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Swedish Telecommunications Market 2020

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Contents

Summary

The Swedish Post and Telecom Authority (PTS) has been tasked with monitoring service developments in the market for electronic communication, promoting competition within this market and providing information aimed at consumers. As a part of this assignment, PTS annually collects and publishes market data in this report, *The Swedish Telecommunications Market*. *The Swedish Telecommunications Market* is one of Sweden's most important operator surveys on subscriptions, revenues and data traffic in the fields of mobile subscriptions, broadband, fixed-line telephone services and traditional TV services. The report is based on PTS's own data collection, which covers the developments of operators and other stakeholders.

All figures refer to the situation on 31 December 2020, and comparisons are made with the same date the previous year. The survey was sent out to 615 organisations (operators, municipalities and other organisations). Of these operators, 10 operators were no longer active. Of the remaining 605 operators, 588 responded. This results in a response rate of 97 per cent.

Mobile networks were used more intensively in 2020. Data traffic in mobile networks increased by 36 per cent, which is a higher rate of increase compared to the last period's increase of 26 per cent. At the same time, the number of traffic minutes in mobile networks increased by about 11 per cent, which is the fastest rate of increase in many years. Data traffic in 5G networks was reported by two operators in 2020.

The number of fixed broadband subscriptions via fibre increased by 9 per cent and now accounts for three quarters of all fixed broadband subscriptions. More than 80 per cent of all fixed broadband subscriptions have a download speed of at least 100 Mbps. Subscriptions with speeds of 1 Gb/s increased by 49 per cent.

The number of broadband subscriptions via the traditional copper network (xDSL) has fallen by 50 per cent over a three year period, and there are now just 360,000 such subscriptions left.

There were 1.5 million subscriptions for fixed-line telephony, which was a reduction of 15 per cent. Both IP telephony subscriptions and traditional fixed-line telephony via the copper network decreased.

For the first time in many years, the number of fixed-line telephony traffic minutes for companies increased. This was a result of the Covid-19 pandemic. The increase is due to greater use among corporate customers.

In 2020, revenues from telephony, broadband and data communication services totalled SEK 49.9 billion, which is 1 per cent lower than the previous year. Reduced revenues in fixed-line telephony, mobile telephony and mobile broadband are partly offset by an increase in fixed broadband revenues.

More information is available on the PTS statistics portal:
https://statistik.pts.se/en/the-swedish-telecommunications-market/

Sammanfattning

Post- och telestyrelsen (PTS) har i uppdrag att följa tjänsteutvecklingen på marknaden för elektronisk kommunikation, att främja konkurrensen inom denna marknad och att bedriva informationsverksamhet riktad till konsumenter. Som en del av dessa uppdrag arbetar PTS med att samla in och publicera marknadsdata som redovisas i denna rapport, Svensk telekommarknad. Svensk telekommarknad är en av Sveriges viktigaste operatörsundersökningar om abonnemang, intäkter och datatrafik inom områdena mobila abonnemang, bredband, fasta samtalstjänster och traditionella tv-tjänster. Rapporten är baserad på PTS egen datainsamling som undersöker operatörers och andra aktörers utveckling.

Alla sifferuppgifter avser förhållandet per den 31 december 2020, och jämförelser görs med samma tidpunkt föregående år. Undersökningen skickades ut till 615 aktörer (operatörer, kommuner och andra aktörer). Av dessa aktörer var 10 aktörer inte längre aktiva. Av resterade 605 aktörer svarade 588 aktörer. Det ger en svarsfrekvens på 97 procent.

Mobilnäten användes mer intensivt under 2020. Datatrafiken i mobilnäten ökade med 36 procent, vilket är en högre ökningstakt jämfört med förra periodens ökning med 26 procent. Samtidigt ökar antalet trafikminuter i mobilnäten med cirka 11 procent, vilket är den snabbaste ökningstakten på många år. Datatrafik i 5G-nät rapporteras från två operatörer under 2020.

Antalet abonnemang för fast bredband via fiber ökade med 9 procent och står nu för tre fjärdedelar av alla fasta bredbandsabonnemang. Mer än 80 procent av alla abonnemang på fast bredband har en nedladdningshastighet på minst 100 Mbit/s. Abonnemang med hastigheter på 1 Gb/s ökade med 49 procent.

Antalet abonnemang för bredband via det traditionella kopparnätet (xDSL) har halverats på tre år, och det finns nu 360 000 sådana abonnemang kvar.

Det fanns vid 1,5 miljoner abonnemang för fast telefoni, en minskning med 15 procent. Såväl abonnemangen på ip-telefoni som traditionell fast telefoni via kopparnätet minskade.

För första gången på många år ökade antalet trafikminuter inom fast telefoni för företag vilket också är en pandemieffekt. Ökningen beror på större användning bland företagskunder.

Under 2020 var intäkterna för tjänster inom telefoni, bredband och datakommunikation 49,9 miljarder kronor, vilket är 1 procent lägre än föregående år. Minskade intäkter inom fast telefoni, mobiltelefoni och mobilt bredband kompenseras delvis av att intäkterna inom fast bredband ökade.

På PTS statistikportal finns mer information https://statistik.pts.se/

1. Introduction

The Swedish Post and Telecom Authority (PTS) has been tasked with monitoring service developments in the market for electronic communication, promoting competition within this market and providing information aimed at consumers. As a part of this assignment, PTS collects and publishes market data in this report, *The Swedish Telecommunications Market*.

The Swedish Telecommunications Market is a descriptive report, without analysis. However, the statistics from the report are used in PTS's analyses conducted within the context of the agency's areas of responsibility. The statistics are also used by, e.g., the Ministry of Infrastructure, various public authorities, Swedish industry, investigators, researchers, media, trade associations, individual companies and organisations, as well as the general public.

The Swedish Telecommunications Market is one of Sweden's most important operator surveys on subscriptions, revenues and data traffic in the fields of mobile subscriptions, broadband, fixed-line telephone services and traditional TV services. The survey also covers digital capacity services, black fibre connections and more.

The survey is carried out twice a year, for the first half and the full year. This report is for the full year 2020 and, as in previous years, is based on PTS's own data collection.

The statistics have been collected with the aid of an online questionnaire. The selection for the Swedish Telecommunications Market is based partly on the selection of organisations in previous years and partly on organisations of which PTS has been notified according to the Act (2003:389) regarding electronic communication (LEK).

The survey was sent out to 615 organisations (operators, municipalities and other organisations). Of these operators, 10 were no longer active. Of the remaining 605, 588 responded. This results in a response rate of 97 per cent.

Of the 605 operators in the survey, most (448) were private Swedish companies, 12 were economic associations, 56 were publicly owned Swedish companies (over 50%-owned by public actors such as the Swedish state, municipalities, state-run companies, etc.) and 89 foreign companies (without a Swedish company registration number).

All figures refer to the situation on 31 December 2020, and comparisons are made with the same date in the previous year, unless otherwise stated.

For further information about the survey, please refer to the *Quality Declaration*.

1.1 Do you wish to produce more detailed statistics and know more?

On the PTS statistics portal:

https://statistik.pts.se/en/the-swedish-telecommunications-market/

you can search for and sort statistics in the different areas. Data quantities and market shares for the individual operators are also available.

For further information, see the statistics portal and the documents:

- tables with statistics
- quality declaration,
- change log with historical changes,
- list of participants.

Table 1 A selection of results

	2020	2019	Change
Total end customer revenues (in SEK million)	49,867	50,453	-1%
Mobile subscriptions			
Mobile subscriptions - total (in thousands)	14,275	14,208	0%
Outgoing traffic minutes (in millions)	40,149	36,291	11%
Mobile data services traffic (Tbytes)	1,823,345	1,340,058	36%
Revenues from mobile subscriptions - total (in SEK million)	29,572	30,093	-2%
Number of M2M SIM cards (in thousands)	16,874	15,005	12%
Internet services			
Subscriptions for fixed broadband (in thousands)	4,180	4,039	3%
via fibre and fibre LANs (in thousands)	3,136	2,875	9%
via xDSL (in thousands)	356	483	-26%
Revenues from fixed broadband subscriptions (in SEK million)	13,991	13,198	6%
Fixed-line voice services			
Fixed-line telephony subscriptions (in thousands)	1,479	1,749	-15%
Revenues from fixed-line voice services (in SEK million)	3,308	3,957	-16%
TV services			
Digital TV subscriptions (in thousands)	4,012	2,829	42%
Number of analogue TV subscriptions (in thousands)	485	2,277	-77%
Revenues from basic subscription packages for TV services (in SEK million)	8,004	8,342	-4%
Data communication services, etc.			
Revenues from data communication services to end customers (in SEK million)	2,996	3,205	-7%
Revenues from dark fibre and wavelength connections (in SEK million)	5,280	4,909	8%
Bundled services			
Number of bundled subscriptions (in thousands)	1,417	1,210	17%

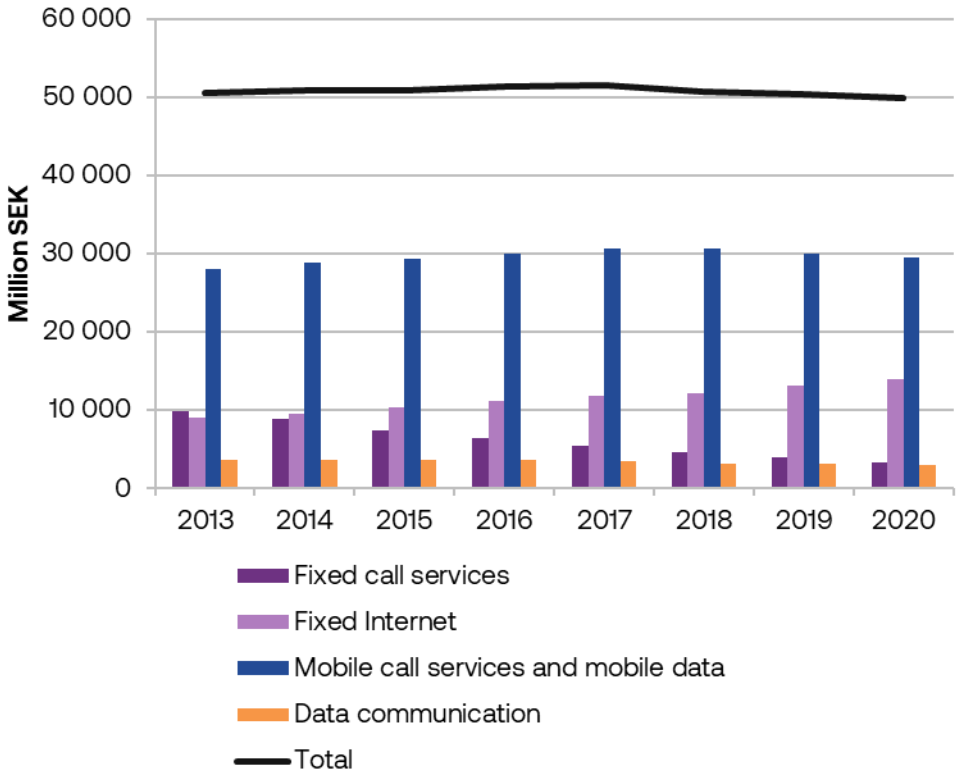
2. Revenues in electronic communications

For the purposes of this report, “electronic communications” comprise mobile voice and data services, fixed internet services, fixed-line voice services and data communications services provided to end users. Revenues from, e.g., TV subscriptions, roaming, apps, cloud services are not included here, nor are revenues from wholesale services. In 2020, telecommunications revenues from end customers totalled SEK 49.9 billion, which is 1 per cent lower than the previous year.

In 2020, the average revenue[1] generated per household per month was SEK 601, which is the same level as during 2019. The average revenue per month includes fixed-line voice services, SEK 28 (a SEK 8 reduction); mobile voice and data services, SEK 369 (a SEK 6 reduction), and internet services (excluding mobile data), SEK 204 (SEK 13 increase).

[1] Average revenue is calculated as revenues for 2020 divided by the average number of subscriptions per household

Figure 1 Revenues in the end customer market for electronic communications

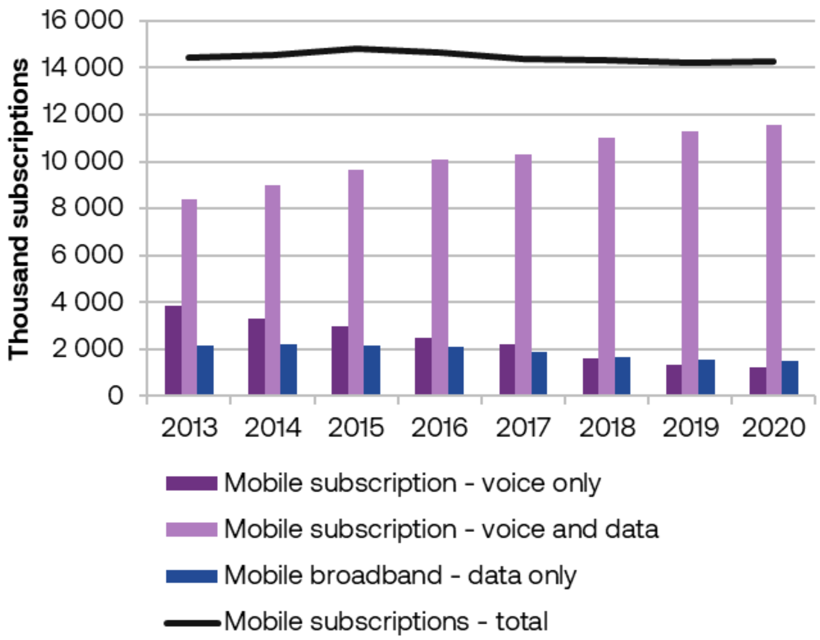


3. Mobile subscriptions and M2M

There were a total of 14.3 million mobile subscriptions on 31 December 2020, which was at the same level as a year earlier (see Figure 2 below). There were 11.5 million mobile subscriptions for both voice and data services, which are often used on smartphones, an increase of 2 per cent compared to the previous year. There were 1.5 million data-only mobile subscriptions, which is 4 per cent fewer than the previous year. There were 1.2 million voice-only mobile subscriptions, a reduction of 7 per cent.

80 per cent of the total number of mobile subscriptions were contract subscriptions, while the others were pay-as-you-go (cash cards). The proportion of contract subscriptions has increased steadily; 10 years ago the corresponding proportion was 66 per cent.

Figure 2 Number of mobile subscriptions

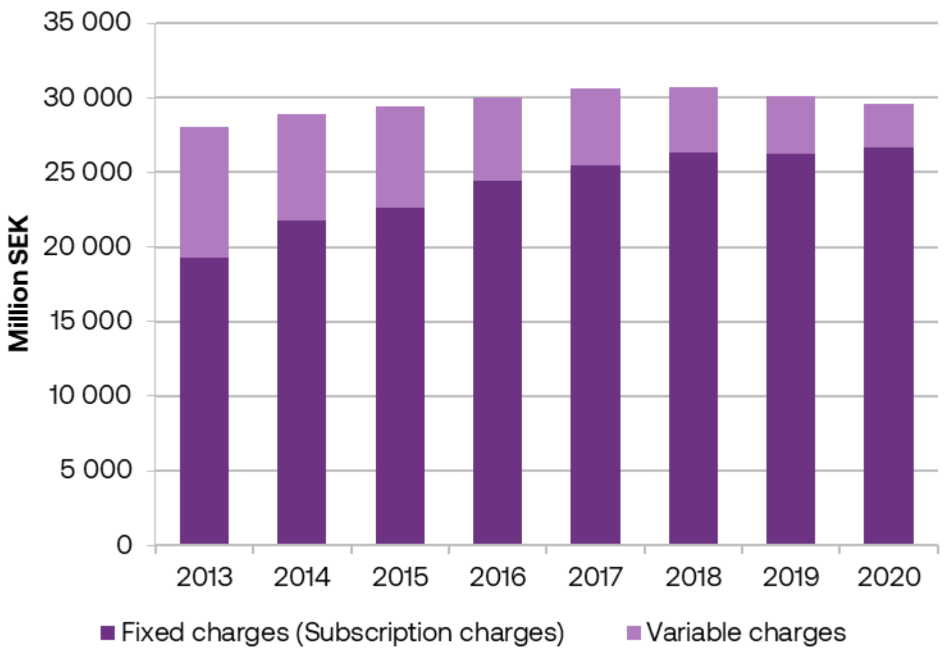


3.1 Revenues from mobile subscriptions continue to decline

End user revenues from mobile subscriptions totalled approximately SEK 29.6 billion. This is 2 per cent lower than the previous year and the third year in a row in which mobile revenues have fallen.

Of these revenues, 90 per cent were from fixed charges (subscriptions) and the rest were from variable charges. Revenues from fixed charges totalled SEK 26.7 billion, an increase of 2 per cent. Variable charges fell by 25 per cent, to SEK 2.9 billion.

Figure 3 Revenues from mobile subscriptions



3.2 Data traffic in the mobile networks is increasing

Data traffic in the mobile networks increased to 1,823 Pbytes[2] during 2020 (see Figure 4 below). This was an increase of 36 per cent, which is a higher rate of increase than the previous period (26 per cent).

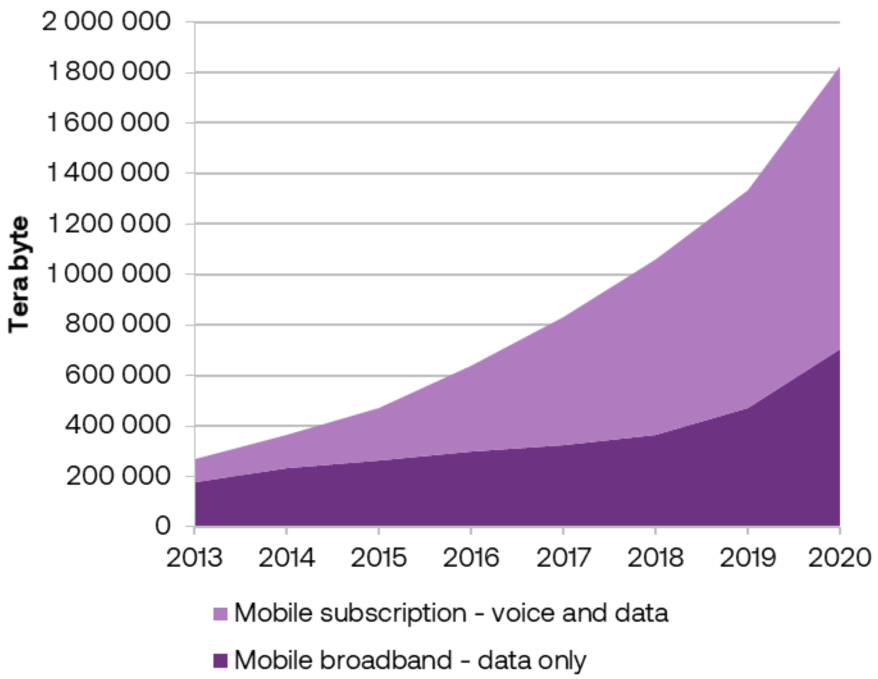
Some operators have indicated that the pandemic has contributed to increased data volumes.

[2] Peta=1[15]

Private mobile subscriptions for voice and data services drove traffic growth and generated an average of 9.6 Gbytes per subscription per month, which was an increase of 7.7 per cent compared to the previous year. The average amount of traffic for a private data-only mobile subscription was 55 Gbytes per month, an increase of 32.6 per cent compared to the previous year. In 2020, a few operators (Tre and Tele2) started reporting data traffic in 5G networks, which amounted to 2,607 Tbytes.

The number of subscriptions using data services in 4G networks continued to increase and amounted to 11.8 million, or 82 per cent of all mobile subscriptions.

Figure 4 Data traffic in mobile networks

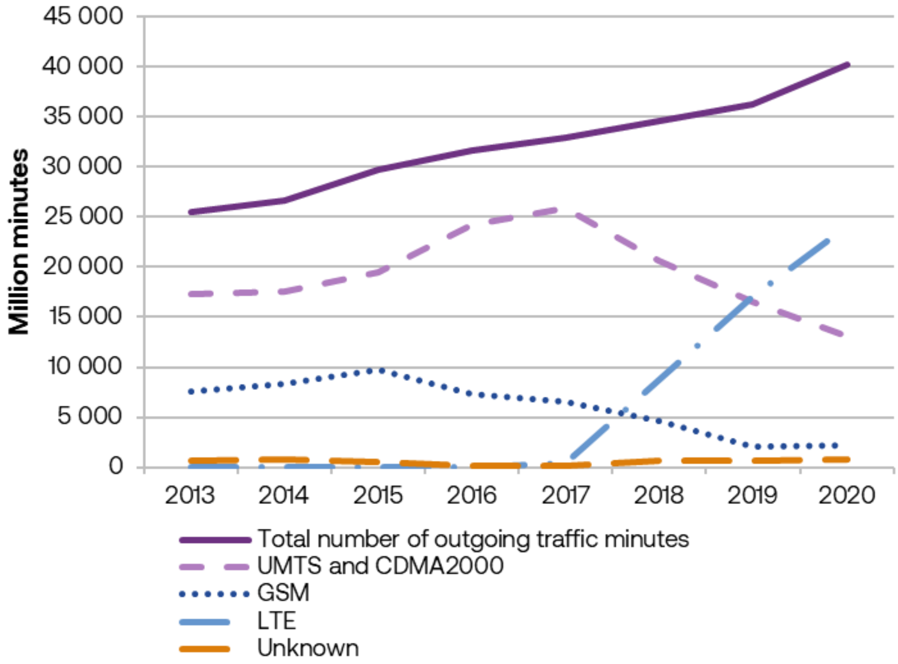


3.3 The number of mobile traffic minutes is increasing

The number of outgoing voice traffic minutes from mobile subscriptions totalled 40.2 billion in 2020. This is an increase of 11 per cent compared to the previous period, and a higher rate of increase than in 2019 (8 per cent).

The number of call minutes via 4G networks (VoLTE) totalled 24 billion, which corresponds to 60 per cent of all mobile voice traffic. This can be compared with 47 per cent the previous year. This increase comes at the expense of voice traffic in 3G networks (UMTS), which is falling (see Figure 5 below). No operator has yet reported traffic minutes over 5G networks.

Figure 5 Outgoing traffic minutes in mobile networks



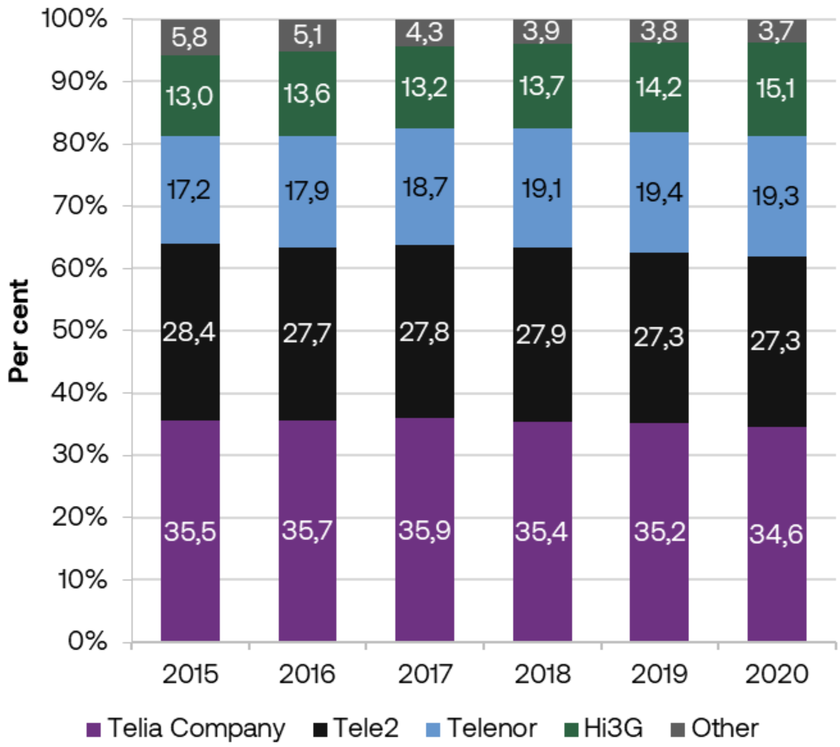
The average length of a mobile call was 3.9 minutes and the average number of calls per mobile subscription per month was 68, which was the same level as the previous year.

A total of 6.7 billion text messages were sent. This represents a decrease of 17 per cent compared to the previous year. On average, 44 SMS texts were sent per subscription per month, a reduction of 18 per cent compared to one year prior.

3.4 Market share - mobile services

Market share for mobile subscriptions includes mobile subscriptions for voice and data, voice-only mobile subscriptions, and data-only mobile broadband. The four largest companies, Telia Company, Tele2, Telenor and Hi3G (Three), had 96 per cent of all subscriptions between them, which is the same level as the previous year.

Figure 6 Market share of mobile subscriptions per operator



3.5 The number of M2M SIM cards continues to increase

There were 16.9 million SIM cards for M2M[3], which is an increase of 12 per cent. This rate of increase is slightly lower than in the previous year (16 per cent). Revenues from SIM cards for M2M totalled SEK 1.4 billion, an increase of 3 per cent[4].

Swedish M2M SIM cards are not necessarily used within Sweden, but also by customers abroad. Of the 16.9 million M2M SIM cards, 3.9 million were reported to be used in Sweden and revenues for these amounted to SEK 600 million. The largest player in M2M in Sweden, Telenor Connexion, has reported 1.6 million M2M SIM cards used in Sweden, an increase of 8 per cent since the previous year.

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[3] M2M refers to technology for wireless communication between different devices. M2M solutions are used for, e.g., monitoring, measurement, control, transport and logistics.

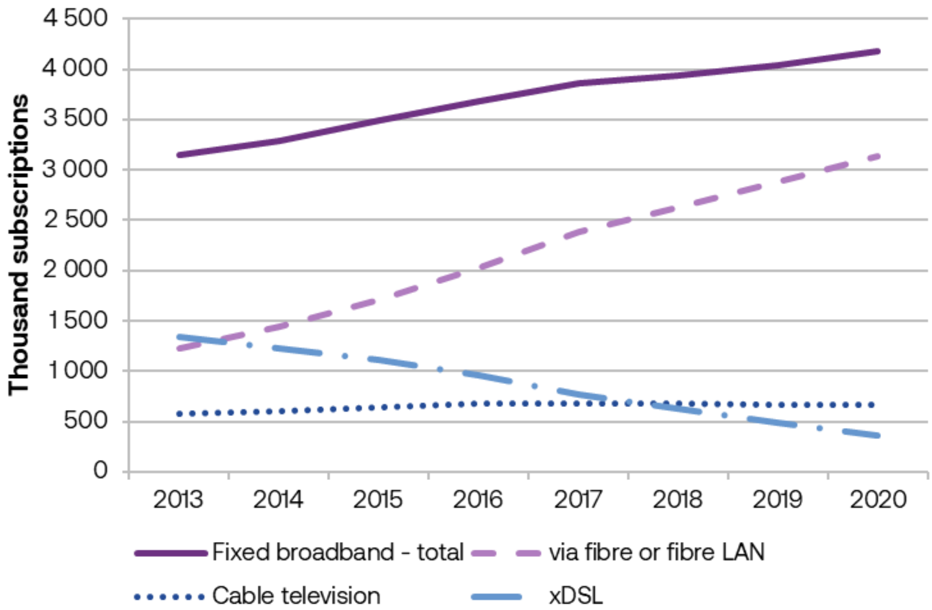
4. Fixed broadband

4.1 Fibre subscriptions continue to increase

On 31 December 2020 there were 4.2 million fixed broadband subscriptions, which corresponds to an increase of 3 per cent. There were a total of 3.1 million fibre subscriptions. This was an increase of 9 per cent, the same degree of increase as in the previous periods.

Fibre accounted for the lion's share of the growth in fixed broadband and amounted to more than two-thirds (75 per cent) of all fixed broadband subscriptions (see Figure 7 below). The number of fixed broadband subscriptions via cable TV networks amounted to 0.7 million (+1 per cent), subscriptions via xDSL totalled 0.4 million (-26 per cent), and the number of other fixed broadband subscriptions totalled 14,900 (+5 per cent). The category "other fixed broadband" includes fixed radio and satellite connections.

Figure 7 Number of fixed broadband subscriptions

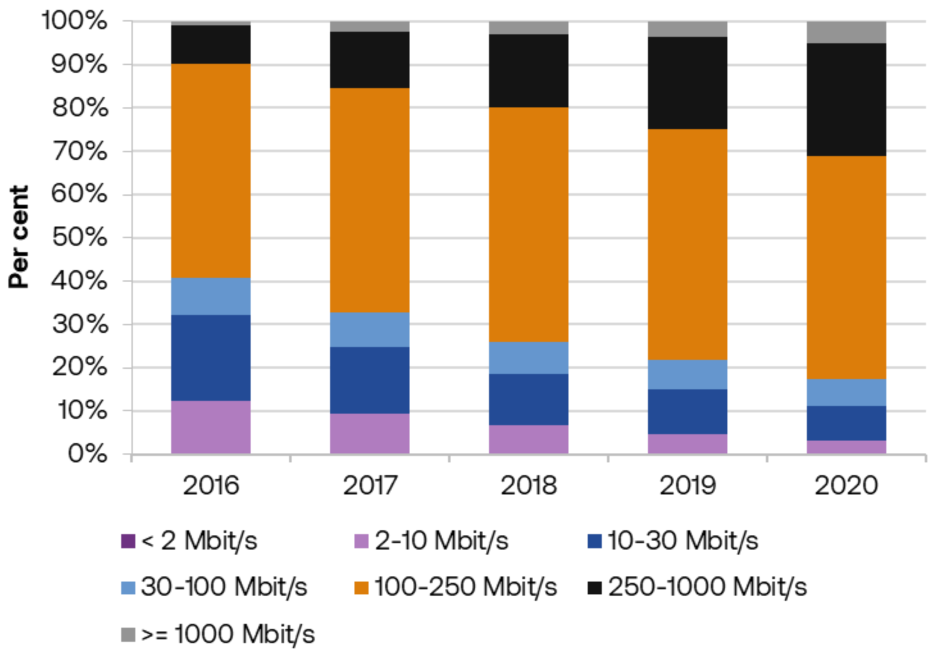


4.2 100 Mbps subscriptions (both upload and download speeds) are increasing

There were 3.5 million subscriptions with download speeds of 100 Mbps or more, which was an increase of 9 per cent. 83 per cent of all subscriptions in Sweden had a speed of 100 Mbps or more, which was an increase from 78 per cent. Subscriptions with speeds of 1 Gbps or more have also increased. These were up 48 per cent compared to the previous year, for a total of 216,000 subscriptions.

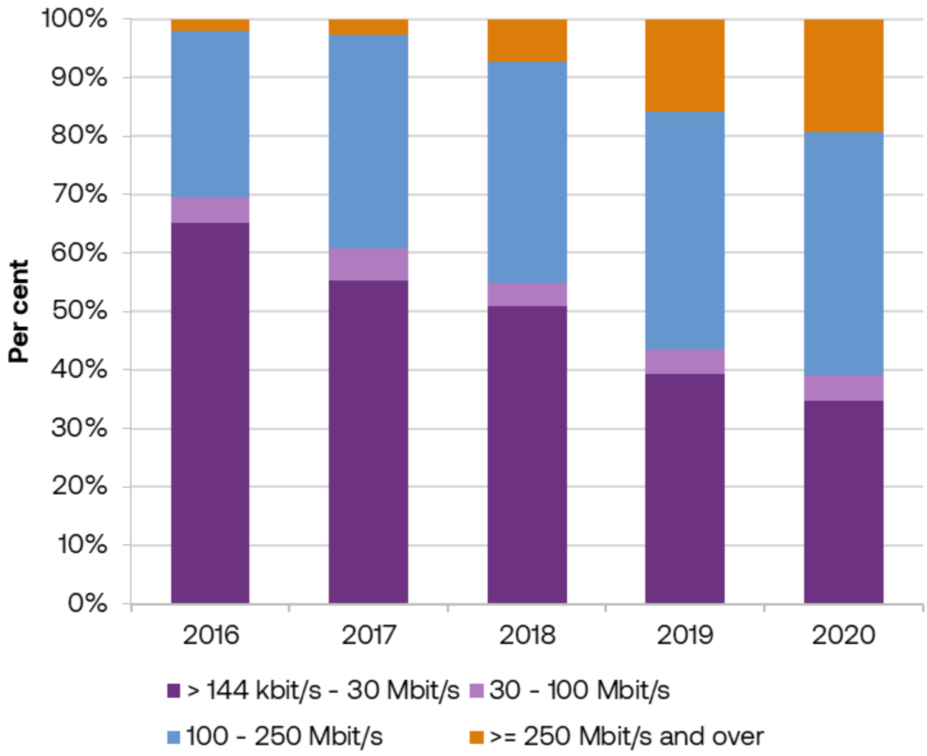
There were 2.9 million subscriptions with a download speed of 100 Mbps or more (an increase of 11 per cent), while there were a total of 582,000 subscriptions via cable TV networks with the same speed, an increase of 1 per cent.

Figure 8 Proportion of fixed broadband subscriptions per speed - download



Upload speeds for fixed broadband subscriptions are also increasing. The number of fixed broadband subscriptions with upload speeds of 100 Mbps or more increased by 12 per cent, to 2.6 million. This accounts for more than half of all fixed broadband subscriptions.

Figure 9 Proportion of fixed broadband subscriptions by upload speed



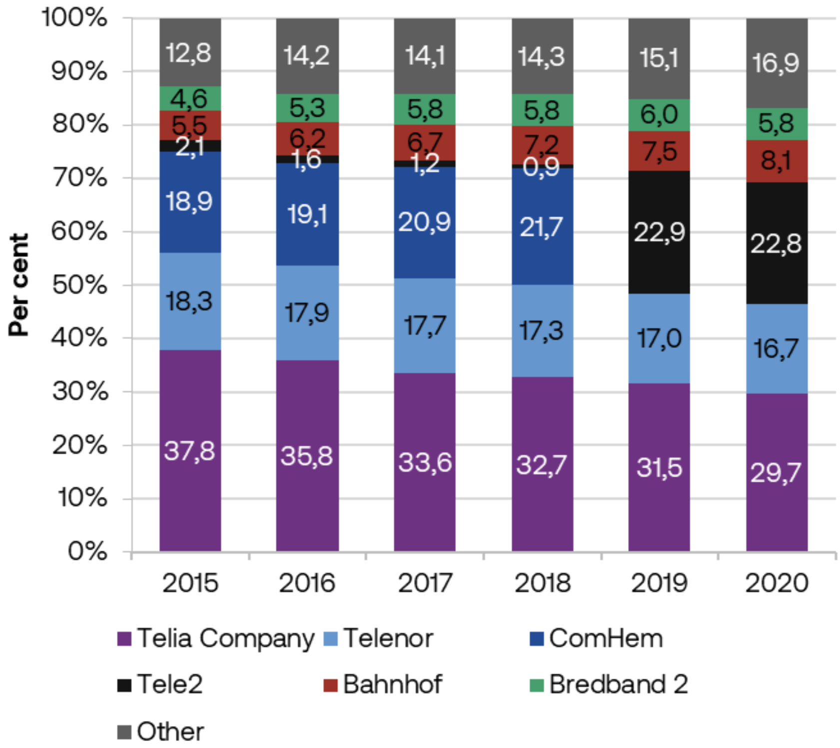
4.3 Increase in the number of collective connections

Approximately 1 million broadband subscriptions were stated to be collective connections. This is an increase of 10 per cent. This year's increase of 10 percent is slightly lower than the increase in previous periods, which has been between 12 and 16 percent since 2017. “Collective connections” are private internet subscriptions negotiated with, e.g., landlords, tenant-owners’ associations, housing associations or local residents’ associations rather than directly with the end customer. Of the total number of private fibre subscriptions, 27 per cent were via collective connections.

4.4 Market share - Fixed broadband

The market share of fixed broadband subscriptions includes subscriptions to xDSL, cable TV, fibre, as well as technologies such as satellite and fixed radio/radio links. The three largest operators, Telia Company, Telenor and Tele2, accounted between them for 69 per cent of fixed broadband subscriptions. The five largest operators in fibre subscriptions were Telia Company, Telenor, Bahnhof, Tele2 and Bredband2, which together had 83 per cent. The “Others” accounted for 16.9 per cent of market share and includes 180 operators. The largest group was A3[5] with 5 per cent.

Figure 10 Proportion of fixed broadband subscriptions per operator



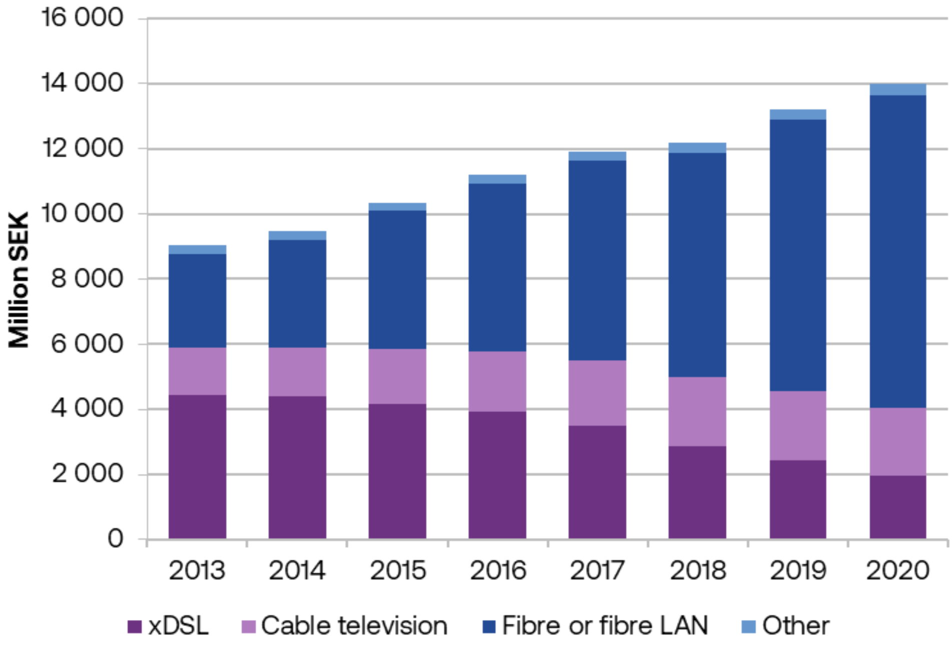
4.5 Revenues from fixed broadband increased

In 2020, revenues from fixed broadband subscriptions totalled SEK 14 billion. That is 6 per cent higher than the previous year. Revenues from fibre subscriptions[6] increased by 15 per cent to SEK 9.6 billion. Revenues from broadband subscriptions via cable TV subscriptions decreased by 1 per cent to SEK 2,1 billion, and revenues from xDSL subscriptions fell by 20 per cent to SEK 2 billion. Revenues from

[5] Bredand2 acquired A3 (A3 Företag AB, A3 Privat AB, A3 Sverige AB) in 2020, but in this report the companies are reported separately.
[6] PTS has estimated Bahnhof's revenues from broadband subscriptions via fibre for the years 2015 – 2019, because Bahnhof misunderstood the question.

subscriptions via other access technologies totalled SEK 331 million. Revenues from dial-up internet connections were negligible.

Figure 11 Revenues from fixed broadband subscriptions

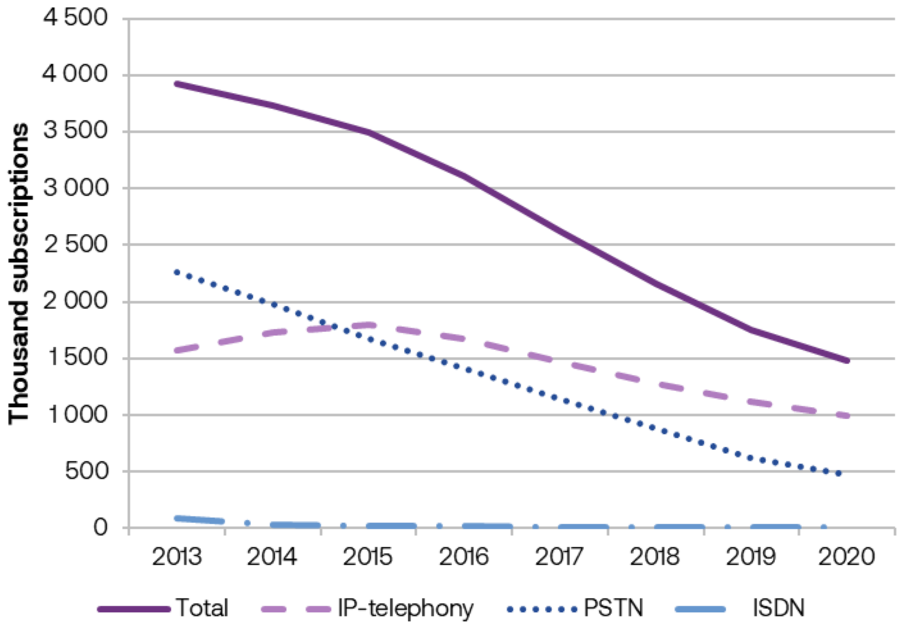


5. Subscriptions for fixed-line telephony

5.1 Subscriptions for fixed-line telephony continue to fall

There were 1.5 million subscriptions for fixed-line telephony, which was a reduction of 15 per cent. Of these, 1 million (68 per cent) were subscriptions for IP telephony (see Figure 12 below).

Figure 12 Number of subscriptions for fixed-line telephony

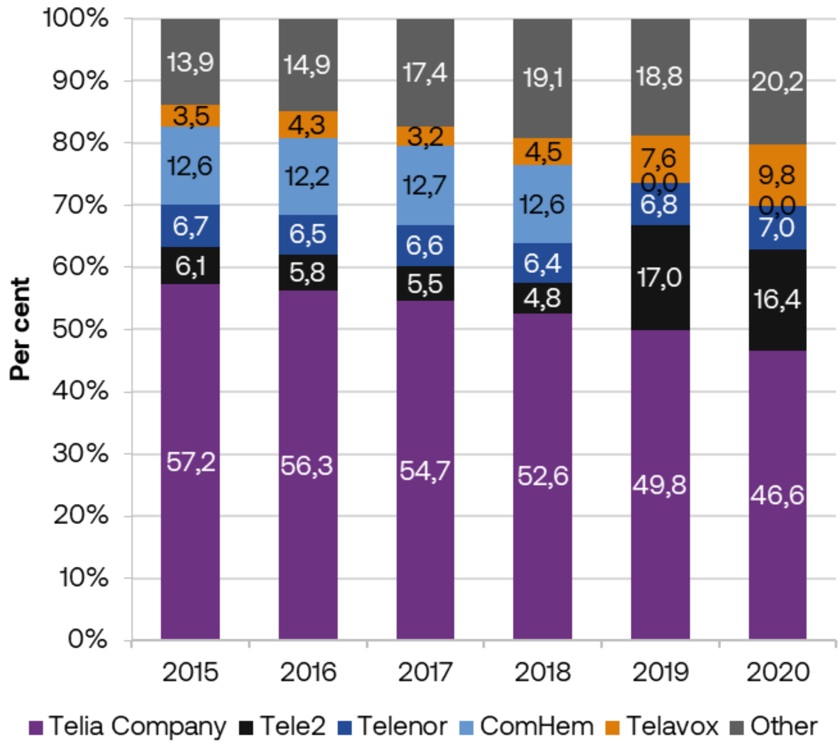


For the first time in many years, the number of fixed-line telephony traffic minutes for companies increased. This was a result of the Covid-19 pandemic. The increase is due to greater use among corporate customers.

5.2 Market share - Fixed-line telephony

Telia Company had the largest market share in terms of fixed-line telephony subscriptions, 47 per cent. The next largest was Tele2 with 16.4 per cent, followed by Telavox and Telenor with 9.8 per cent and 7.0 per cent respectively. The “Others” group consists of about 100 operators, the largest of which was WX3 with 4 per cent.

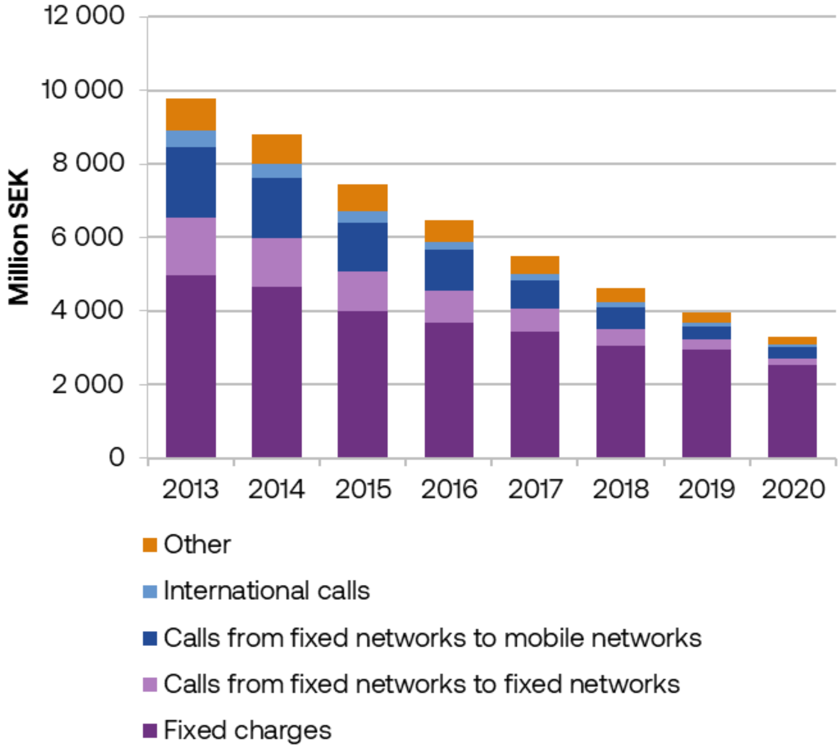
Figure 13 Proportion of fixed-line telephony subscriptions per operator



5.3 Revenues from fixed-line telephony decreased

In 2020, revenues from fixed-line telephony services fell by 16 per cent to SEK 3.3 billion. During 2020, fixed charges accounted for 77 per cent of revenues from fixed-line telephony, which is 3 percentage points more than the previous year. Revenues from IP telephony totalled SEK 0.8 billion in 2020, a decrease of 9 per cent compared to the previous year. IP telephony’s share of revenues was 24 per cent, which is an increase of just under 2 per cent compared to the previous year.

Figure 14 Revenues from fixed-line voice services



6. Traditional pay-TV subscriptions

6.1 The number of digital pay-TV subscriptions is increasing, while analogue subscriptions are decreasing

There were 4.0 million digital TV subscriptions (via cable TV networks, satellite, terrestrial networks or broadband), which was 1.2 million more subscriptions than the preceding year. The change is due to Tele2's dismantling of its analogue cable network in September 2020. This meant that almost all Tele2/Com Hem analogue cable TV subscriptions via property owners switched to digital cable TV subscriptions via property owners.

The number of subscriptions via the digital cable network increased from 674 to 1.8 million. Many households in multi-family buildings now have a digital connection via the property owner that is included in the rent, as well as a digital subscription with expanded channel offerings.

The number of subscriptions to TV via fibre increased by 12 per cent to 1.4 million. All other pay-TV subscriptions, i.e., via cable TV networks, terrestrial networks and satellite, decreased (see Figure 15 below).

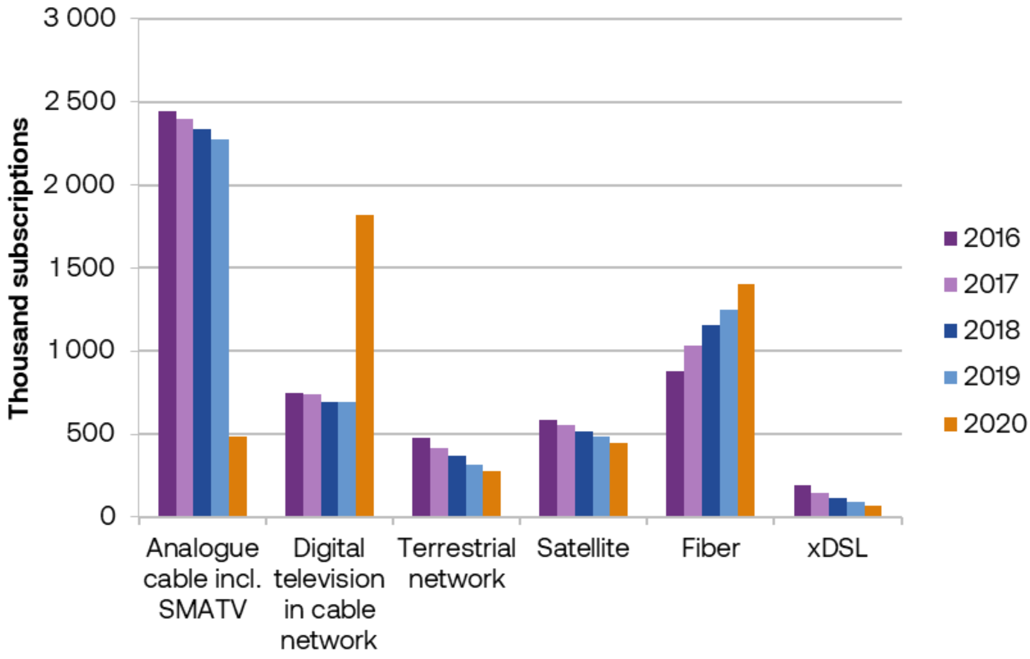
Of the fiber subscriptions, 47 per cent were via property owners, a proportion that has remained at the same level since 2016.

The total number of analogue cable TV subscriptions (including SMATV[7]) was 485,000 million, which was a decrease from 2.1 million compared to the previous year.

It is estimated that there are 139,000 subscriptions via SMATV, a decrease of 19 per cent compared to the previous year.

[7] Satellite Master Antenna Television (SMATV) is an independent cable TV network where many households share an antenna.

Figure 15 Number of pay-TV subscriptions



6.2 Proportion of pay-TV subscriptions

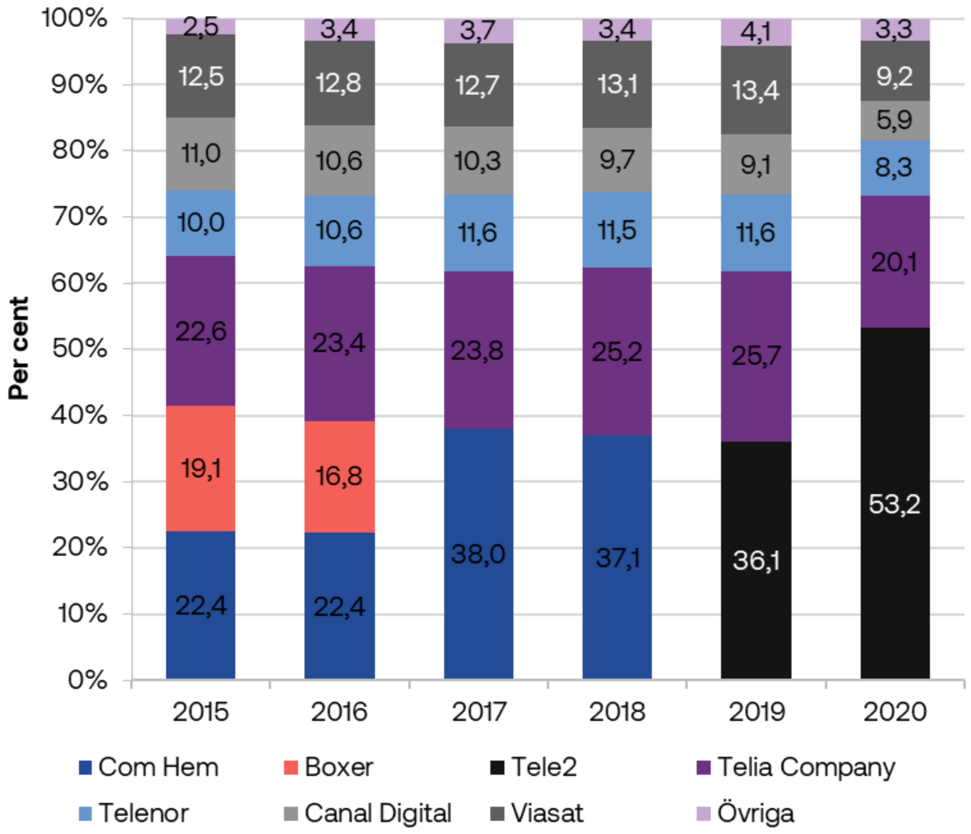
The proportions for digital TV services are based on the number of pay-TV subscriptions distributed via digital distribution methods. Between them, the five largest companies, Tele2 (including Com Hem and Boxer), Telia Company, Telenor, VCB Sweden[8] and Canal Digital accounted for 97 per cent of subscriptions.

The largest player, Tele2, increased from 36.1 percent to 53.2 percent. This increase was due to the fact that almost all Tele2/Com Hem analogue cable TV subscriptions via property owners switched to digital cable TV subscriptions via property owners.

[8] In the survey, Nordic Entertainment Group Sweden AB, formerly Viasat, specified a new name for the first half of 2020: VCB Sweden AB

In May 2020, a merger was established between Viasat Consumer (VCB Sweden, which is part of NENT Group) and Canal Digital, a subsidiary of Telenor Group under the name Allente[9]. Allente was thus the third largest operator in pay-TV.

Figure 16 Share of digital pay-TV subscriptions per operator



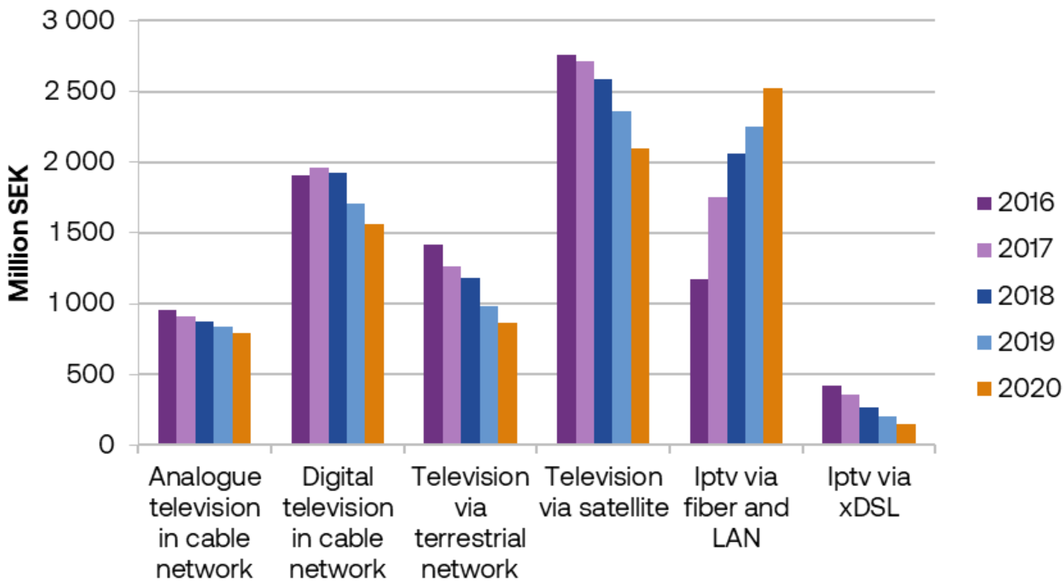
6.3 Revenues from TV subscriptions

The revenues from basic package subscriptions[10] totalled SEK 8.0 billion, which is 4 per cent less than the previous year. The reported revenues from supplementary

[9] 50 per cent of Allente is owned by NENT Group and 50 per cent is owned by Telenor Group.
[10] For the period 2009 to 2014, revenues from terrestrial TV services for both basic and supplementary packages were reported as basic package revenues, since it was impossible to distinguish between the

package subscriptions increased by 5 per cent and amounted to SEK 1.3 billion.[11] The total revenues from TV services for basic and supplementary package subscriptions amounted to SEK 9.3 billion at the end of December 2020, which is a decrease of 3 per cent compared to the previous year.

Figure 17 Revenues from traditional TV subscriptions



two types of packages. This means that for these years, revenues from basic subscription packages were somewhat too high, while revenues from supplementary packages were somewhat too low.

[11] Since 2016, transaction-based VOD (video-on-demand) and pay-per-view are no longer included. This means that the revenue figures for supplementary packages before and after 2016 are not entirely comparable.

7. Bundled subscriptions

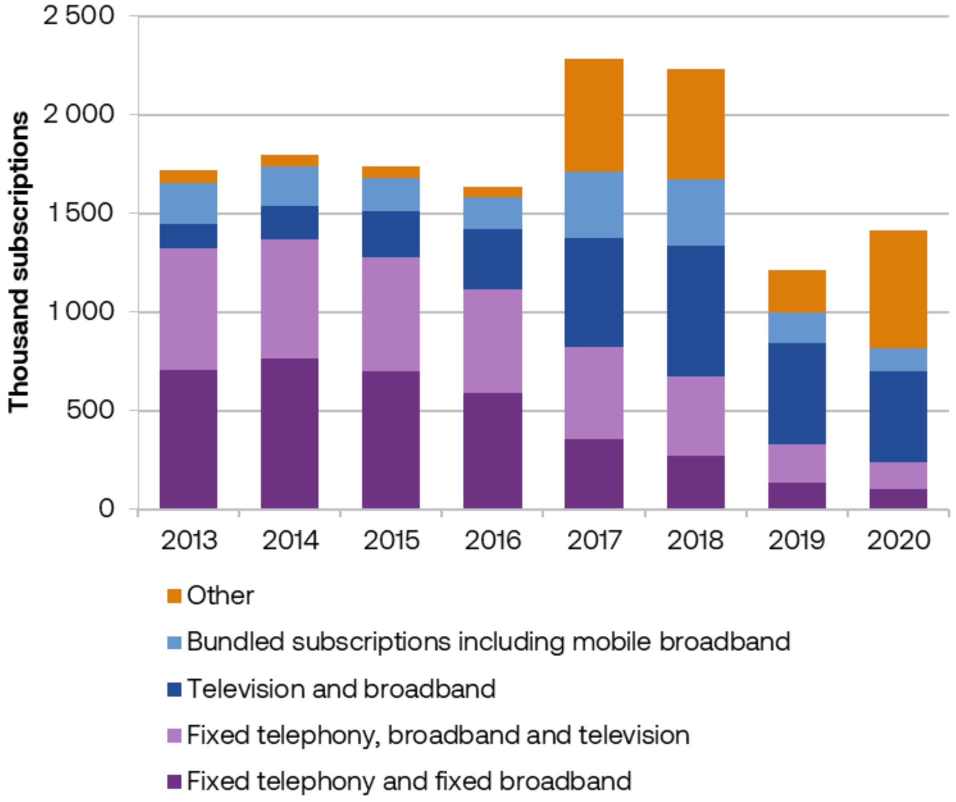
7.1 Bundled subscriptions

The number of bundled subscriptions totalled 1.4 million at the end of December 2020. Telia Company, Com Hem, Telenor and Three together had 92 per cent of the bundled subscriptions. The number of bundled subscriptions increased by 17 per cent between 2020 and 2019. Telia and Tele2 accounted for nearly the entirety of this increase.

The definition for bundled subscriptions changed in both 2017 and 2019. As a result, the number of subscriptions cannot be compared between periods.[12]

[12] For more information about the definitions, see the questionnaires for *The Swedish Telecommunications Market.*

Figure 18 Number of bundled subscriptions

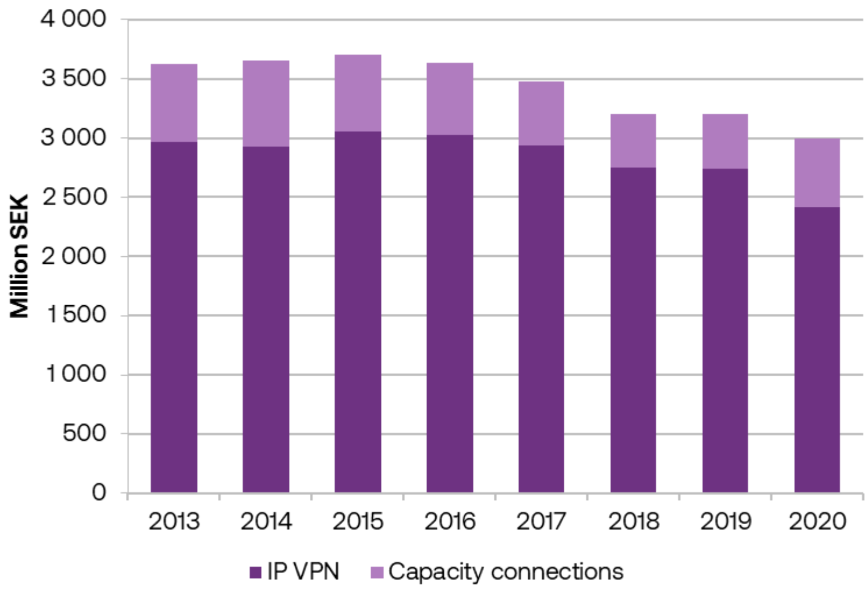


8. Data communication services to end customers

In this context, “data communication services” refers to data services used, e.g., to connect companies’ and agencies’ working locations and various IP-based systems with each other. In 2020, revenues from data communication services to end customers totalled SEK 3.0 billion, a decrease of 7 per cent compared with 2019.

Between 2019 and 2020 revenues from IP VPN services decreased by 12 per cent to SEK 2.41 billion, while revenues from capacity services to end customers rose by 25 per cent to SEK 585 million.[13] Revenues from the sale of capacity services to operators (wholesale customers) are not included in these data.

Figure 19 Revenues from data communication services to end customers



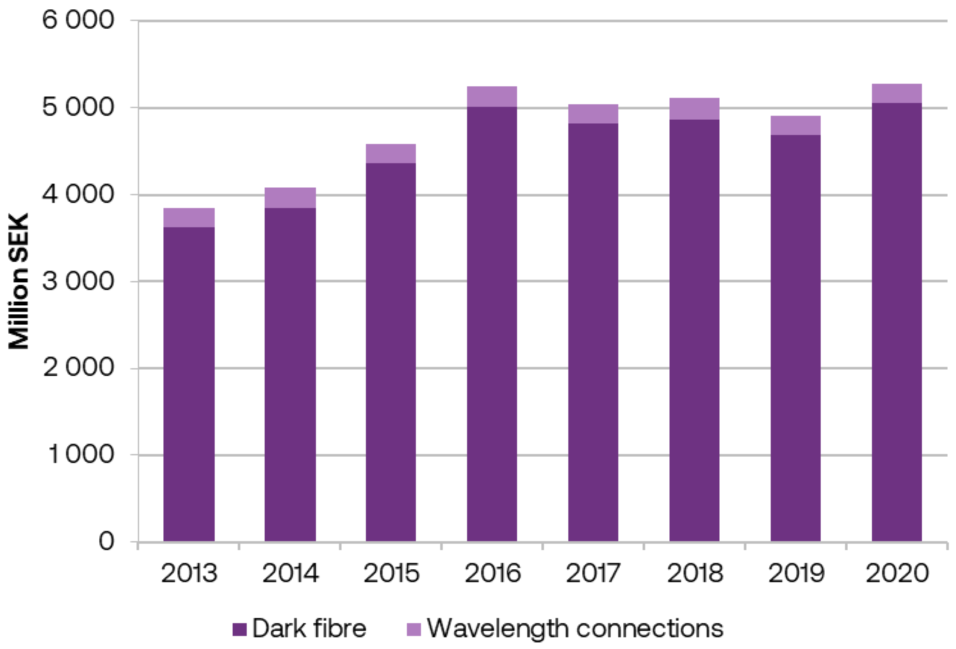
[13] In the 2019 survey of the Swedish telecommunications market, the questions about capacity services to end customers were clarified, such that some types of revenues which may previously have been included in the statistics are now excluded. Revenues from capacity services to end customers in 2018 have been retroactively adjusted for greater comparability. Revenues for the years prior to 2018 have not been adjusted.

9. Dark fibre and wavelengths

Dark fibre refers to fibre cable rented out without electronic equipment. Dark fibre is usually sold to wholesale customers, but in some cases also to end customers, such as larger companies or public authorities. Between 2019 and 2020, revenues from dark fibre connections increased by 8 per cent, from SEK 4.7 billion to SEK 5.1 billion.

The optical light in a fibre can be divided into wavelengths so that each wavelength functions as a channel. As with dark fibre, wavelength connections are mainly purchased by wholesale customers. In 2020, revenues from wavelength connections totalled SEK 220 million, an increase of 2 per cent compared to the previous year.

Figure 20 Revenues from dark fibre and wavelength connections



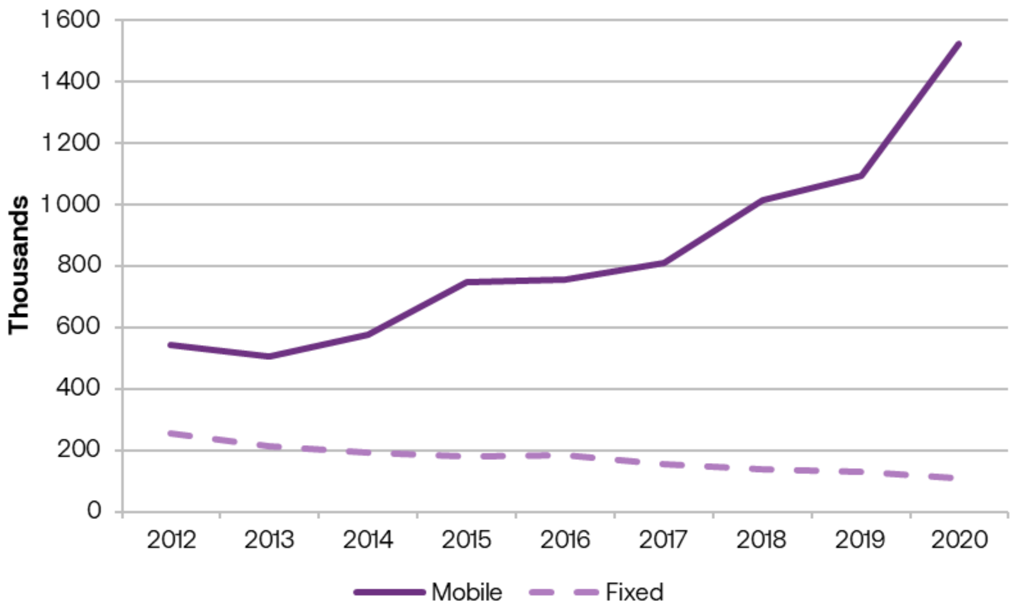
10. Number porting

The data about number porting comes from the Swedish Number Portability Administrative Centre (SNPAC).[14]

At the end of December 2020, the number of ported mobile numbers totalled 1,575,497, which is an increase of 36 per cent. In Sweden, the number of porting instances for mobile numbers totalled 1,521,741, an increase of 39 per cent.

The SNPAC statistics do not include figures for fixed-line numbers. For this reason the number of porting instances is shown below, which is lower than the number of ported telephone numbers. In Sweden, the number of porting instances for fixed (geographical) telephone numbers totalled 110,188, a decrease of 15 per cent.

Figure 21 Number of porting instances for mobile and fixed-line telephone numbers



[14] https://www.snpac.se/sv/content/2021