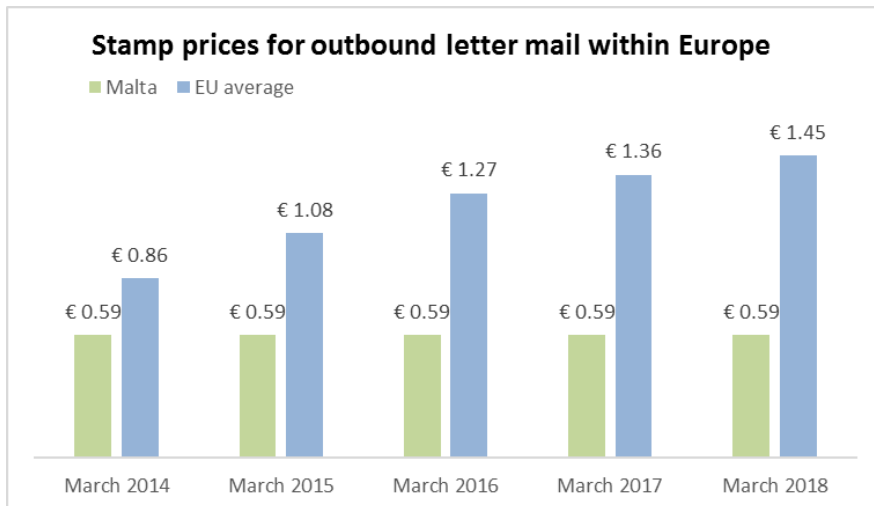
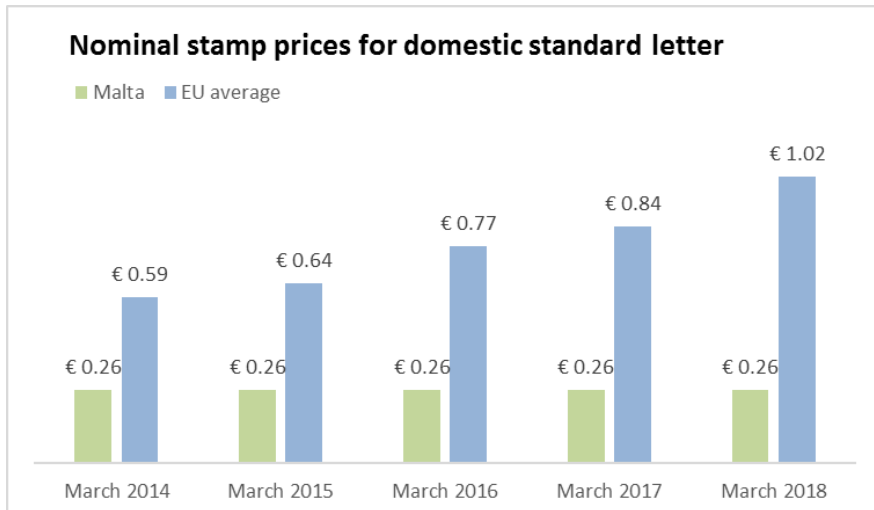


Figure 50: Nominal stamp prices in Malta and the EU

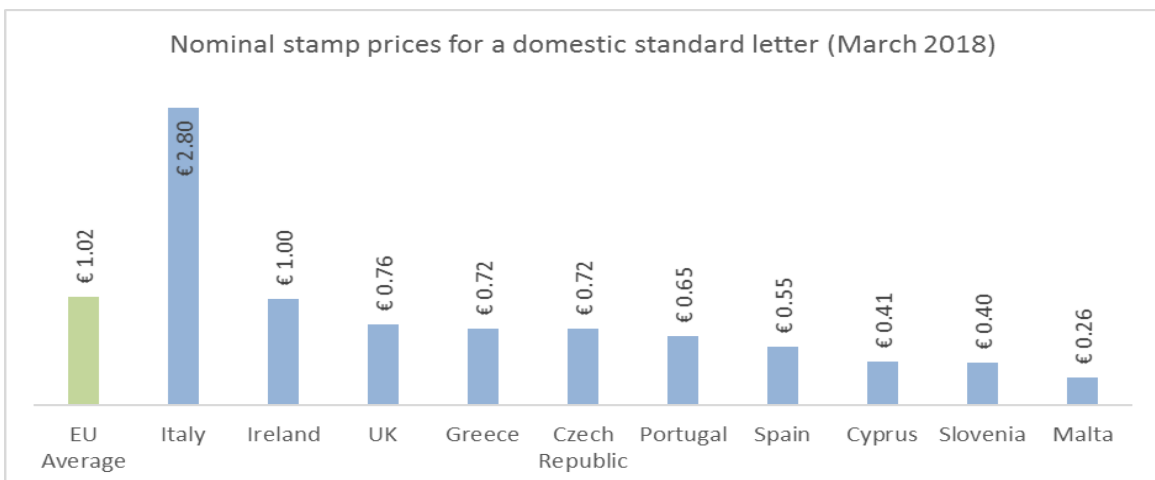


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11. Glossary of Terms

| | |
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| 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 | First half of the year, referring to the period June 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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