ERICSSON

EUROPE

ERICSSON MOBILITY REPORT APPENDIX

NOVEMBER 2014

MARKET OVERVIEW

Key figures: Europe

	2014	2020	CAGR 2014–2020
Mobile subscriptions (million)	1,135	1,280	2%
Smartphone subscriptions (million)	475	815	10%
Total mobile traffic (PB/month)	800	5,500	35%

Europe continues to have a mixed level of maturity in its ICT (Information and Communications Technology) industry, but the difference between advanced and developing markets is getting smaller. Digital activities surround and support people throughout the day, making life more comfortable and safe, while bringing people closer to each other. Users understand the advantages of high quality connectivity and how big a role technology plays in their lives. More than one-third of Europeans state that it is very important for them to be able to access the internet wherever they are.

Device connection trends

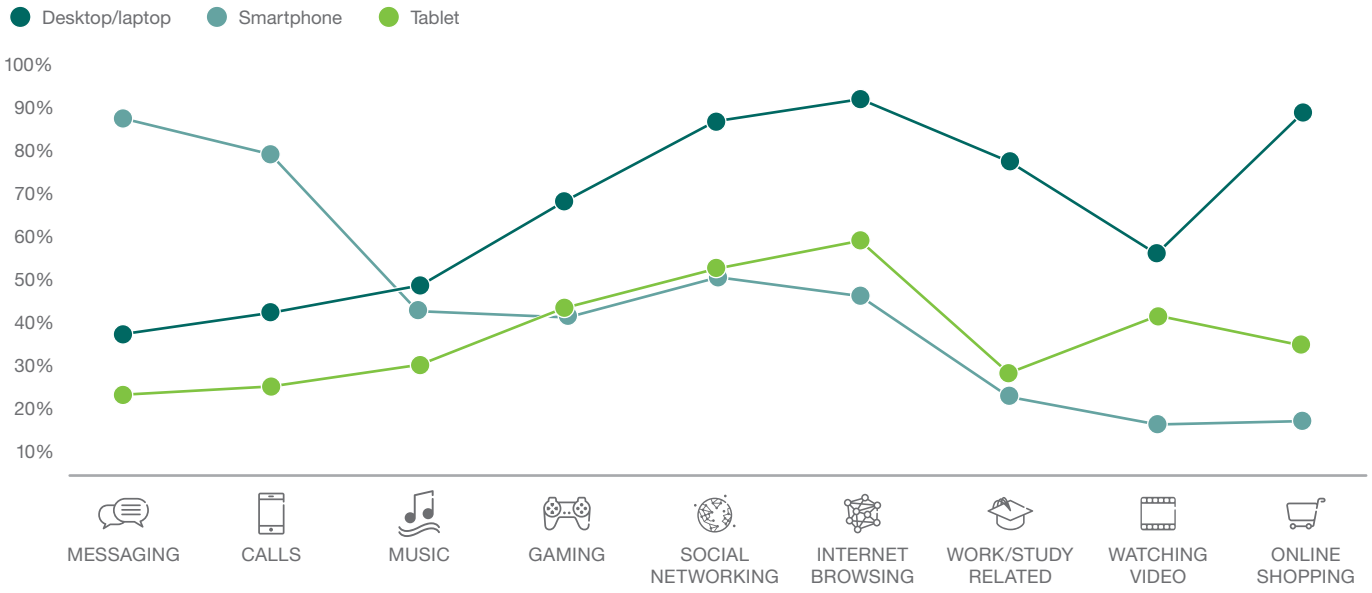
Household penetration of connected devices in Europe is growing significantly. According to Ericsson ConsumerLab research from 2014, household smartphone penetration has almost doubled across European countries in the last two years. In developing markets in Eastern Europe, household smartphone penetration has tripled. In highly developed markets, like the UK or Sweden, smartphones have already passed desktop computers in terms of household penetration. In other European countries such as Italy, smartphones can be found in 2 out of 3 households in 2014, compared to 1 in 3 in 2012.

Tablets are mainly used in parallel to smartphones. The household penetration of tablets in Europe has increased significantly, from only 18 percent in 2012 to almost 50 percent in 2014.

Device usage trends

With the increasing availability of multiple connected devices, it becomes apparent that the usage profile of activities performed via apps or telecom services is significantly affected by the device type. The figure below shows that the smartphone is the preferred device for activities where mobility is the key requirement, such as messaging and voice calls.

Device usage preferences



Source: Ericsson ConsumerLab (2014)
Base: Internet users of respective services

Smartphones and tablets are increasingly being used for gaming and social networking among European internet users. For instance in Germany, 42 percent of internet users play games on these devices. For more stationary devices such as desktop computers and laptops, the most common activity is browsing the internet, which 93 percent of internet users in Europe do. Online shopping and social networking are the second and third most common activities for these devices, and are performed by 89 percent and 87 percent of consumers, respectively.

Connectivity experience in Europe

Ericsson ConsumerLab research from 2014 also elaborates on differences in the user experience between indoor and outdoor connectivity. These differences are a critical barrier to further drive device usage. Analyzing the experience of both Wi-Fi and cellular connections, there is greater satisfaction with indoor connectivity, be it in the office, at home or at school. However, the satisfaction level with indoor connectivity dips when consumers perform data-intensive tasks, especially for activities such as viewing videos and gaming.

The bottom left figure shows that with 50 percent satisfaction, Russian internet users are the most content with their indoor connectivity experience for low data-intensive activities. Ukraine came a close second at 49 percent. In terms of high data-intensive activities performed indoors, the UK were most satisfied with 42 percent, followed by Russia at 38 percent.

OUTDOOR EXPERIENCE

INDOOR EXPERIENCE

Satisfaction of consumers while accessing services over the internet

	OUTDOOR		INDOOR	
AUSTRIA	12%	7%	43%	29%
DENMARK	13%	8%	41%	30%
GERMANY	11%	10%	41%	36%
ITALY	11%	10%	32%	24%
RUSSIA	16%	11%	50%	38%
SWEDEN	13%	9%	44%	36%
UK	16%	13%	47%	42%
UKRAINE	14%	9%	49%	29%
	LOW DATA INTENSIVE SERVICES	HIGH DATA INTENSIVE SERVICES	LOW DATA INTENSIVE SERVICES	HIGH DATA INTENSIVE SERVICES

Source: Ericsson ConsumerLab (2014)

MOBILE SUBSCRIPTIONS

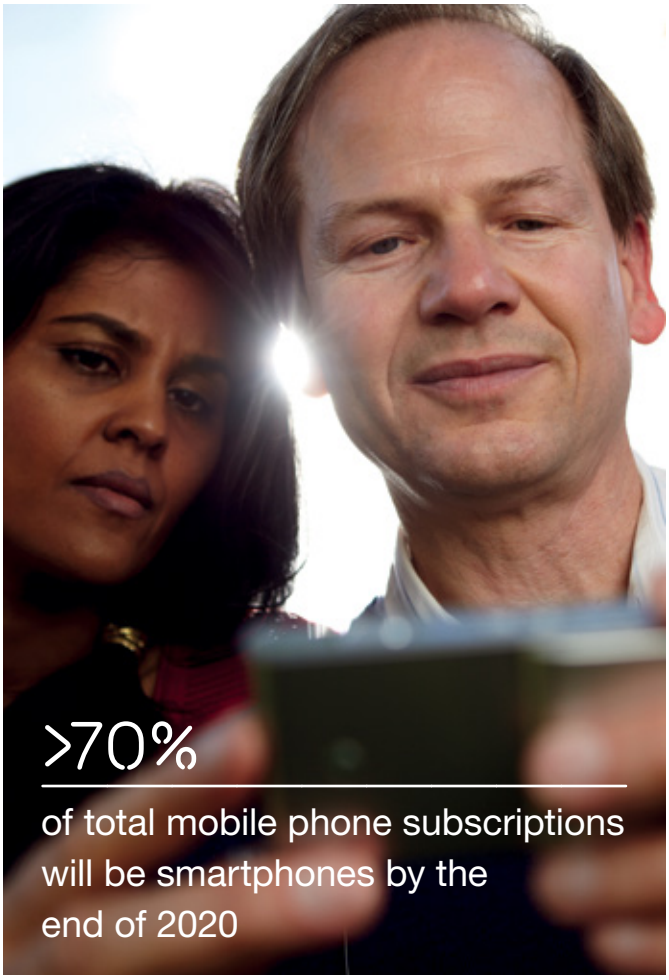
LTE subscriptions

In Europe, every country has WCDMA/HSPA networks and more than half have launched LTE. Western Europe has the largest number of LTE subscriptions, whereas Eastern Europe lags behind due to spectrum being awarded later.

Sweden and Norway launched LTE in 2009, becoming the first in the world to do so. The number of LTE subscriptions in Europe is growing rapidly and is expected to triple during 2014, when it will reach 5 percent of mobile subscriptions. The number of LTE subscriptions will be around 600 million by the end of 2020, which will equate to around 50 percent of all mobile subscriptions.

Smartphone subscriptions

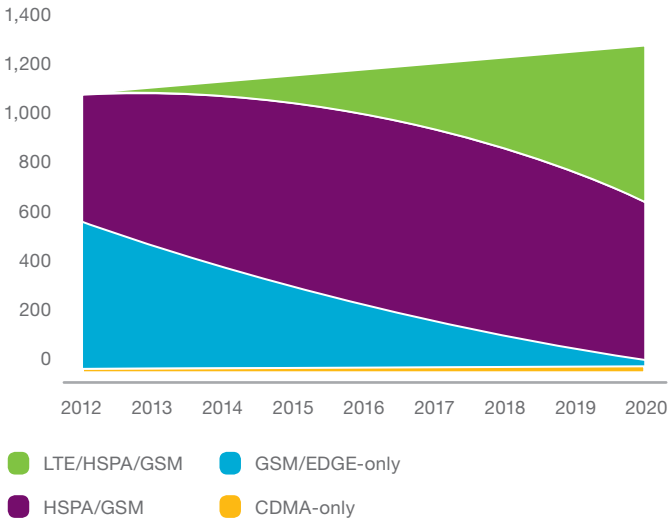
When looking specifically at smartphones, the penetration in Europe is already among the highest in the world. The number of smartphone subscriptions was around 400 million in 2013, accounting for almost 40 percent of total handsets. By the end of 2020, the number of smartphones in Europe will have doubled, reaching 800 million, meaning that more than 70 percent of mobile phone subscriptions will be for smartphones.



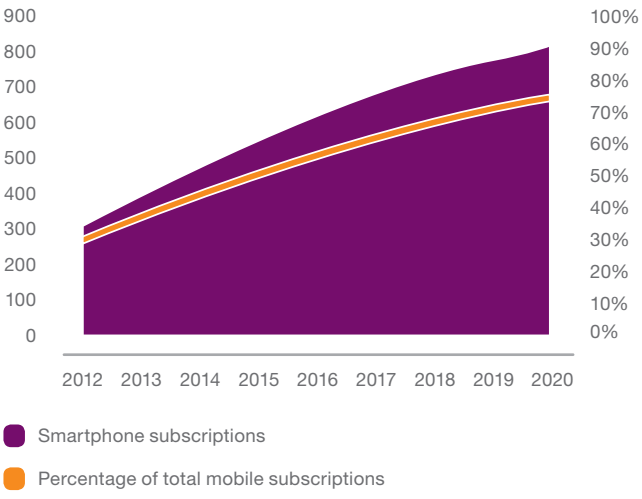
600 MILLION

LTE subscriptions in 2020

Mobile subscriptions, Europe (million)



Smartphone subscriptions and penetration, Europe (million and percent)



Mobile subscriptions do not include M2M subscriptions

MOBILE TRAFFIC

Mobile traffic in Europe will reach 5.5 ExaBytes (EB) per month by the end of 2020 – around 7 times more than 2014. Mobile voice traffic will slightly increase in the coming years, but will have a lower impact on total mobile traffic volumes and will start to decrease from 2018. Mobile data traffic is continuing to grow steadily, and increased around 65 percent in 2013 compared to 2012. It is expected to rise by a CAGR of around 40 percent between 2014 and 2020. This is due to the availability of affordable data-centric mobile devices – which makes it easier to use mobile data services – and attractive data plans, creating significant increases in usage per subscription. The rapid uptake of both smartphones and tablets is fueling consumer demand for a better user experience.

Traffic in the mobile phone segment is primarily generated by smartphones. By 2020, smartphone subscriptions are expected to almost double, resulting in rapid traffic growth.

Total monthly smartphone traffic over mobile networks will grow 6 times between 2014 and 2020. The amount of data used on each active smartphone subscription will increase substantially from an average of 1.2 GB per month in 2014, to a forecast average of around 4.6 GB per month in 2020.

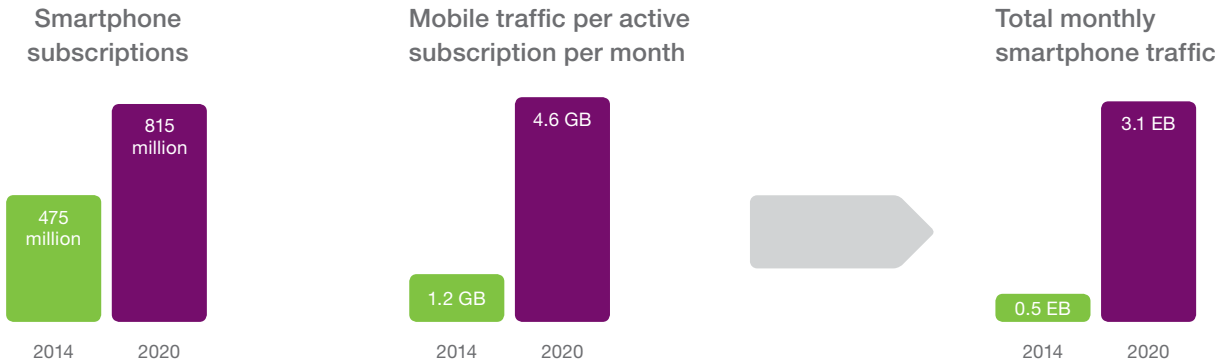
One of the key drivers of rising mobile data usage among consumers is the growth of video consumption on mobile devices, both at home and on the go.

The improved speed and capacity of HSPA networks is an important factor supporting this trend. The deployment of LTE across Europe will further enhance the user experience.

6X

growth in monthly smartphone traffic

Smartphone subscriptions and traffic, Europe



Active subscriptions here refer to the number of used devices, i.e. not including multiple SIMs or inactive devices.

EVOLVING BEHAVIOR

Multiscreen

The penetration of connected devices in European households is increasing significantly and consistently, with smartphones and tablets taking the lion's share of this growth.

An interesting aspect is that people tend to use multiple devices during the day to satisfy their information and communication needs. As an example, in Italy, when considering mobile phones, tablets and PCs, more than one in two people regularly uses two device types and more than one in three uses all three device types.[1]

People enjoy the freedom to access digital services across a multitude of devices: close to 60 percent utilize multiple screens to perform the same digital activity.[1] Top activities carried out across numerous devices are web browsing, messaging/instant messaging, listening to music and social networking. The popularity of these activities reflects the need for people to access information, entertain themselves as well as communicate and keep in touch with others.

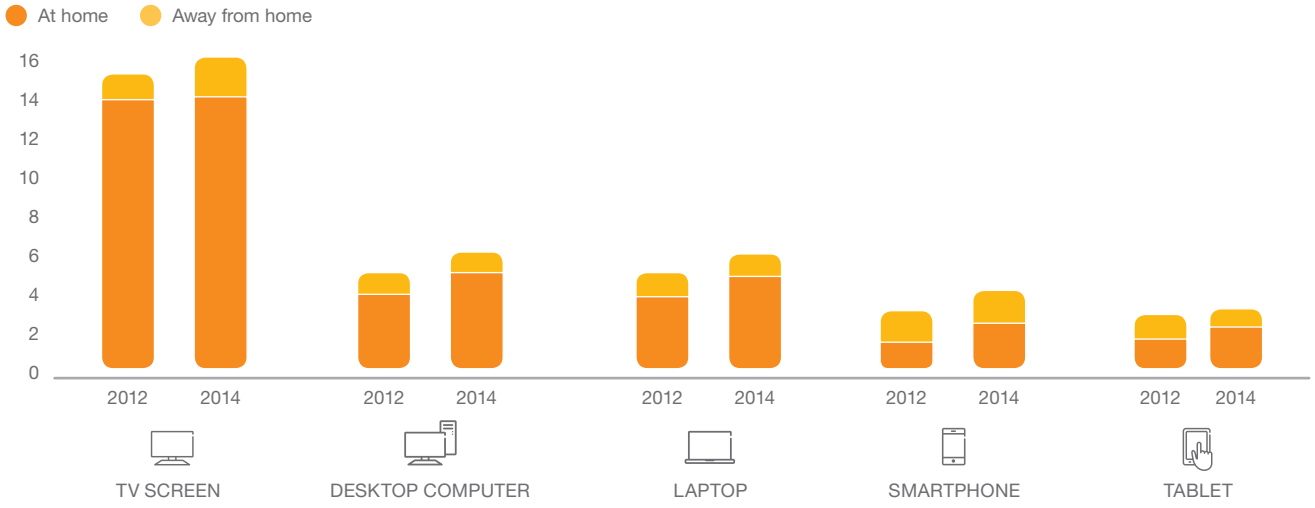
The screen-switching aspect is of course positively correlated to the place-shifting aspect. People who often change location during the day also tend to change devices to access services. In Italy, one-third of people who spend their day in only one or two locations use multiple devices to browse the web. This percentage rises to around 50 percent for people moving across 3 or more locations.[1] The ability to access information and communicate anywhere and at any time is becoming increasingly more common.

The fact that people consume digital services across several screens makes a case for synchronizing information and content across devices for a more seamless experience. This need is generally satisfied through consumer cloud services such as common storage for personal content, and synchronized agendas, calendars and bookmarks in web browsers. The adoption of such services grows with the number of devices used.

The multiscreen trend is also impacting TV services. The advent of capable mobile platforms, the growing availability of quality on-demand content, as well as the growth of high performing broadband networks is leading to changes in user behavior, as they broaden their viewing habits beyond TV screens.

The graph below exemplifies this trend, and shows that users that watch video on their smartphone have increased their weekly consumption time more than viewers on desktops and laptops. The viewing on mobile platforms is not limited to short video clips. As a matter of fact, in France and Spain, close to 50 percent of smartphone video viewers consume traditional TV content on their mobile on a weekly basis. For smartphones, the percentage of consumption away from home is particularly relevant: smartphone viewers consume more than four hours of video content on a weekly basis, almost half of which they view on-the-go.

Average hours spent watching video on each device per week (those who have used each device)



Source: Ericsson ConsumerLab (2014)

[1] Ericsson ConsumerLab (2014)

Over-the-top (OTT) services

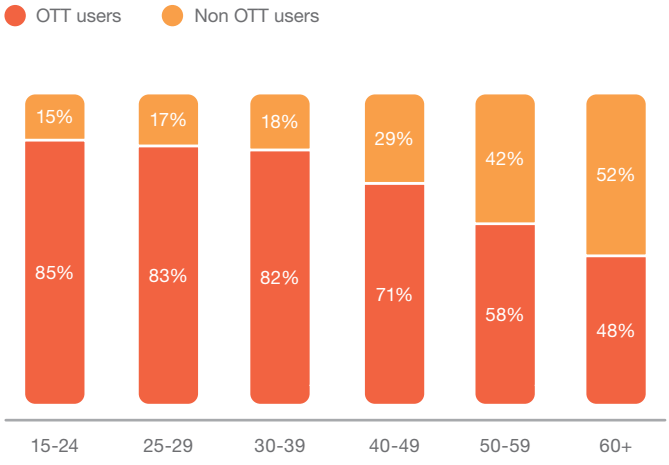
In addition to multiscreen behaviors changing TV and video viewing habits, people now do not want to have to worry about device types and technologies. They just want to see their favorite movies or shows wherever and whenever they want. OTT providers offer a wide spectrum of services, from VoIP and messaging to video and music streaming, increasing the amount of competition traditional operators face. More than 70 percent of the population in Europe use OTT services.

Smartphone owners are more active users of OTT services than feature phone owners, as most internet services on smartphones are easy-to-use apps with user-friendly interfaces. This makes them easily accessible and usable even for less tech-savvy people. There is still a big difference in the use of OTT services among age groups. For example, more than 80 percent of young people in Europe use OTT services, while only 48 percent over 60 years of age do so.

Some OTT services are complementary to traditional communication services such as voice or messaging, while others substitute it. Social network messengers and smartphone IM (Instant Messaging) apps have become more and more popular, while for voice calls the overwhelming majority still prefers traditional services.

In short, the European market is facing exciting times, with connectivity fully integrated into daily routines and changing the way consumers live and interact with technology. There is an increasing demand for better connectivity to guarantee a seamless internet experience anytime, anywhere and on any device.

OTT services penetration per age group



Source: Ericsson ConsumerLab (2014)
Base: Austria, Denmark, Germany, Italy, Sweden, UK, Ukraine

Ericsson is the driving force behind the Networked Society – a world leader in communications technology and services. Our long-term relationships with every major telecom operator in the world allow people, businesses and societies to fulfill their potential and create a more sustainable future.

Our services, software and infrastructure – especially in mobility, broadband and the cloud – are enabling the telecom industry and other sectors to do better business, increase efficiency, improve the user experience and capture new opportunities.

With more than 110,000 professionals and customers in 180 countries, we combine global scale with technology and services leadership. We support networks that connect more than 2.5 billion subscribers. Forty percent of the world's mobile traffic is carried over Ericsson networks. And our investments in research and development ensure that our solutions – and our customers – stay in front.

Founded in 1876, Ericsson has its headquarters in Stockholm, Sweden. Net sales in 2013 were SEK 227.4 billion (USD 34.9 billion). Ericsson is listed on NASDAQ OMX stock exchange in Stockholm and the NASDAQ in New York.

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