

**SUBSCRIPTION TELEVISION SIGNAL  
DISTRIBUTION SERVICE**

**First half of 2020**

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## **Executive summary**

## EXECUTIVE SUMMARY

### **The number of TV signal distribution service subscribers grew by 4.1% and 89% of households are customers of this service**

In the first half of 2020 (1S2020), around 89.3% of households had the subscription television (TVS) signal distribution service, 3.3 p.p. more than in the same period of the previous year.

The number of subscribers to the subscription TV signal distribution service reached 4.15 million, 165 thousand more (+4.1%) than in the same period of the previous year. This is the largest annual growth in absolute and relative terms recorded since 2016.

### **Optical fibre surpasses two million accesses**

The growth of the service was due to the offers based on optical fibre (FTTH), which recorded 263 thousand subscribers more than in the same period of the previous year (+14.8%), surpassing two million accesses.

FTTH continued to be the main form of access to this service (49.0% of total subscribers), followed by cable television (31.9%), satellite direct to home (DTH) (11.1%), and telephone line (ADSL) (8.0%), as has been the case since the beginning of 2018.

### **Impact of COVID-19**

In the 1S2020 there was simultaneously a slowdown of the downward trend of the number of DTH and ADSL subscribers, and an upward trend of the number of FTTH subscribers. This evolution could be associated to the impact of COVID-19 on the activity of the providers and on the needs of the users. Reference should also be made to the possible effect of the reduction of the monthly payment of 3P offers by satellite that occurred in the semester under review.

It should also be recalled that the process of digital terrestrial television (DTT) switchover of frequencies started on 7 February 2020 and was suspended on 13 March 2020 due to the constraints associated to COVID-19.

## **Shares per provider**

At the end of the 1S2020, MEO became the provider with the largest share of subscribers to the subscription TV signal distribution service (39.8%), followed by the NOS Group (39.7%), Vodafone (16.7%) and NOWO (3.7%).

Vodafone and MEO were the providers that, in net terms, captured most subscribers in relation to the same period of the previous year, with their shares having increased by 0.9 p.p. and 0.3 p.p., respectively. On the other hand, a reduction occurred in the shares of the NOS Group (0.9 p.p.) and NOWO (0.3 p.p.).

The concentration level in terms of traffic, measured by the Herfindahl-Hirschman index, although high, fell slightly in relation to the previous year. The current trend of decreasing concentration trend began in 2013, with the launch of Vodafone's triple play deal supported on FTTH. Since the start of 2018, the concentration level has shown insignificant reductions.

# Report

## 1. Number of providers

In the final first half of 2020 (1S2020), 12 providers offered the subscription TV signal distribution service (Table 1).

Considering the physical support of access to the service, eight providers offered the TVS signal distribution service based on optical fibre – FTTH (MEO, NOS Açores, NOS Comunicações, NOS Madeira, NOWO, OTNETVTEL, Pinkhairezononet and Vodafone), and eight provided the service through cable TV networks (Associação de Moradores de Almancil, Cyclop Net, NOS Açores, NOS Comunicações, NOS Madeira, NOWO, Sousa Pinheiro Telecomunicações and Transview). Four providers offered the service through DTH – satellite direct to home (MEO, NOS Açores, NOS Comunicações and NOS Madeira) and three through ADSL (MEO, NOS Comunicações and Vodafone).

**Table 1 – Number of providers that reported statistical information by technology**

|              | 1S2019    | 1S2020    |
|--------------|-----------|-----------|
| FTTH         | 8         | 8         |
| Cable        | 8         | 8         |
| DTH          | 4         | 4         |
| ADSL         | 3         | 3         |
| <b>Total</b> | <b>12</b> | <b>12</b> |

Unit: 1 provider.

Source: ANACOM

## 2. Penetration of subscribers

In 1S2020, residential penetration of the TVS signal distribution service reached 89.3 subscribers for every 100 private households, 3.3 p.p. more year-on-year.

## 3. Total number of subscribers

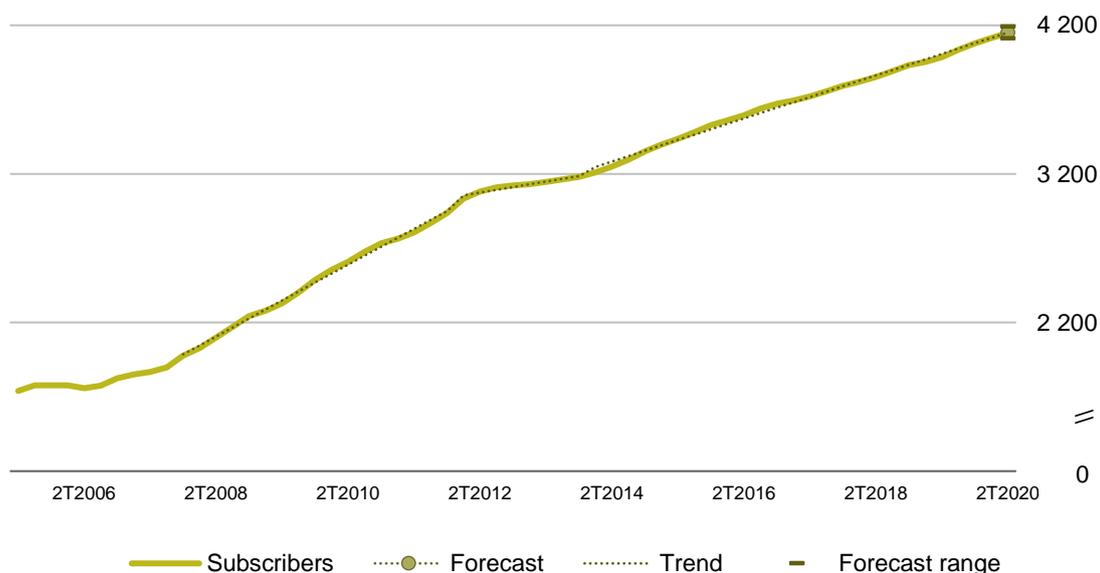
The evolution of the total number of subscribers to this service and the share of subscribers per provider are presented below.

### 3.1. Evolution of the number of subscribers

The total number of subscribers to the TVS signal distribution service reached 4.15 million, 165 thousand more (+4.1%) than in the same period of the previous year. This is the largest annual growth in absolute and relative terms recorded since 2016.

The number of subscribers recorded stood within the forecast range derived from the forecast range derived from the recent historical evolution of this indicator (Figure 1). The current trend of evolution began in 2014.

**Figure 1 – Evolution of subscribers to the TVS signal distribution and forecast range**



Unit: 1000 subscribers

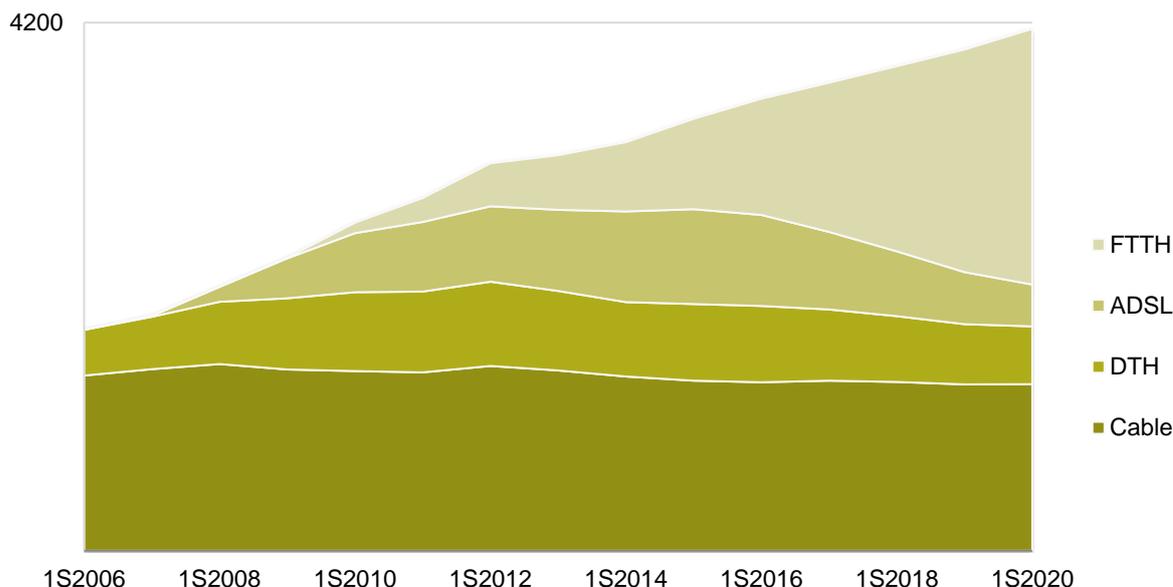
Source: ANACOM

Note: The estimation began in the 4Q2007, i.e. after the change of market structure arising from the spin-off of PT Multimédia. The modelling of this series was based on a multiple linear regression model with a distinct linear trend according to the periods: between 4Q2007 and 4Q2011; between 1Q2012 and 4Q2013 associated to the macroeconomic circumstances; from 1Q2014 onwards:  $Y_t = 1,925,971 + 60,305 t_1 + 796,064 \text{ est}_2 + 18,541 \text{ est}_2^2 + 381,746 \text{ est}_3 + 36,162 \text{ est}_3^3$ , where  $\text{est}_2$  and  $\text{est}_3$  are dummy variables for change of structure. Forecast range with a 95% significance level and adjusted  $R^2$  of 0.999.

The observed growth of was due to the offers based on optical fibre (FTTH), whose number of subscribers grew by 14.8%. This growth resulted not only from attracting new customers, but also from the transfer to FTTH of customers who were previously supported by other networks.

In the 1S2020, optical fibre was the main form of access to the service (49.0%), followed by cable television (31.9%), DTH (11.1%) and ADSL (8.0%). Since the beginning of 2018, optical fibre has been the main form of access to this service (Figure 2).

**Figure 2 – Evolution of subscribers to the TVS signal distribution by technology**



Unit: 1000 subscribers

Source: ANACOM

Note: Number of subscribers by technology at the end of the first half of each year.

### 3.2. Shares per provider

At the end of the 1S2020, MEO was the provider with the largest share of subscribers (39.8%), having surpassed the NOS Group (39.7%). This was followed by Vodafone (16.7%) and NOWO (3.7%) – see Table 2.

Vodafone and MEO were the providers that, in net terms, had the most subscribers compared to the same period of the previous year, with their shares having increased by 0.9 p.p. and 0.3 p.p., respectively. On the other hand, a reduction occurred in the shares of the NOS Group (0.9 p.p.) and NOWO (0.3 p.p.).

**Table 2 – Shares of subscribers to the subscription TV signal distribution service**

|                  | 1S2019      | 1S2020      | Var. (p.p.)<br>1S2019/1S2020 |
|------------------|-------------|-------------|------------------------------|
| MEO              | 39.6        | <b>39.8</b> | 0.3                          |
| NOS Group        | <b>40.5</b> | 39.7        | -0.9                         |
| NOS Comunicações | 37.9        | 37.1        | -0.8                         |
| NOS Madeira      | 1.8         | 1.7         | 0.0                          |
| NOS Açores       | 0.9         | 0.8         | 0.0                          |
| Vodafone         | 15.8        | 16.7        | 0.9                          |
| NOWO             | 4.0         | 3.7         | -0.3                         |
| Other providers  | 0.1         | 0.1         | 0.0                          |

Unit: %

Source: ANACOM

Note 1: Some operators are active in specific segments of the market. The relative position that operators occupy in this table should not be interpreted as an indicator of the quality of services provided or of the performance of these operators in the segments in which they operate.

Note 2: The variations presented above might not correspond exactly to the values in the table due to rounding off.

The concentration level, as measured by the Herfindahl-Hirschman index<sup>1</sup>, although high, decreased compared to the same period of the previous year. The current trend of decreasing concentration trend began in 2013, with the launch of Vodafone's triple play deal supported on FTTH. Since the start of 2018, the concentration level has shown insignificant reductions.

#### 4. Number of subscribers by technology

In the 1S2020, the number of subscribers to the TVS signal distribution service supported on optical fibre (FTTH), representing 49.0% of total subscribers, surpassed 2 million, 263 thousand more (+14.8%) than in the same period of the previous year (Table 3).

<sup>1</sup> The Herfindahl-Hirschman (HHI) index is frequently used by the European Commission to assess market concentration levels. This index is calculated by adding the squares of the individual market shares of all market participants. Its theoretical values vary between approximately zero (in a fragmented market) and 10,000 (in the case of an absolute monopoly). When the HHI is over 1,800, the market is considered to be highly concentrated. Between 1,000 and 1,800, the market is considered to be moderately concentrated.

**Table 3 – Subscribers to the TVS signal distribution service by technology**

|              | 1S2019       | 1S2020       | Var. (%)<br>1S2019/1S2020 |
|--------------|--------------|--------------|---------------------------|
| FTTH         | 1 769        | 2 032        | 14.8                      |
| Cable        | 1 324        | 1 324        | 0.1                       |
| DTH          | 478          | 460          | -3.6                      |
| ADSL         | 414          | 334          | -19.5                     |
| <b>Total</b> | <b>3 985</b> | <b>4 150</b> | <b>4.1</b>                |

Unit: 1000 subscribers; %

Source: ANACOM

Note: The variations presented above might not correspond exactly to the values in the table due to rounding off.

The number of cable television service subscribers was 1.3 million, a figure similar to that recorded in the same period of the previous year, at which time it reached the lowest value of recent years.

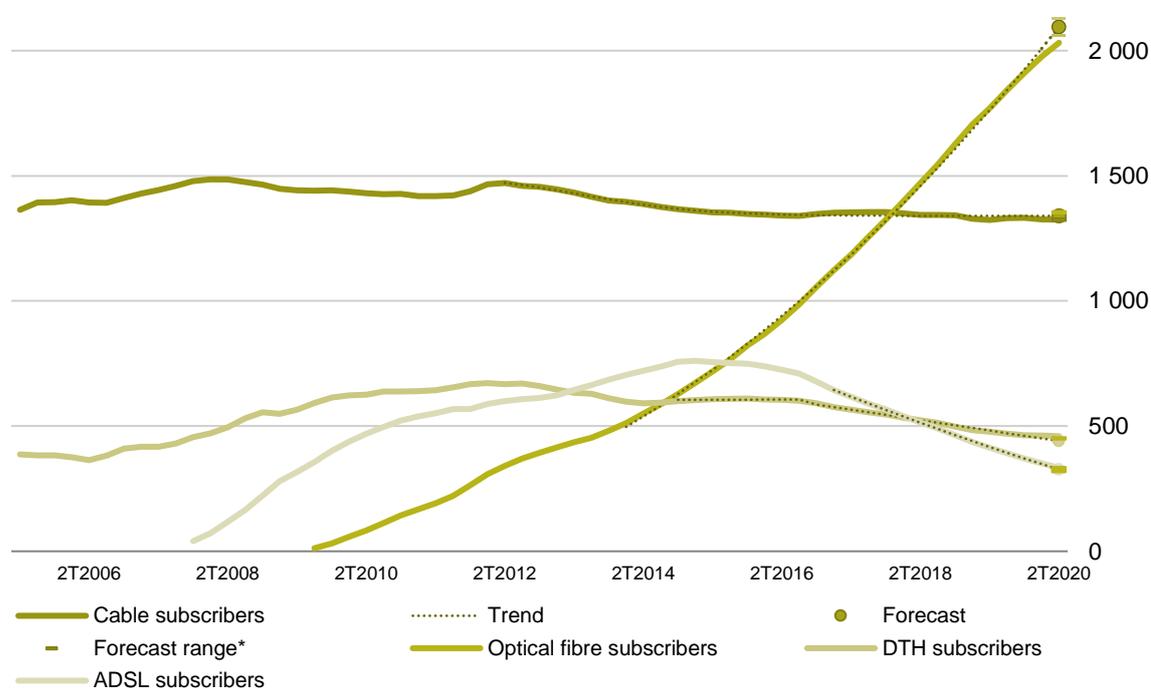
The number of DTH subscribers reached 460 thousand, corresponding to 17 thousand less (-3.6%) than in the same period of the previous year (in the first half of 2019 it had decreased by 45 thousand accesses). These are the lowest absolute and relative reductions since 2016.

The subscribers to the TVS signal distribution service supported on ADSL reached around 334 thousand, 81 thousand less (-19.5%) than in the same period of the previous year (in the first half of the year it had decreased by 100 thousand accesses). In this half year the absolute reduction recorded was the lowest since the end of 2016.

The evolution described above could be associated to the impact of COVID-19 on the activity of the providers and on the needs of the users. Reference should also be made to the possible effect of the reduction of the monthly payment of 3P deals by satellite, both at MEO and NOS, that occurred in the half year under review.

It should be noted that the number of subscribers supported on optical fibre and the number of subscribers supported on cable TV networks are below the respective forecast range derived from the historical trend. In contrast, the number of DTH and ADSL subscribers are above the estimated variation range (Figure 3).

**Figure 3 – Evolution of subscribers to the subscription TV signal distribution service by technology and forecast range**



Unit: thousands of subscribers

Source: ANACOM

Note: \* Forecast range with a 95% significance level.

**Optical fibre subscribers:** A regression model with a quadratic trend was used:  $Y = 456,583 + 39,350 t + 909t^2$ . Adjusted  $R^2$  equal to 0.999.

**Cable subscribers:** A non-linear logistic model was used:  $Y = 1,339.596 + 166,921 / (1 + \exp(0.29*(t-5.58)))$ . The modelling was done in the second quarter of 2012. Adjusted  $R^2$  of 0.970.

**DTH subscribers:** A linear regression model was used:  $Y = 680.233 - 10.424t - 75,439est + 10,603est*t$ , with a dummy variable associated to the period of 4Q2014 to 3Q2016 during which the convergent deals of TV by satellite and internet and voice supported on 4G were launched, that inverted the downward trend observed since the beginning of 2012. The modelling started in the 4Q2014. Adjusted  $R^2$  of 0.994.

**ADSL subscribers:** The modelling started in the 1Q2017. Following 2T2015 there was a turning point associated to the stronger growth of TVS customers who adopted new technological platforms (especially FTTH). A regression model with a quadratic trend was used:  $Y = 671,681 - 27,675 t - 215t^2$ . Adjusted  $R^2$  of 0.999.

This time series includes the subscribers who subscribed to the TVS signal distribution service through the AR Telecom deals on fixed access via radio – FWA using a proprietary standard. This provider stopped offering this type of services on 30 November 2011.

## 5. Number of subscribers by customer segment

The information relative to the number of subscribers by customer segment is presented below.

### 5.1. Number of subscribers by customer segment

In the 1S2020, the number of residential subscribers to the subscription TV signal distribution service (89.2% of total subscribers) reached 3.7 million, 138 thousand more

(3.9%) than in the same period of the previous year (Table 4). Total non-residential subscribers amounted to 446 thousand (10.8%), having grown by 6.4%.

**Table 4 – Subscribers to the TVS signal distribution service by customer segment**

|                             | 1S2019       | 1S2020       | Var. (%)<br>1S2019/1S2020 | Weight (%)<br>1S2020 |
|-----------------------------|--------------|--------------|---------------------------|----------------------|
| Residential subscribers     | 3 566        | 3 704        | 3.9                       | 89.2                 |
| Non-residential subscribers | 419          | 446          | 6.4                       | 10.8                 |
| <b>Total</b>                | <b>3 985</b> | <b>4 150</b> | <b>4.1</b>                | <b>100.0</b>         |

Unit: 1000 subscribers; %

Source: ANACOM

## 5.2. Shares per provider

The NOS Group had the highest share of residential subscribers (40.5%), followed by MEO (38.5%), Vodafone (17.0%) and NOWO (4.0%) – see Table 5. The shares of Vodafone and MEO increased (+1 p.p. and +0.3 p.p., respectively), while the shares of the NOS Group and NOWO decreased (-0.9 p.p. and -0.3 p.p., respectively).

**Table 5 – Shares of residential subscribers to the subscription TV signal distribution service**

|                  | 1S2019 | 1S2020 | Var. (p.p.)<br>1S2019/1S2020 |
|------------------|--------|--------|------------------------------|
| NOS Group        | 41.4   | 40.5   | -0.9                         |
| NOS Comunicações | 38.7   | 37.8   | -0.9                         |
| NOS Madeira      | 1.8    | 1.8    | 0.0                          |
| NOS Açores       | 0.9    | 0.9    | 0.0                          |
| MEO              | 38.2   | 38.5   | 0.3                          |
| Vodafone         | 16.0   | 17.0   | 1.0                          |
| NOWO             | 4.3    | 4.0    | -0.3                         |
| Other providers  | 0.1    | 0.0    | 0.0                          |

Unit: %

Source: ANACOM

Note 1: Some operators are active in specific segments of the market. The relative position that operators occupy in this table should not be interpreted as an indicator of the quality of services provided or of the performance of these operators in the segments in which they operate.

Note 2: The variations presented above might not correspond exactly to the values in the table due to rounding off.

In the case of non-residential subscribers, MEO had the highest share (51.3%), followed by the NOS Group (32.8%), Vodafone (14.1%) and NOWO (1.2%) – see Table 6.

Vodafone recorded an increase of the share of non-residential subscribers compared to the same period of the previous year (+0.6 p.p.). MEO, the NOS Group and NOWO recorded decreases (-0.3 p.p., -0.2 p.p. and -0.1 p.p., respectively).

**Table 6 – Shares of non-residential subscribers to the subscription TV signal distribution service**

|                  | 1S2019 | 1S2020 | Var. (p.p.)<br>1S2019/1S2020 |
|------------------|--------|--------|------------------------------|
| MEO              | 51.5   | 51.3   | -0.3                         |
| NOS Group        | 33.0   | 32.8   | -0.2                         |
| NOS Comunicações | 31.2   | 31.0   | -0.2                         |
| NOS Madeira      | 1.3    | 1.3    | 0.0                          |
| NOS Açores       | 0.6    | 0.5    | 0.0                          |
| Vodafone         | 13.5   | 14.1   | 0.6                          |
| NOWO             | 1.3    | 1.2    | -0.1                         |
| Other providers  | 0.7    | 0.7    | 0.0                          |

Unit: %

Source: ANACOM

Note 1: Some operators are active in specific segments of the market. The relative position that operators occupy in this table should not be interpreted as an indicator of the quality of services provided or of the performance of these operators in the segments in which they operate.

Note 2: The variations presented above might not correspond exactly to the values in the table due to rounding off.

## **Methodological note**

## Methodological note

### a. Sources

- Quarterly survey on electronic communications networks and services.

Information collected quarterly from electronic communications providers in accordance with the specifications and definitions contained in Annex 2 of the Regulation on the provision of statistical information (Regulation 255/2017, published on 16 May 2017: <https://www.anacom.pt/render.jsp?contentId=1415433>). The reference date for the information presented is 30-07-2020. The quarterly information now made available may be subject to revisions or updates.

- Statistical aggregates published by Statistics Portugal (INE).

This report uses the most recent estimates of the population, private family homes and private households, after the 2011 Census. For this reason, the penetration figures are not comparable with those of previous reports.

### b. Definitions and notes

- Subscribers.

See Section I.5 of Annex 2 of the Regulation on the provision of statistical information (Regulation 255/2017, published on 16 May 2017: <https://www.anacom.pt/render.jsp?contentId=1415433>).

For accounting purposes, the figures for subscribers and shares do not consider the services provided under the protocol signed between the Government of the Republic, Regional Governments, ANACOM, NOS Açores and NOS Madeira, which aim to guarantee citizens of the archipelagos free access to generalist channels nationwide and the gradual migration from analogue to digital technology.

- Private households.

Statistical aggregate consisting of the group of people residing in the same accommodation and who have kinship relationships (in law or in fact) with each other, including any independent person who occupies all or part of an accommodation unit (see <http://smi.ine.pt/Conceito/Details/1123#Hist%C3%B3rico>).

### c. Initials and abbreviations

|      |                                    |      |   |        |                    |
|------|------------------------------------|------|---|--------|--------------------|
| ADSL | Asymmetric Digital Subscriber Line | FTTH | Fibre-to-the-Home                                   | 1S2019 | First half of 2019 |
| DTH  | Direct to Home                     | TVS  | Subscription television signal distribution service | 1S2020 | First half of 2020 |

### d. Conventional signs

|   |            |      |                   |
|---|------------|------|-------------------|
| % | percentage | p.p. | percentage points |
|---|------------|------|-------------------|