Europe's Digital Progress Report (EDPR) 2016

Telecom Factsheet

SWEDEN

1. MEASURES FACILITATING DEPLOYMENT AND INVESTMENTS IN HIGH SPEED NETWORKS

1.1. Spectrum

Harmonised bands	MHz spectrum assigned[1]	% of the harmonised band assigned
800MHz	60	100%
900MHz	70	100%
1500MHz	0	0%
1800MHz	143.4	100 %
2000MHz paired	120	100%
2600MHz	190	100%
3400-3600MHz	168	84%
3600-3800MHz	200	100%

Overall Swedish NRA has assigned 93% of harmonised spectrum for broadband and is among the best performing Member States in this regard.

Following the Swedish Government decision in 2014 to allow the assignment of 700 frequencies to mobile broadband services, PTS concluded in April 2015 a pre-study and a public consultation on the potential use of the 700 MHz preparing for a spectrum award in late 2016. In 2015 PTS launched an investigation of the needs and demands of the use of the 3.4-3.8 GHz frequency band

1.2. State of transposition of the BB CRD (Directive 2014/61/EU)

Finalisation of the adoption process of the national legislation transposing the Directive is on-going. New rules are expected to enter into force on the 1st July and the NRA is planning to launch a web portal on that date that will form the central information point together with the already established web site "Ledningskollen.se".

1.3. EU and National investments in broadband

Fixed basic broadband coverage of rural areas is 93.6%, above the EU average of 90.6%. Sweden's National Broadband Strategy adopted in 2009 sets a long term objective of 90 % coverage with 100 Mbps until 2020 and is part of an overall strategy, the Digital Agenda for Sweden (DAS), a tool for coordinating the Government's efforts and actions in the area of ICT, addressing supply and demand. The mid-term broadband goal has been already achieved with a coverage level reaching 57.5[2] % with100 Mbps, significantly above the target of 40%. In addition to private investors, Swedish municipalities play also a crucial role in network deployment, not only by way of controlling access to municipal land and granting digging and construction permits to operators rolling out networks, but

[1] Including guard bands
[2] Data from Broadband coverage in Europe in 2014 by IHS and VVA

also by deploying and owning a fibre-based infrastructure. Their involvement is defined through local digital strategies and is driven i.a. by a need to be able to offer welfare services, i.e. municipal information, services in education, health and social care over broadband networks. Also municipal housing companies have a role, since they invest in fibre to the apartments and they agreed with property owners increased rents for fibred properties, reflecting the added value of fibre connection for the end user.
Share of ESIF funds allocated to broadband according to 3 Operational Programs for North Central Sweden, Central Norrland and Upper Norrland is 70 936 799 euro.

2. COMPETITIVE LANDSCAPE

Fixed broadband subscriptions - operator market shares[3]

Incumbent market share		New entrants market share	
2014	2015 (EU average)	2014	2015 (EU average)
39,0%	36.4% (40.6%)	61%	63.6% (59.4%)

Fixed broadband subscriptions - technology market shares[4]

DSL (including VDSL) (EU)	Cable Modem (EU)	FTTH/B (EU)	Other[5] (EU)
34.8% (69.2%)	18.5% (18.6%)	46.2% (8.7%)	0.5% (3.5%)

The increasing trend in FTTH/B connections is continuing, with fibre deployment driven by consumer demand for high speed connections above 100 Mbps. DSL users continue to decline and new fibre users are growing steadily, resulting in a significant increase in FTTH/B from 40.5% in 2014 to 46.2% in 2015, with Sweden among the leading Member States in fibre penetration.

Mobile sector[6]

Number of MNOs	Market shares of the first 2 MNOs		Number of MVNOs (overall share)
5	34%	27%	39 (13%)

3. REGULATORY FUNCTION

New entrants` DSL subscriptions by type of access at EU level (VDSL and VULA excluded)[7]

Own network (EU)	Full ULL (EU)	Shared Access (EU)	Bitstream (EU)	Resale (EU)
	51.4% (78.1%)	26.1% (2.3%)	4.1% (12%)	18.5% (7%)

LLU prices: 12.8 EUR (EU Average; 9,5EUR)[8]

As regards the 2014 Relevant Market Recommendation, the Wholesale central access market (M3b) has been considered competitive and deregulated, while all the other markets have been regulated. Three markets from the 2003/2007 Recommendation are still regulated: the Access to PSTN market

[3] Source: Communications Committee. Data as of July 2014 and July 2015.
[4] Source: Communications Committee. Data as of July 2015
[5] Including fixed wireless.
[6] Source: Communications Committee. Data as of October 2015.
[7] Source: Communications Committee. Data as of July 2015.
[8] Full LLU monthly average total cost in EUR; source: Communications Committee. Data as of October 2015.

(ex M1), the market for call origination on fixed networks (ex M2) and the broadcasting market (ex M18).

For both fixed and mobile termination rates, PTS has adopted and applied a pure BULRIC MTRs of 0.8800 eur cents and FTRs of 0.12/0.07, in accordance with the 2009 Termination Rates Recommendation.

4. CONSUMER ISSUES

Swedish consumers benefit from an average retail Eurotariff price for roaming of 0.165EUR per minute of calls made and 0.046EUR per minute of calls received (with alternative tariffs more expensive for both calls made with 0.295 and for calls received with 0.062). The average price for Euro-SMS roaming is of 0.049 eur. Average retail price per data is of 0.045 eur for each Mb, below the EU average (EU 0.059EUR per MB).[9]

Number portability		**2014**	**2015**
Fixed	Number of transactions[10]	136 566	132 891
	% of total numbers[11]	3.5%	3.6%
	Maximum wholesale price[12]	-	4
	Maximum time under regulation (number of working days)[13]	3	3
Mobile	Number of transactions[14]	407 284	547 698
	% of total numbers[15]	3.4%	4.5%
	Maximum wholesale price[16]	-	2
	Maximum time under regulation (number of working days)[17]	3	3

The Eurobarometer 2015 Survey shows that only 59% Swedish consumers consider they can easily compare bundles; this is below the EU average of 69% (12.position in the EU).

Furthermore, 77% of Swedish mobile phone users consider it is easy to monitor and control their mobile consumption, while a lower percentage of fixed phone users 73% easily monitor their consumption, which is very close to the EU average of respectively 78% for mobile and 71% for fixed. The uncertainty is however slightly higher as regards internet services, with only 62% and 53% Swedish consumers that finds it easy to monitor and control mobile and fixed internet consumption, that is below the EU average of respectively 69% for European mobile internet users and 67% for European fix internet users that find it easy to monitor and control internet consumption.

[9] International Roaming BEREC Benchmark Data Report April 2014 –September 2015 BoR (16) 28
[10] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[11] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[12] Source: Communications Committee. Data as of October 2014 and October 2015.
[13] Source: Communications Committee. Data as of October 2014 and October 2015.
[14] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[15] Source: Communications Committee. Data as of January to September 2014 and January to September 2015.
[16] Source: Communications Committee. Data as of October 2014 and October 2015.
[17] Source: Communications Committee. Data as of October 2014 and October 2015.

Swedish consumers are in principle equally critical as the EU average as regards the clarity of contracts since only 82% of consumers considered the contract they signed provided sufficient and clear information compared to an EU average of 84%, while 14% of swedes were not satisfied with the information provided compared to 13% of the EU average.

The NRA has not imposed any universal service obligation to provide electronic communication services.