

The Swedish Telecommunications Market 2021

Report number

PTS-ER-2022:22

Reference number

21-15410

ISSN

1650-9862

The Swedish Post and Telecom Authority

Box 6101

SE-102 32 Stockholm

+46 (0)8-678 55 00

pts@pts.se

www.pts.se

Contents

Summary	5
Sammanfattning	7
1. Introduction	9
1.1 Would you like to produce more detailed statistics and know more?	10
2. Revenues in electronic communications	12
3. Mobile subscriptions and M2M	13
3.1 Revenues from mobile subscriptions continue to decline	14
3.2 Data traffic in the mobile networks is increasing	15
3.3 The number of mobile traffic minutes is increasing	16
3.4 Market share – mobile services	17
3.5 The number of M2M SIM cards continues to increase	18
4. Fixed broadband	19
4.1 Fibre subscriptions continue to increase	19
4.2 100 Mbps subscriptions (both upload and download speeds) are increasing	20
4.3 Increase in the number of collective connections	22
4.4 Market share – Fixed broadband	22
4.5 Revenues from fixed broadband increased	23
5. Subscriptions for fixed-line telephony	25
5.1 Subscriptions for fixed-line telephony continue to fall	25
5.2 Market share – fixed-line telephony	26
5.3 Revenues from fixed-line telephony decreased	26
6. Traditional pay-TV subscriptions	28

6.1	The number of digital pay-TV subscriptions is increasing, while analogue subscriptions are decreasing	28
6.2	Proportion of pay-TV subscriptions.....	29
6.3	Revenues from TV subscriptions	30
7.	Bundled subscriptions	32
7.1	Bundled subscriptions.....	32
8.	Data communication services to end customers.....	34
9.	Dark fibre and wavelengths.....	35
10.	Number porting	36

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 voice 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 2021, and comparisons are made with the same date the previous year. The survey was sent to 629 organisations (operators, municipalities and other organisations). Of these organisations, 609 responded. This results in a response rate of 97 per cent. For more information on methodology, response rate, see the Quality Declaration (Kvalitetsdeklarationen).

Mobile networks were used intensively in 2021. Data traffic in mobile networks increased by 29 per cent compared with the previous period. The number of subscriptions in 5G-network services increased by 395 per cent, representing 8 per cent of all mobile subscriptions. Data traffic in 5G networks also saw strong growth, but still represents a very small share of mobile data traffic.

The number of fixed broadband subscriptions via fibre increased by 7 per cent, and now accounts for three quarters of all fixed broadband subscriptions. 87 per cent of all fixed broadband subscriptions have a download speed of at least 100 Mbps. Subscriptions with speeds of 1 Gbps also increased compared with the previous period.

The number of broadband subscriptions via the traditional copper network (xDSL) continues to decrease, and there are now just 230,000 such subscriptions left. For the first time in the history of this survey, no dial-up internet subscriptions were reported.

There were 1.3 million fixed-line telephony subscriptions at the end of 2021, a decrease of 15 per cent. Both IP telephony subscriptions and traditional fixed-line telephony via the copper network decreased.

In 2021, revenues from telephony, broadband and data communication services totalled SEK 49.2 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: <http://statistik.pts.se/>

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 2021, och jämförelser görs med samma tidpunkt föregående år. Undersökningen skickades ut till 629 aktörer (operatörer, kommuner och andra aktörer). Av dessa svarade 609 aktörer. Det ger en svarsfrekvens på 97 procent. För mer information om metod, svarsfrekvens och bortfall, se Kvalitetsdeklarationen.

Mobilnäten användes intensivt under 2021. Datatrafiken i mobilnäten ökade med 29 procent jämfört med föregående period. Antalet abonnemang som använder tjänster i 5G-nät ökade med 395 procent, motsvarande 8 procent av samtliga mobilabonnemang. Även datatrafiken i 5G-nät ökade kraftigt, men utgör än så länge en mycket liten del av den mobila datatrafiken.

Antalet abonnemang för fast bredband via fiber ökade med 7 procent och står nu för mer än tre fjärdedelar av alla fasta bredbandsabonnemang. 87 procent av alla abonnemang på fast bredband har en nedladdningshastighet på minst 100 Mbit/s. Även abonnemang med hastigheter på 1 Gb/s ökade jämfört med föregående period.

Antalet abonnemang för bredband via det traditionella kopparnätet (xDSL) fortsätter att minska, och det finns nu 230 000 sådana abonnemang kvar. För första gången i insamlingens historia rapporterades inga internetabonnemang via uppringt internet.

Det fanns vid årsskiftet 2021 1,3 miljoner abonnemang för fast telefoni, en minskning med 15 procent. Såväl abonnemangen på ip-telefoni som traditionell fast telefoni via kopparnätet minskade.

Under 2021 var intäkterna för tjänster inom telefoni, bredband och datakommunikation 49,2 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 <http://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 annually collects and publishes market data in a report entitled 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 broadband (fixed and mobile), voice services (fixed-line and mobile) 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 2021 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 629 organisations (operators, municipalities and other organisations), which is 14 more than the previous year. 609 of these responded. This represents a response rate of 97 per cent, which is the same level as the previous year.

All figures refer to the situation on 31 December 2021, and comparisons are made with the same date the previous year, unless otherwise stated. Revenue is expressed in nominal terms.

For further information about the survey, please refer to the Quality Declaration (Kvalitetsdeklarationen).

1.1 Would you like to produce more detailed statistics and know more?

On the PTS statistics portal (<http://statistik.pts.se/>), you can search for and sort statistics in the different areas. Data quantities and market shares for the individual operators are also available there.

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

- tables with statistics
- quality declaration
- change log with historical changes
- list of participants
- MVNO/SP per mobile network.

Table 1 A selection of results

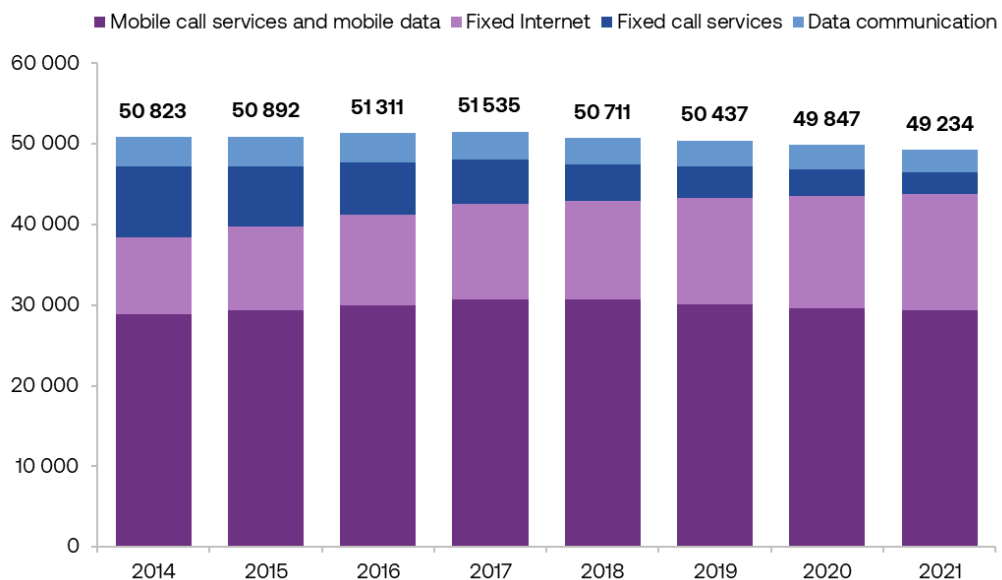
	2021	2020	Change
Total retail revenues (SEK million)	49 234	49 847	-1%
Mobile subscriptions			
Mobile subscriptions – total (thousands)	14 439	14 275	1%
Outgoing traffic minutes (millions)	41 679	40 149	4%
Traffic for mobile data services (Tbytes)	2 351 155	1 823 345	29%
Revenues from mobile subscriptions – total (SEK million)	29 398	29 572	-1%
Number of M2M SIM cards (thousands)	19 900	16 874	18%
Fixed broadband			
Subscriptions for fixed broadband (thousands)	4 253	4 180	2%
via fibre and fibre LANs (thousands)	3 319	3 095	7%
via xDSL (thousands)	231	356	-35%
Revenues from fixed broadband subscriptions (SEK million)	14 333	13 976	3%
Fixed-line voice services			
Fixed-line telephony subscriptions (thousands)	1 261	1 479	-15%
Revenues from fixed-line voice services (SEK million)	2 784	3 302	-16%
TV services			
Digital TV subscriptions (thousands)	4 062	4 008	1%
Analogue TV subscriptions (thousands)	280	372	-25%
Revenues from basic subscription packages for TV services (SEK million)	8 912	9 348	-5%
Data communication services, etc.			
Revenues from data communication services to end users (SEK million)	2 719	2 996	-9%
Revenues from dark fibre and wavelength connections (SEK million)	5 605	5 280	6%
Bundled services			
Number of bundled subscriptions (thousands)	1 510	1 417	7%

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 and cloud services are not included here, nor are revenues from wholesale services. In 2021, telecommunications revenues from end customers totalled SEK 49.2 billion, which is 1 per cent lower than the previous year.

In 2021, the average revenue¹ generated per household per month was SEK 595, which is 1 per cent lower than 2020. The average revenue per month includes fixed-line voice services, SEK 22 (a reduction of SEK 6); mobile voice and data services, SEK 367 (a reduction of SEK 2) and internet services (excluding mobile data), SEK 206 (an increase of SEK 2).

Figure 1 Revenues in the end customer market for electronic communications (Million SEK)



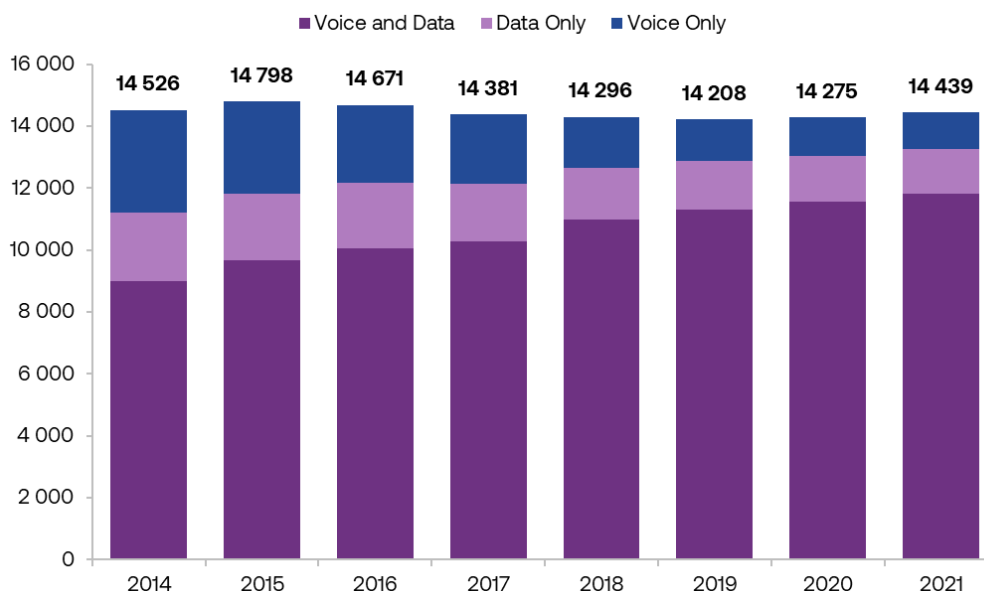
¹ Average revenue is calculated as revenues for 2021 divided by the average number of subscriptions per household.

3. Mobile subscriptions and M2M

There was a total of 14.4 million mobile subscriptions in Sweden on 31 December 2021, which was a 1 per cent increase compared to one year earlier (see Figure 2 below). There were 11.8 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 1.4 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 decrease of 5 per cent. The average number of private mobile subscriptions per person in recent years has been 1 subscription per person. The increase in the number of mobile subscriptions follows the increase in the population. The number of FWA subscriptions² in December 2021 was 20,000.

81 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 69 per cent.

² Definition of fixed wireless access (FWA) services (all of the following criteria must be met): 1) FWA services are data transmission services provided over mobile networks (e.g. LTE, 5G) 2) FWA services have dedicated capacity (e.g. through frequency band or bandwidth allocation, network slicing or traffic prioritisation) for individual connections that enables the provision of services with guaranteed quality. 3) FWA services are provided with specified minimum transmission speeds, and where appropriate other quality parameters (such as maximum speed, response time and packet loss), in a manner similar to broadband services in wired networks. 4) FWA services are sold to a fixed address.

Figure 2 Number of mobile subscriptions (thousands)

By 2021, around 1.1 million subscriptions had used services in 5G networks. This represents 8 per cent of all mobile subscriptions. In the first half of 2021, the corresponding proportion was 3 per cent. Reported data traffic in 5G networks amounted to 12,484 Tbytes, a large increase from 388 Tbytes in 2020.

Table 2 Subscriptions and data traffic in 5G networks

	2021	1H2021	2020
Subscriptions using 5G (thousands)	1 089	469	220
<i>Proportion of total number of subscriptions</i>	8%	3%	2%
Data traffic on 5G network (Tbytes)	12 484	978	388
<i>Proportion of total data traffic</i>	0,5%	0,1%	0,02%

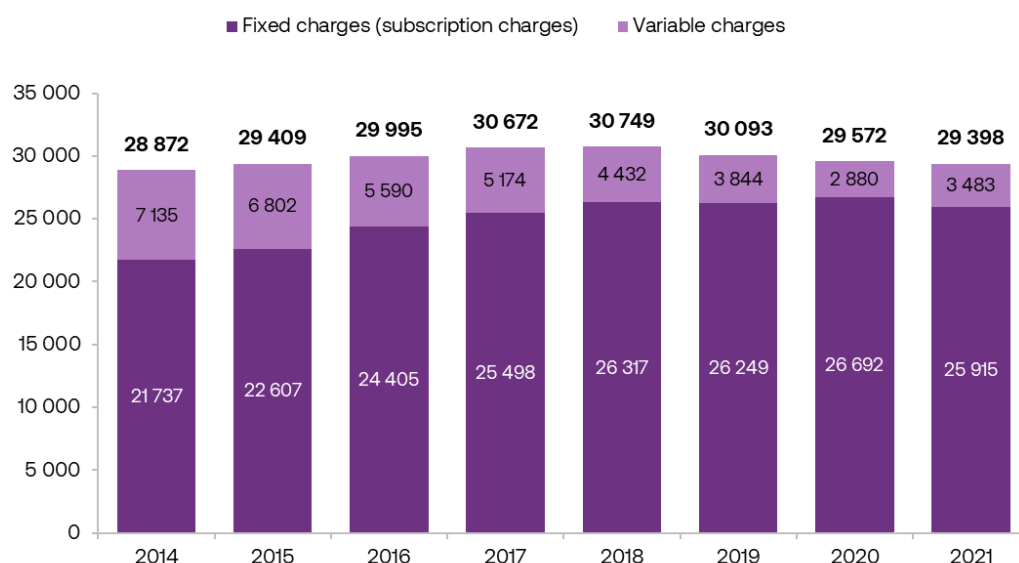
3.1 Revenues from mobile subscriptions continue to decline

End user revenues from mobile subscriptions totalled approximately SEK 29.4 billion. This is 1 per cent lower than the previous year, and the fourth year in a row in which mobile revenues have fallen.

Of these revenues, 88 per cent were from fixed charges (subscription charges) and the rest were from variable charges. Revenues from fixed charges totalled SEK 25.9

billion, a decrease of 3 per cent. Variable charges increased by 21 per cent, to SEK 3.5 billion. Unlike in previous years, fixed charges decreased despite an increase in the number of subscriptions and, unlike in previous years, variable revenues increased.

Figure 3 Revenues from mobile subscriptions (SEK million)



3.2 Data traffic in the mobile networks is increasing

Data traffic in the mobile networks increased to 2,351 Pbytes³ in 2021 (see Figure 4 below). This was an increase of 29 per cent, which is a slightly lower rate of increase than measured the previous year (36 per cent).

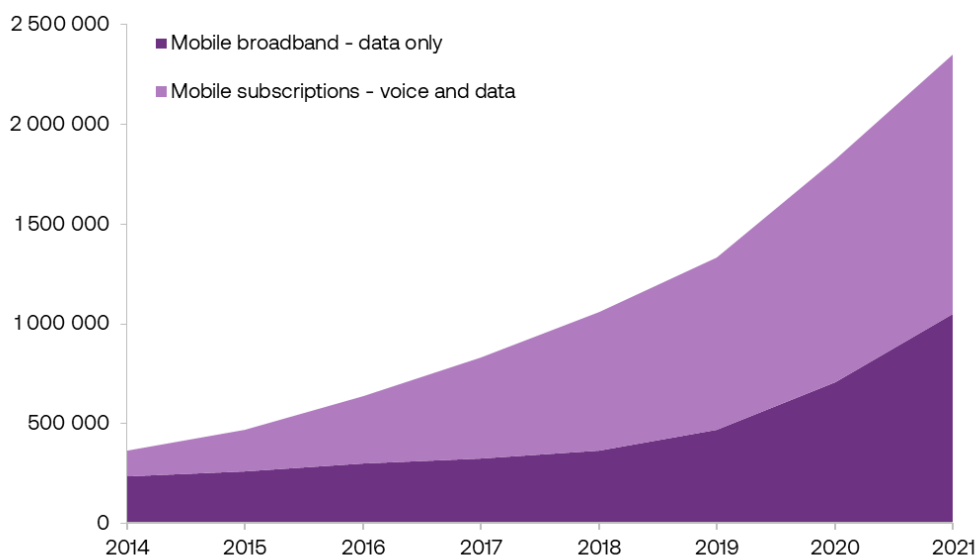
Private mobile subscriptions for voice and data services generated an average of 10.7 Gbytes per subscription per month, which was an increase of 9.6 compared to the previous year. The average amount of traffic for a private data-only mobile subscription was 90.5 Gbytes per month, an increase of 55 Gbytes compared to the previous year⁴.

³ Peta=1¹⁵

⁴ The average increase in mobile broadband is attributable to one operator

The number of subscriptions using data services in 4G networks continued to increase and amounted to 12.7 million, or 88 per cent of all mobile subscriptions.

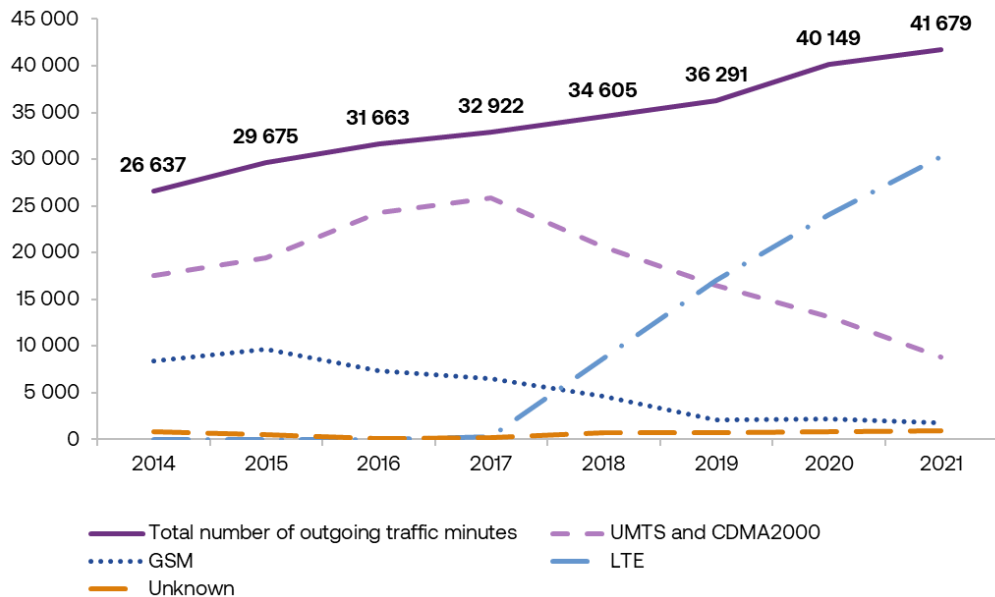
Figure 4 Data traffic in mobile networks (Terabytes)



3.3 The number of mobile traffic minutes is increasing

The number of outgoing voice traffic minutes from mobile subscriptions totalled 41.7 billion in 2021. This is an increase of 4 per cent compared to the previous period, and a lower rate of increase than in 2020 (11 per cent).

The number of call minutes via 4G networks (VoLTE) totalled 30.3 billion, which corresponds to 73 per cent of all mobile voice traffic. This can be compared with 60 per cent the previous year. This increase comes at the expense of voice traffic in 3G networks (UMTS), which is decreasing (see Figure 5 below). No operator has yet reported traffic minutes over 5G networks.

Figure 5 Outgoing traffic minutes in mobile networks (million minutes)

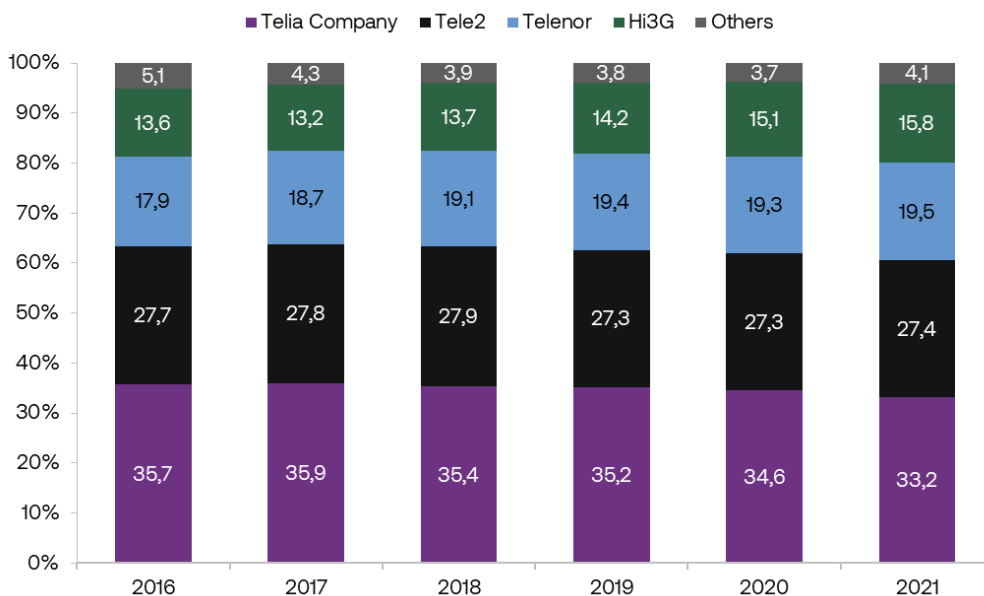
The average length of a mobile call was 4 minutes and the average number of calls per mobile subscription per month was 68, which was the same level as the previous year.

A total of 6.2 billion text messages were sent. This represents a decrease of 7 per cent compared to the previous year. On average, 40 SMS texts were sent per subscription and month, a reduction of 8 per cent compared to one year prior. The number of MMS texts increased by 3 per cent to 618 million.

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 operators, Telia Company, Tele2, Telenor and Hi3G (Tre), had 96 per cent of all subscriptions on the market, which is the same level as the previous year.

Figure 6 Market share of mobile subscriptions per operator (per cent)



3.5 The number of M2M SIM cards continues to increase

There were 19.9 million SIM cards for M2M⁵, which is an increase of 18 per cent. This rate of increase is slightly higher than in the previous year (12 per cent). Revenues for M2M SIM cards totalled SEK 1.5 billion, an increase of 6 per cent.

Swedish M2M SIM cards are not necessarily used within Sweden, but also by customers abroad. Of the 19.9 million M2M Sim cards, 4.9 million were reported to be used in Sweden, and revenues for these amounted to SEK 647 million. The largest operator in M2M in Sweden, Telenor Connexion, has reported 1.6 million M2M SIM cards used in Sweden, which is about the same level as the previous year.

⁵ M2M refers to technology for wireless communication between different devices. M2M solutions are used for, e.g. monitoring, measurement, control, transport and logistics.

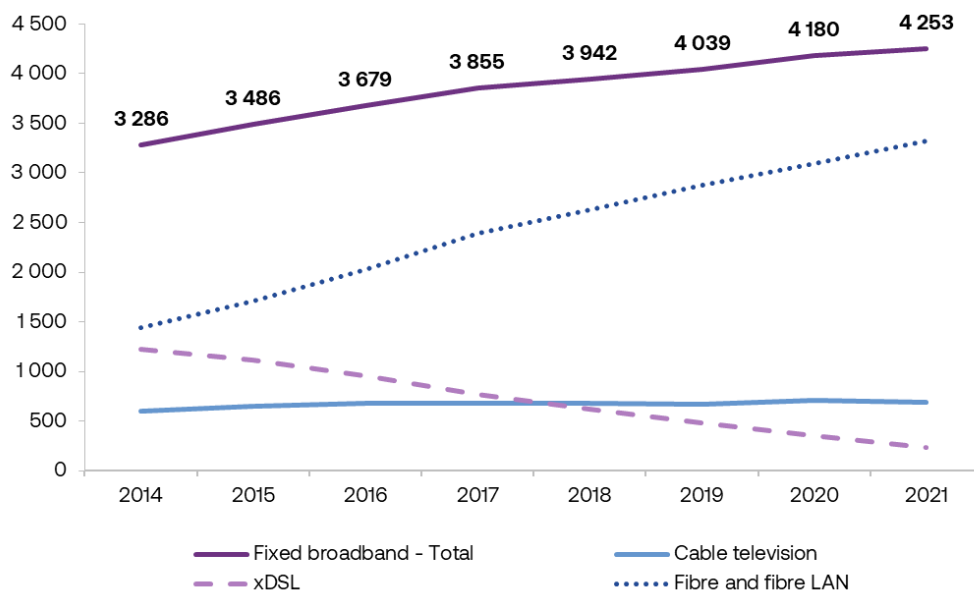
4. Fixed broadband

4.1 Fibre subscriptions continue to increase

On 31 December 2021, there were 4.3 million fixed broadband subscriptions, which corresponds to an increase of 2 per cent. There was a total of 3.3 million fibre subscriptions. This was an increase of 7 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 78 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 (-3 per cent), subscriptions via xDSL totalled 0.2 million (-35 per cent), and the number of other fixed broadband subscriptions totalled 13,600 (-9 per cent). The category "other fixed broadband" includes fixed radio and satellite connections. The number of satellite subscriptions reported was 176 (+17 per cent). This report marks the first time in the history of the report series that no dial-up internet subscriptions (ISDN/PSTN) have been reported.

Figure 7 Number of fixed broadband subscriptions (thousands)

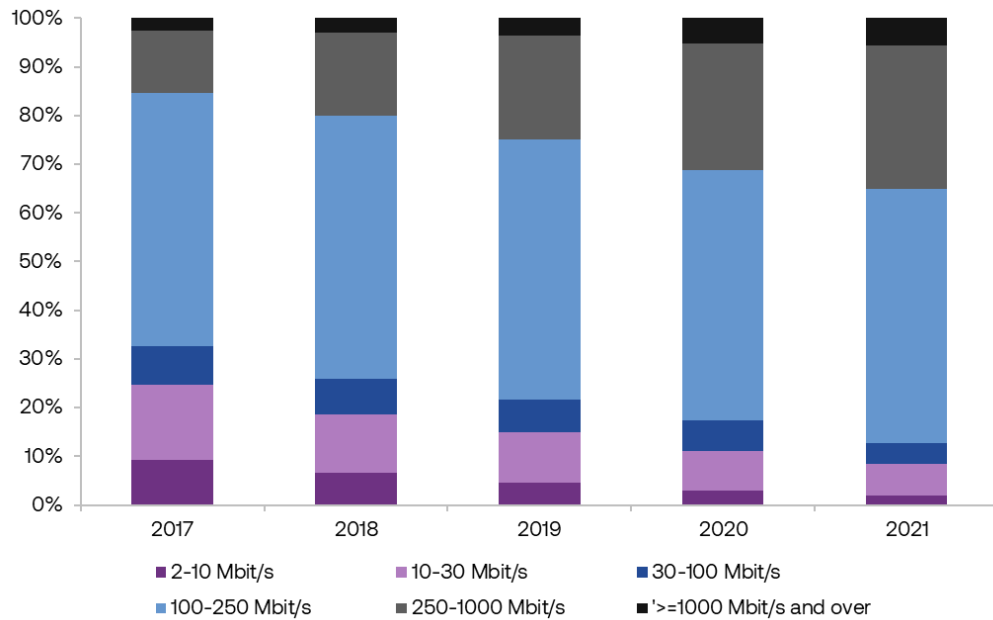


4.2 100 Mbps subscriptions (both upload and download speeds) are increasing

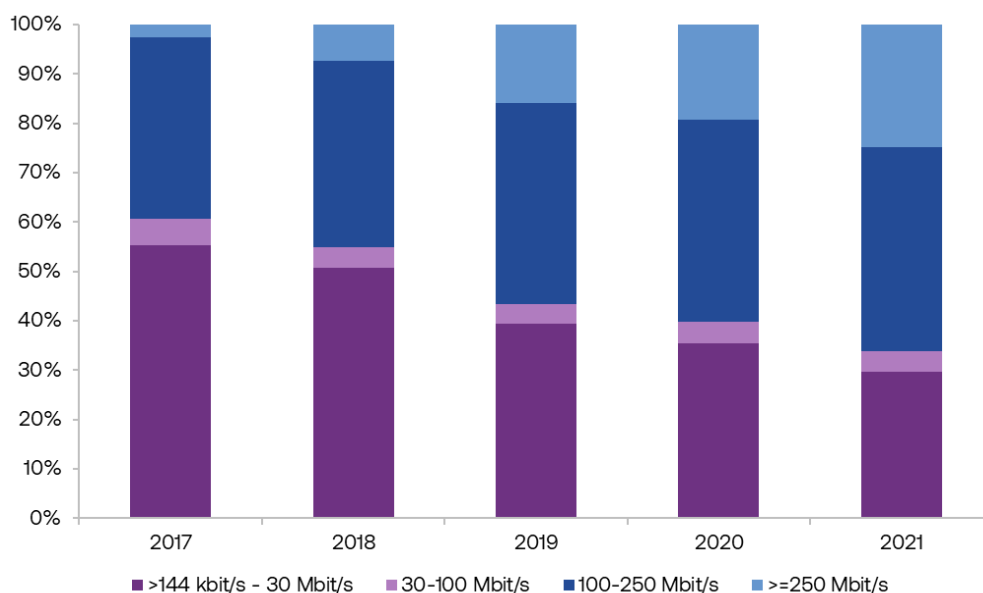
There were 3.7 million subscriptions with download speeds of 100 Mbps or more, which was an increase of 7 per cent. 87 per cent of all subscriptions in Sweden had a speed of 100 Mbps or more, an increase from 82 per cent. Subscriptions with speeds of 1 Gbps or more have also increased. These were up 9 per cent compared to the previous year, for a total of 235,000 subscriptions. In 2021, three out of four households had a subscription with 100 Mbps or more (75 per cent), up from 70 per cent one year earlier. The proportion of households with a subscription of 1 Gbps or more was 5 per cent, compared to 4 per cent one year earlier. Demand for 100 Mbps subscriptions continues to grow, while demand for 1 Gbps remains relatively low.

There were 3.1 million subscriptions with a download speed of 100 Mbps or more (an increase of 9 per cent), while subscriptions via cable TV networks with the same speed amounted to 616,000, which is an unchanged level compared to the previous year.

Figure 8 Proportion of fixed broadband subscriptions by download speed (per cent)



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 2.8 million. This accounts for more than half of all fixed broadband subscriptions.

Figure 9 Proportion of fixed broadband subscriptions by upload speed (per cent)

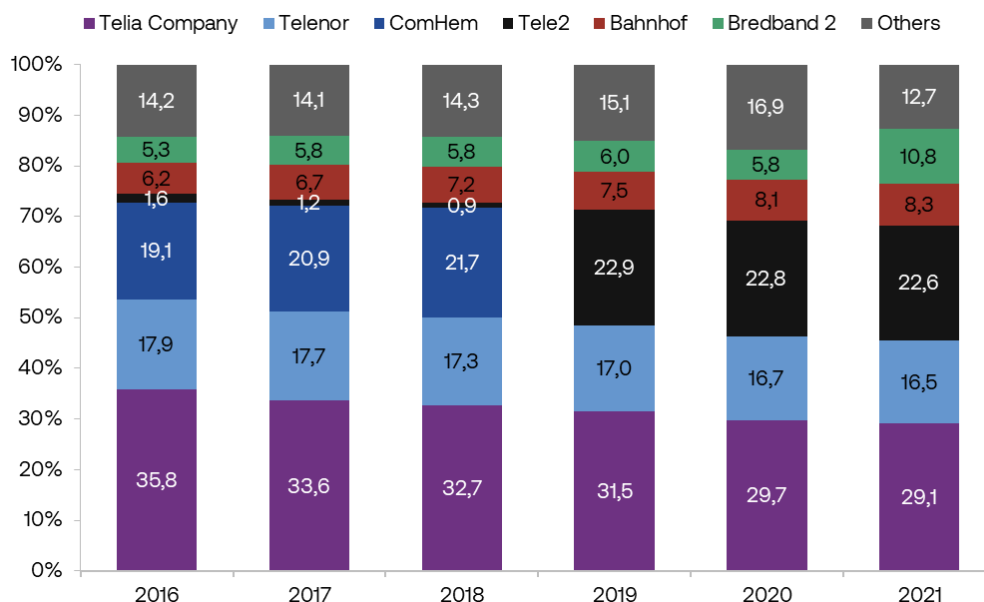
4.3 Increase in the number of collective connections

Approximately 1.1 million broadband subscriptions were stated to be collective connections, an increase of 11 per cent. This year's increase is in line with the increase in previous periods. "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, 29 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 68 per cent of fixed broadband subscriptions. The five largest operators in fibre subscriptions were Telia Company, Telenor, Bahnhof, Tele2 and Bredband2⁶, which together had 87 per cent. The group "Other" accounted for 12.7 per cent of market share, and includes 180 operators. The largest operator in the "Other" category was Allente with 2 per cent.

⁶ Bredand2 acquired A3 (A3 Företag AB, A3 Privat AB, A3 Sverige AB) in 2020, and their combined fixed broadband market share is reported for 2021.

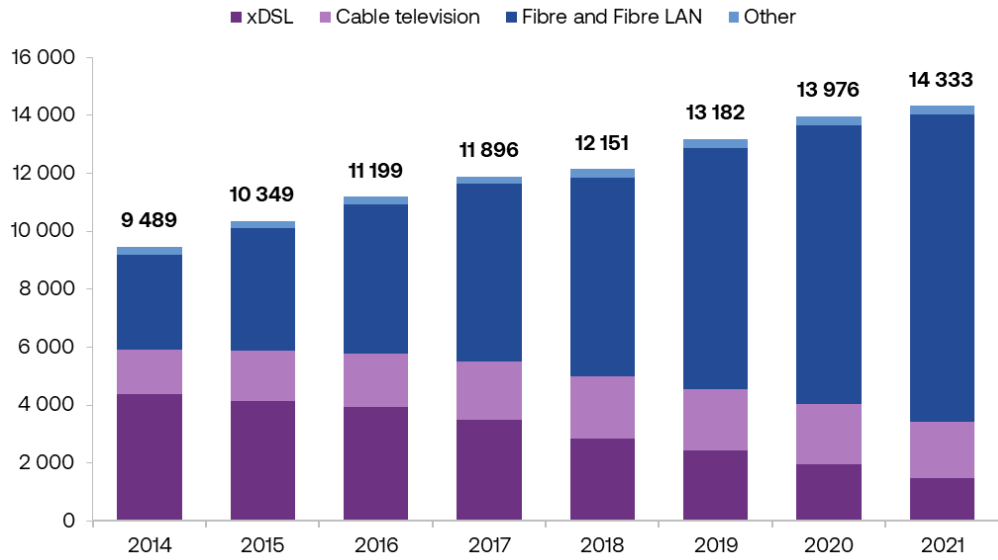
Figure 10 Proportion of fixed broadband subscriptions per operator (percent)

4.5 Revenues from fixed broadband increased

In 2021, revenues from fixed broadband subscriptions totalled SEK 14.3 billion. This is 3 per cent higher than the previous year. Revenues from fibre subscriptions⁷ increased by 11 per cent, to SEK 10.6 billion. Revenues from broadband subscriptions via cable TV subscriptions decreased by 8 per cent to SEK 1.9 billion, and revenues from xDSL subscriptions fell by 24 per cent to SEK 1.5 billion. Revenues from subscriptions via other access technologies totalled SEK 303 million. No revenues from dial-up internet were reported for 2021.

⁷ PTS has estimated Bahnhof's revenues from broadband subscriptions via fibre for the years 2015–2019, because Bahnhof misunderstood the question. Bahnhof's revenues have also been estimated for 2021.

Figure 11 Revenues from fixed broadband subscriptions (SEK million)

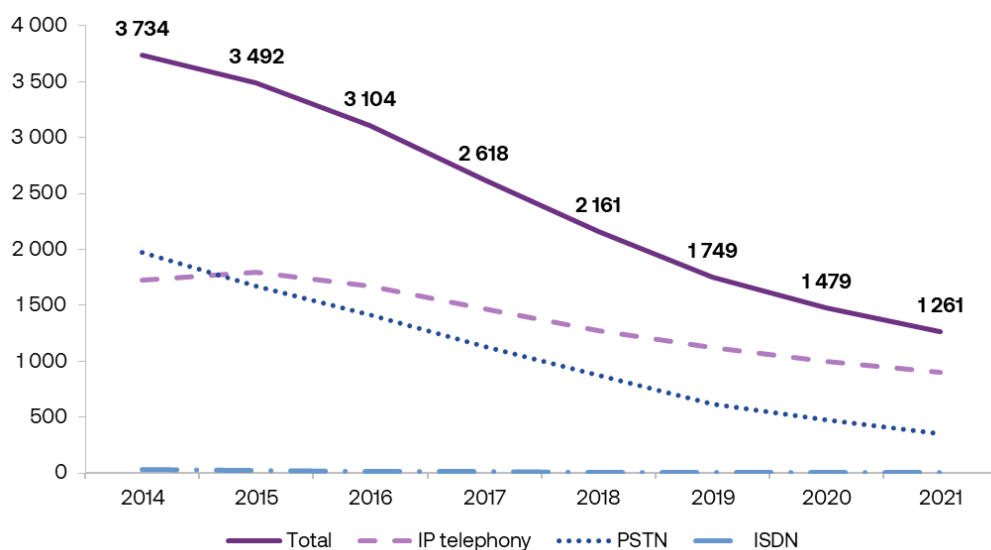


5. Subscriptions for fixed-line telephony

5.1 Subscriptions for fixed-line telephony continue to fall

There were 1.3 million subscriptions for fixed-line telephony, which was a reduction of 15 per cent. Of these 902,000 (71 per cent) were subscriptions for IP telephony (see Figure 12 below). IP telephony refers to fixed-line telephony via xDSL, cable TV, LAN, other IP-based access. The proportion of households with fixed-line telephony subscriptions continues to decline, and was 15 per cent in 2021, compared to 20 per cent on year earlier. The proportion of households subscribing to fixed-line telephony via the copper network (PSTN) was 4 per cent.

Figure 12 Number of fixed-line telephony subscriptions (thousands)

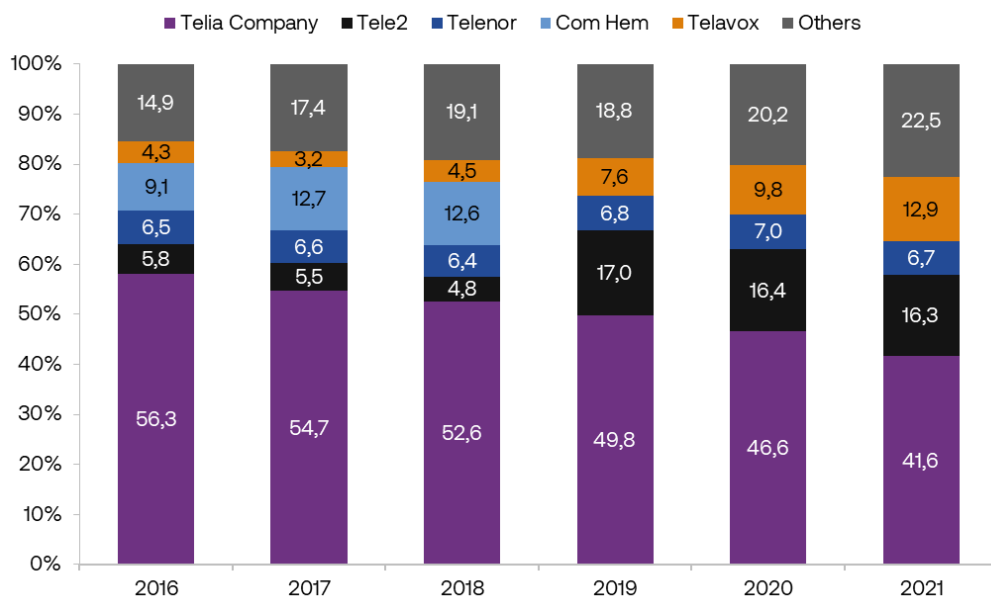


The number of fixed-line telephony traffic minutes for companies decreased to 3.4 billion, representing a decrease of 18 per cent compared to the previous period.

5.2 Marked share – fixed-line telephony

Telia Company had the largest market share in terms of fixed-line telephony subscriptions, 41.6 per cent. The next largest was Tele2 with 16.3 per cent, followed by Telavox and Telenor with 12.9 per cent and 6.7 per cent, respectively. The group “Other” consists of about 100 operators, the largest of which was WX3 Telecom with 4 per cent.

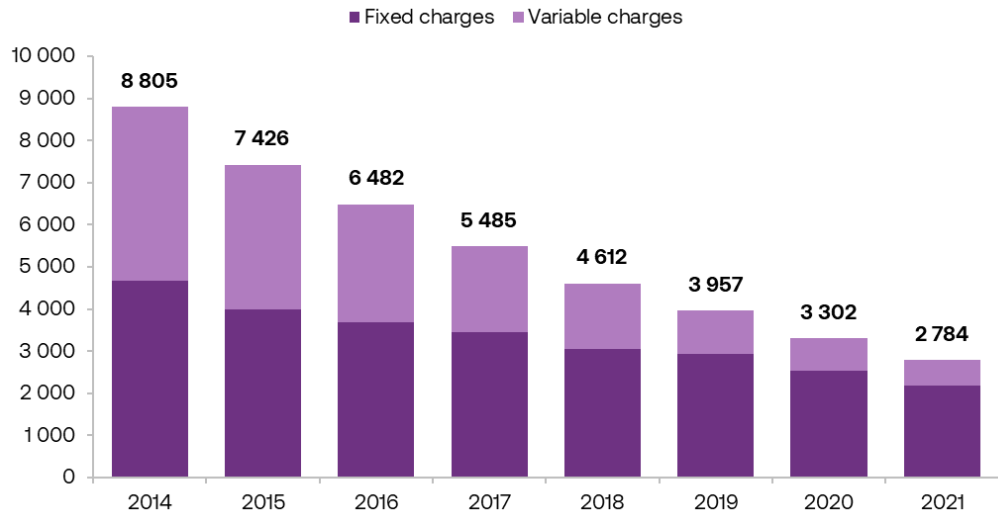
Figure 13 Proportion of fixed-line telephony subscriptions per operator (percent)



5.3 Revenues from fixed-line telephony decreased

In 2021, revenues from fixed-line voice services fell by 16 per cent to 2.8 billion. During 2021, fixed charges accounted for 79 per cent of revenues from fixed-line telephony, which is 2 percentage points more than the previous year. Revenues from IP telephony totalled SEK 0.7 billion in 2021, a decrease of 10 per cent compared to the previous year. IP telephony's share of revenues was 25 per cent, which is an increase of 1 percentage point compared to the previous year.

Figure 14 Revenues from fixed-line voice services (SEK million)



6. Traditional pay-TV subscriptions

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

There were 4.1 million digital pay-TV subscriptions (via cable TV networks, satellite, terrestrial networks or broadband), which was an increase of 1 per cent compared to the previous year.

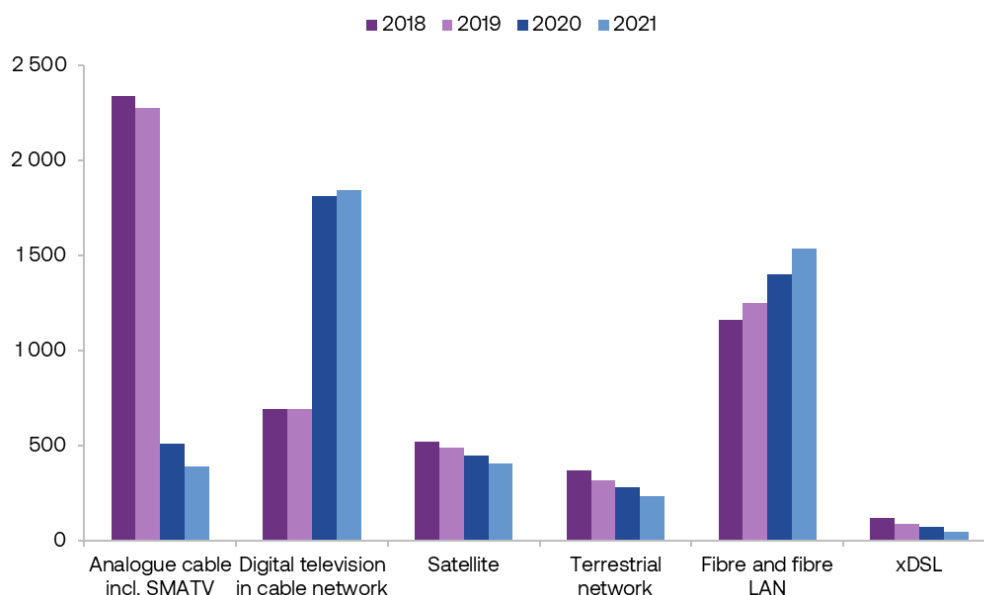
The number of subscribers via digital cable TV networks increased by 2 per cent to 1.8 million. Many households in multi-family residential buildings now have a digital connection via the property owner that is included in the rent, as well as a digital subscription with expanded channel offerings.

The number of subscriptions to TV via fibre increased by 10 per cent to 1.5 million. Subscriptions via terrestrial networks decreased by 16 per cent to 230,000, while satellite decreased by 10 per cent to 400,000 (see the figure below).

Of the fibre subscriptions, 49 per cent were via property owners, which is 2 per cent higher than the previous year.

The number of analogue cable TV subscriptions (including SMATV⁸) was 280,000, which was a decrease of 25 per cent compared to the previous year. Subscriptions via the SMATV network were estimated at 110,000, a decrease of 20 per cent compared to the previous year. The number of TV subscriptions via xDSL continued to decline, reaching around 50,000, a decrease of 33 per cent.

⁸ Satellite Master Antenna Television (SMATV) is an independent cable TV network where many households share an antenna.

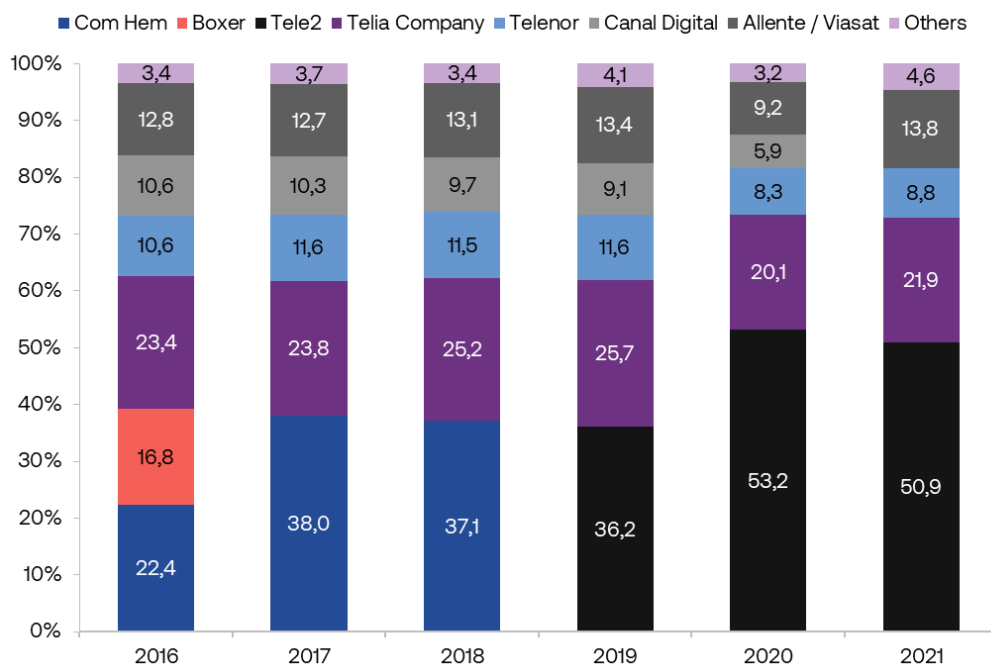
Figure 15 Number of pay-TV subscriptions (thousands)

6.2 Proportion of pay-TV subscriptions

The proportions for digital TV services are based on the number of pay-TV subscriptions broken down by digital distribution method. Between them, the five largest companies, Tele2 (including Com Hem and Boxer), Telia Company, Telenor, and Allente⁹ (NENT and Canal Digital) accounted for 97 per cent of subscriptions.

The largest operator, Tele2, decreased from 53.2 to 50.9 per cent. Allente accounted for 13.8 per cent (compared to Viasat 9.2 % and Canal Digital 5.9% the previous year), making it the third largest operator in pay-TV.

⁹ 50 per cent of Allente is owned by NENT Group and 50 per cent is owned by Telenor Group. 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.

Figure 16 Proportion of digital pay-TV subscriptions per operator (percent)

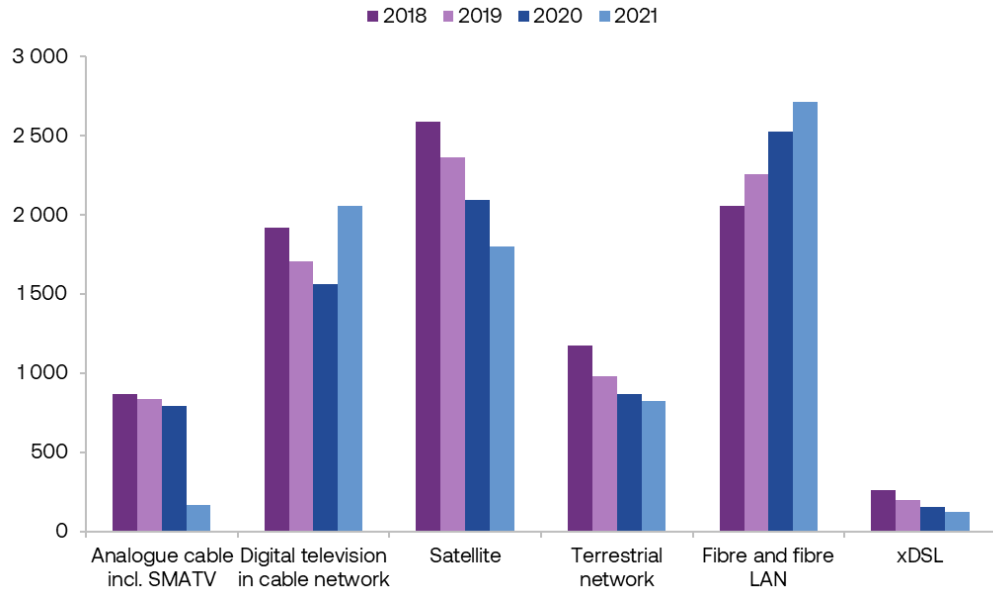
6.3 Revenues from TV subscriptions

Revenues from basic package subscription which represent revenues from pay-TV subscriptions¹⁰ amounted to SEK 7.7 billion, which was 4 per cent less than the previous year. The reported revenues from supplementary package subscriptions decreased by 9 per cent and amounted to SEK 1.2 billion.¹¹ The total revenues from TV services for basic and supplementary package subscriptions amounted to SEK 8.9 billion at the end of December 2021, which is a decrease of 5 per cent compared to the previous year.

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 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.

Figure 17 Revenues from traditional pay-TV subscriptions (SEK million)



7. Bundled subscriptions

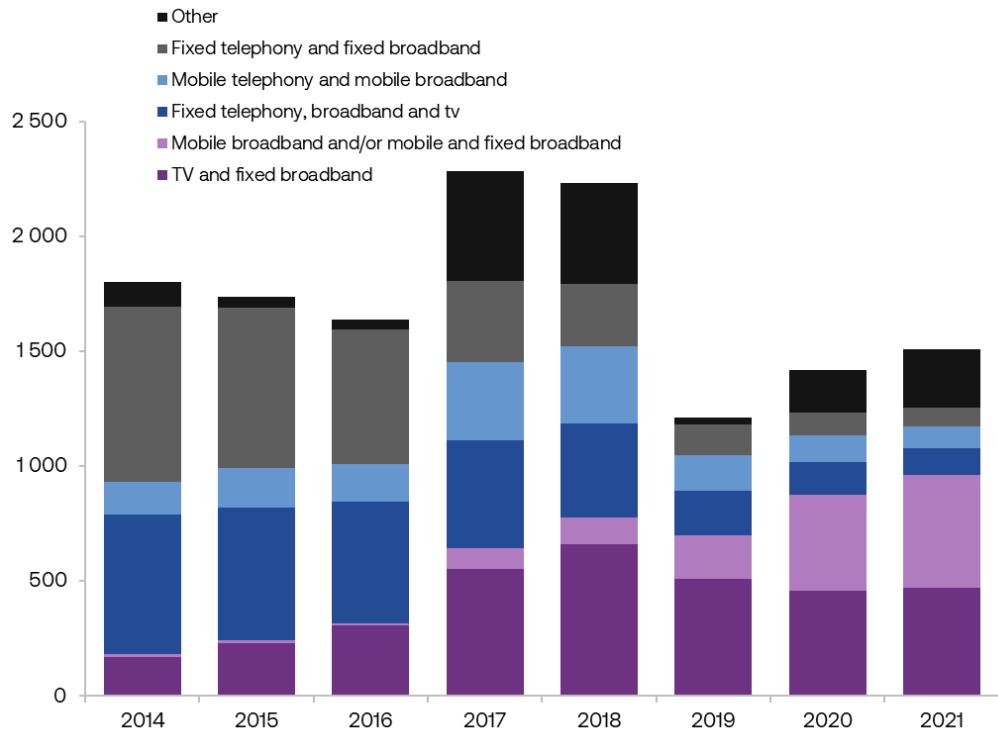
7.1 Bundled subscriptions

The number of bundled subscriptions totalled 1.5 million as of 31 December 2021. Telia Company, Tele2, Telenor, Allente and Tre together accounted for 98 per cent of the bundled subscriptions. The number of bundled subscriptions increased by 7 per cent between 2020 and 2021. Telia, Tele2 and Allente accounted for nearly the entirety of this increase. Overall, mobile bundling is increasing, while fixed-line telephony bundling is decreasing.

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

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

Figure 18 Number of bundled subscriptions (thousands)

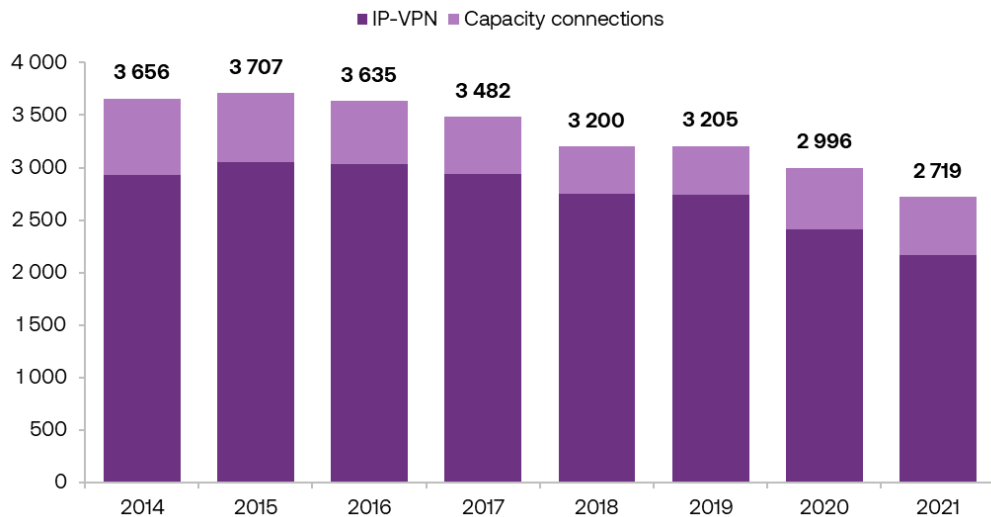


8. Data communication services to end customers

In this context, “data communication services” refers to data services used e.g. to connect the working locations of companies and public authorities with various IP-based systems. In 2021, total revenues from data communication services to end customers amounted to approximately SEK 2.7 billion, a decrease of 9 per cent compared with 2020.

Between 2020 and 2021, revenues from IP VPN services decreased by 10 per cent to SEK 2.2 billion, while revenues from capacity services to end customers decreased by 5 per cent to SEK 553 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 (SEK million)



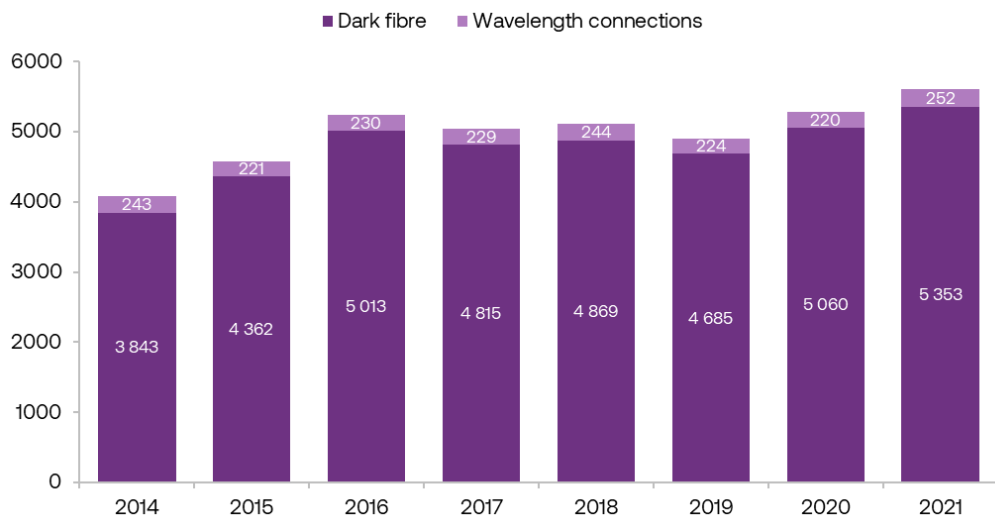
¹³ In the 2019 survey of the Swedish telecommunications market, the questions about capacity services to end customers were clarified, such that some types of revenues which may previously have been included in the statistics are now excluded. Revenues from capacity services to end customers in 2018 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 2020 and 2021, revenues from dark fibre connections to end customers and wholesale customers increased by 6 per cent, from SEK 5.1 billion to SEK 5.4 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 2021, revenues from wavelength connections to end customers and wholesale customers totalled SEK 252 million, an increase of 14 per cent compared to the previous year.

Figure 20 Revenues from dark fibre and wavelength connections (SEK million)



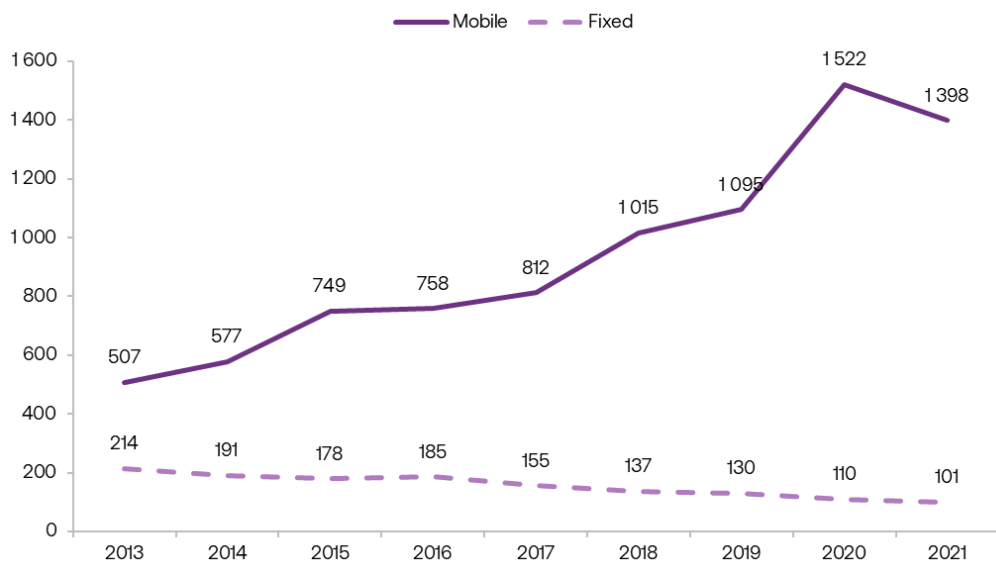
10. Number porting

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

At the end of December 2021, the number of ported mobile numbers totalled 1,411,341, which is an increase of 10 per cent. In Sweden, the number of porting instances for mobile numbers totalled 1,397,041, a decrease of 7 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 100,523, a decrease of 9 per cent.

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



¹⁴ <https://www.snpac.se/sv/content/2022>