COUNCIL OF THE EUROPEAN UNION

Brussels, 2 June 2014

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COVER NOTE

from:	Secretary-General of the European Commission, signed by Mr Jordi AYET PUIGARNAU, Director
date of receipt:	28 May 2014
to:	Mr Uwe CORSEPIUS, Secretary-General of the Council of the European Union
No Cion doc.:	SWD(2014) 180 final - Part 1/2
Subject:	Commission Staff Working document Digital Agenda Scoreboard 2014

Delegations will find attached Commission document SWD(2014) 180 final. - Part 1/2

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Encl.: SWD(2014) 180 final - Part 1/2

EUROPEAN
COMMISSION

Brussels, 28.5.2014
SWD(2014) 180 final

PART 1/2

COMMISSION STAFF WORKING DOCUMENT

Digital Agenda Scoreboard 2014

COMMISSION STAFF WORKING DOCUMENT

Digital Agenda Scoreboard 2014

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(part 1 of 2)

Executive Summary

This is the fourth edition of the annual Digital Agenda Scoreboard

It is the last edition before reaching the expiry year of the Digital Agenda in 2015. Therefore, it looks at the overall development over the last four years.

In general, the results are positive.

> Internet usage is increasing rapidly, an now stands at 72%, up from 60%. Progress has been even faster among disadvantaged groups.
>
> Online shopping is doing well, too, arriving at 47% and 10 points up from the start of the DAE.
>
> High-speed broadband is now available to 62% of the population, more than twice the 29% we had in 2010. Still, so far progress has been heavily concentrated in those urban areas where alternative infrastructures compete. Given the limited advancement in extra-urban areas, it is thus too early to judge whether the 2020 broadband targets will be reached.

However, there are a few areas where progress is insufficient.

> eGovernment take-up by citizens only added four points over four years, is growing more slowly than other online applications and is indeed stagnating in a number of countries. Clearly, neither the potential savings in administration costs nor the potential benefits to citizens are fully exploited.
>
> A mere 14% of SMEs use the Internet as a sales channel, only two points up in four years. With such low rates, eCommerce can only be very limited tool for SMEs to grow and create jobs,
>
> Public support for R&D in ICT is well below the annual growth needed to achieve a targeted doubling by 2020; budget deficit reductions have taken their toll.
>
> Finally, cross-border shopping is growing only slowly.

Each of the sections of this document can be downloaded as a separate powerpoint presentation from http://ec.europa.eu/digital-agenda/en/scoreboard. On this website all the data used is equally available in much more detail for downloading or visualisation. Finally, detailed country profiles for every Member State can be found there, too.

Digital Agenda Targets Progress report

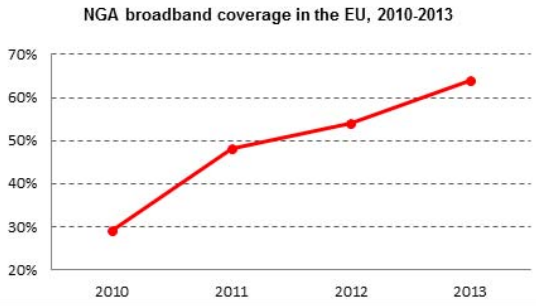
Digital Agenda Scoreboard 2014

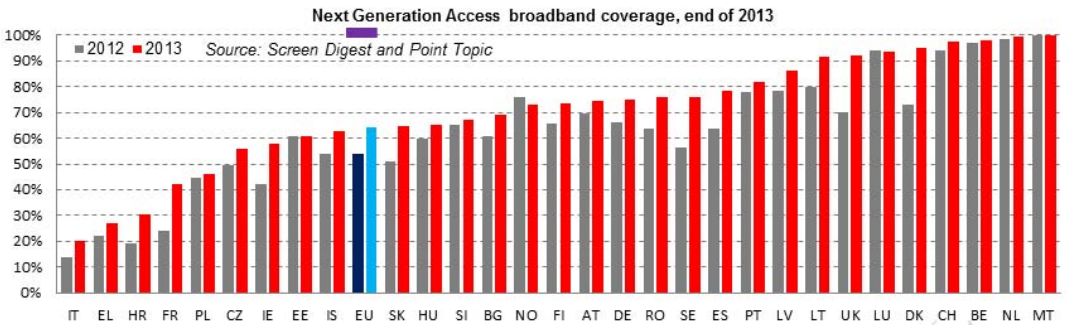
NGA coverage: Fast broadband technologies capable of providing at least 30 Mbps are available to 64%, up from 54% a year ago

Among the Next Generation Access technologies Docsis 3.0 for cable has the highest coverage (42%) followed by VDSL (32%) and FTTP (15%).

There is a number of Member states which have already coverage of 90% of homes or more. Most of these have cable and telecom networks competing for customers.

However, rural areas are lagging behind: only 16% of households are covered.

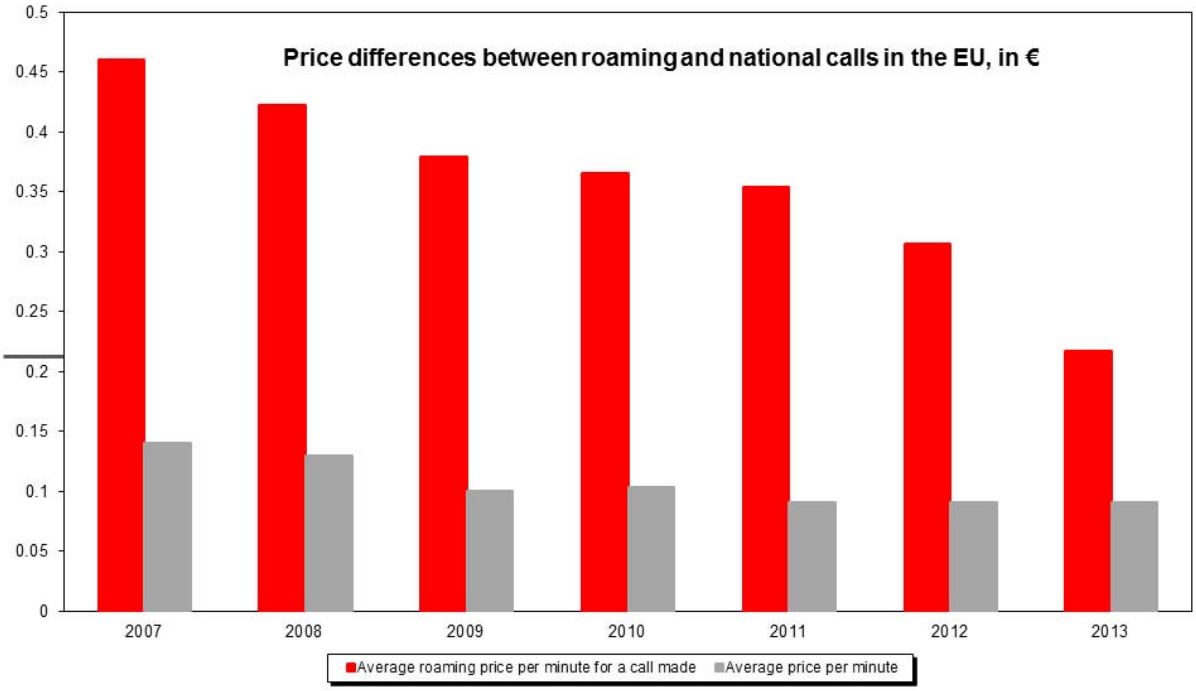




Digital Agenda Scoreboard 2014

European Commission

Roaming charges are coming down, thanks to legislation



Digital Agenda Scoreboard 2014

Source: BEREC and Communications Committee

European Commission

Every European Citizen Digital: consistent progress

Regular Internet use in the EU has increased by 11 percentage points since the launch of the Digital Agenda, from just above 60% to 72%. Although growth is slowing somewhat, on current trends the target of 75% will be reached by 2015.

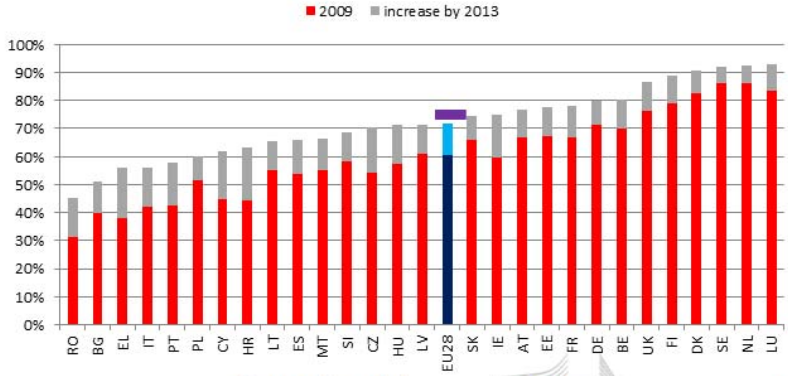
Progress has been largest in countries with a low starting level, especially in Greece, Romania, Ireland, Portugal, the Czech Republic and Croatia. Nevertheless, even Luxemburg has managed to add 10 pp in four years from a very high baseline. Denmark, Sweden, the Netherlands and Luxemburg have now crossed the 90pp threshold, showing that "Every European Digital" is possible in the not-so-distant future.

Conversely, the share of the population which has never used the Internet has declined by 10 points to reach 20%, making the achievement of the target in 2015 possible but not yet assured.

Frequent Internet usage, i.e. connecting at least daily, has risen by 14pp (as opposed to 11pp at least weekly for regular Internet usage), indicating a trend among regular users to more frequent use.

Progress has been expecially strong for disadvantaged groups, among which regular Internet use has now reached 57%, up from 41% four years ago. On current trends, this target of 60% will be reached even before 2015.

Regular Internet Users (at least once a week) in %



Digital Agenda Scoreboard 2014

Source: Eurostat

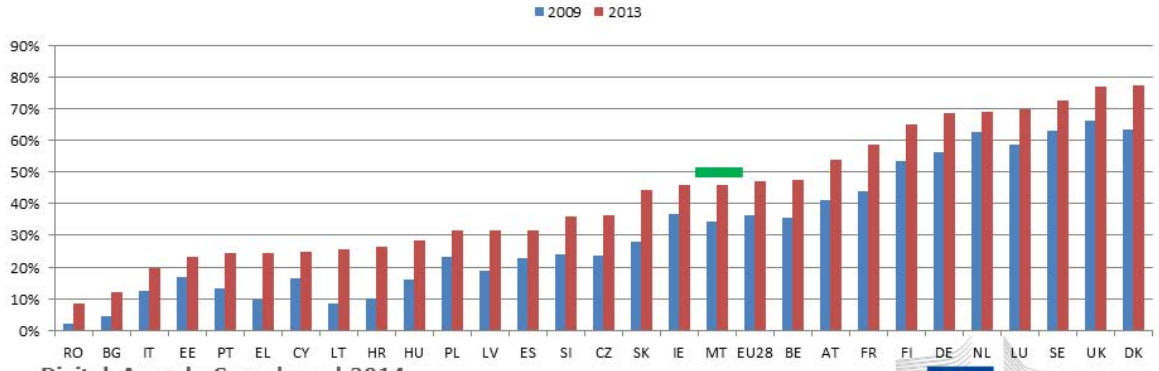
European Commission

Online shopping is growing, but less so cross-border

The proportion of online shoppers continues to grow, up more than 10 points over the period 2009-2013 to 47% of citizens, advancing in a close parallel with the rate of Internet use. The target of 50% by 2015 is likely to be achieved. While there appears to be no overall relationship between the rate of online shoppers in a country and the rate of increase in this rate over the period observed, the countries with the lowest rates of online shoppers (Romania, Bulgaria, Italy and Estonia) have also seen least progress in increasing rates.

Cross-border online shopping has also increased somewhat over this period, up to 12% in 2013 (+4 percentage point over 2009), but this pace is too slow to achieve the target of 20% by 2015. As could be expected, smaller member states have higher rates of cross-border shopping. However, they also exhibit higher growth. In Poland only 9% of online shoppers purchased cross-border, the lowest share of all member states by far.

Online shopping by citizens (% of individuals)



Digital Agenda Scoreboard 2014

Source: Eurostat

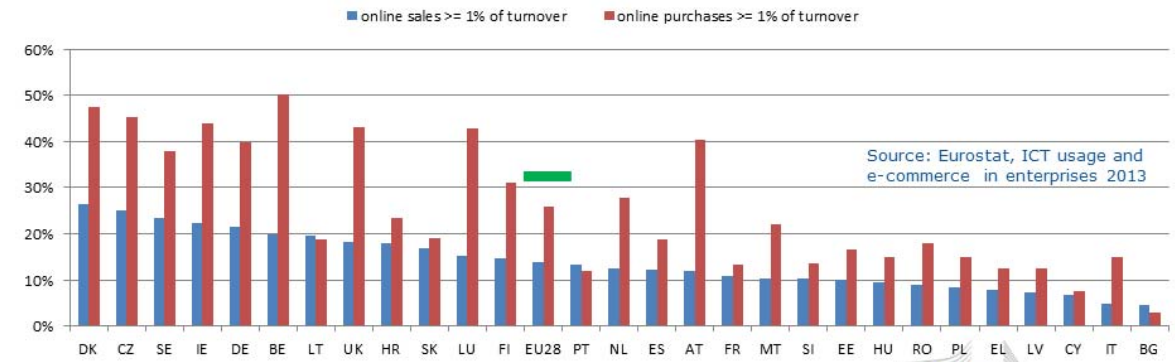
European Commission

SMEs are hardly exploiting the Internet for sales

The share of European SMEs selling online is growing at a glacial pace, reaching 14% in 2012, compared to a DAE baseline of 12%. Even in the best performing countries increases are marginal, and only the UK, the Czech Republic and Slovakia register rises of 5% and more. On current trends, not a single member state will even come close to achieving the EU average target of 33% by 2015.

The share of SMEs purchasing online is generally much higher, and the EU average of 26% is much closer to the target. This relative success is partly due to a much higher starting point. Also, it is easy to purchase online (a credit card number is sufficient), but difficult to sell (a platform needs to be set up, with payment and delivery mechanism).

eCommerce - SMEs selling/buying online in 2012, in %



Digital Agenda Scoreboard 2014

Footnote: data on e-commerce refer to the reference year (2012); online purchases: 2010: BE, DK, DE, EE , HR, UK; 2011: AT, MT, SE

European Commission

eGovernment: use by citizens increases, but too slowly

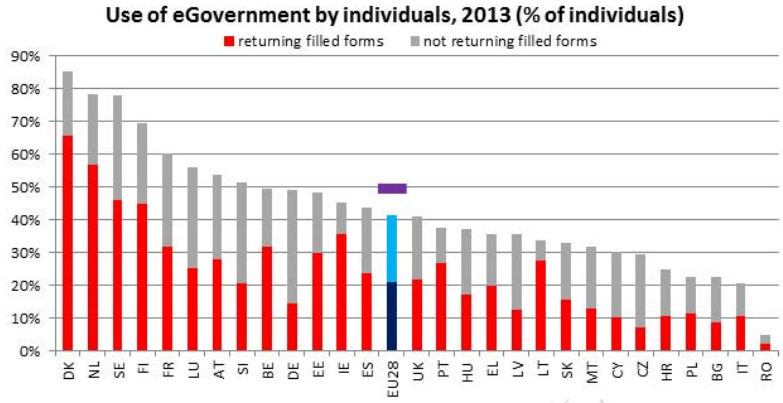
The use of eGovernment services by citizens has advanced over the last four years, but the most recent data indicates progress which is somewhat slower than the trajectory of the first years. As a result, overall progress of only four percentage points over four years is insufficient to achieve the 2015 target of 50%.

There has been considerable progress in a number of countries, but very slow change or even decrease in several large member states (Italy, Poland, United Kingdom, Germany) means that the EU average has moved with limited speed.

The variation of eGovernment uptake is much larger than for most other indicators. Even considering Romania as an outlier, the best-to-worst ratio of 4 is twice as high as for Internet use.

The share of citizens returning filled forms among those using eGovenrment services is very stable across the EU at 50%, a share which is roughly valid for most countries as well, although some countries display much higher shares, such as Denmark, the Netherlands, Lithuania and Ireland.

Among the key cross border public services which have been identified in the Connecting Europe Facility Guidelines, electronic ID, electronic signature, electronic delivery and electronic invoicing will be implemented in 2014.



Source: Eurostat

Low energy lighting is growing fast

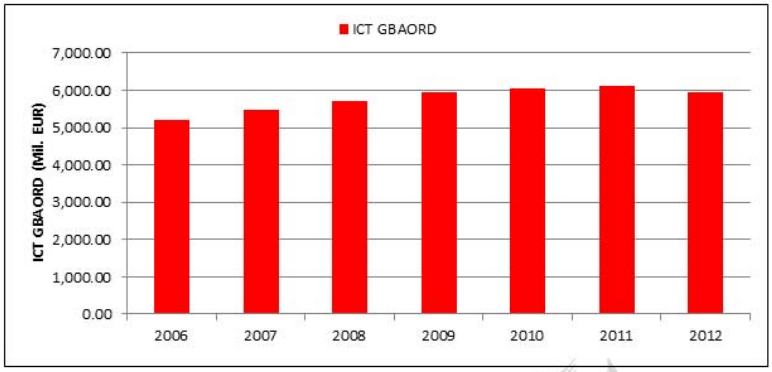
The shift towards energy-efficient lighting is happening fast. Indeed, the market share in value of solid-state lighting such as light-emitting diodes (LEDs and OLEDs), which consume little energy, increased from 14.4 % in 2012 to 19% in 2013, an eleven-fold increase compared to the Digital Agenda starting point of 1.7 % in 2009. It is to be expected that this rapid growth will continue apace in the remaining years of the Digital Agenda, ensuring that the target will be met.

Public R&D for ICT has stopped growing

After increasing for several years, in 2011 public R&D in ICT had managed to increase despite a fall in total public R&D. In 2012, it has followed the overall decrease and went down by 2.5%, a bit faster than the overall decline.

The target of doubling public R&D by 2020 requires an annual growth rate of 5.5%. Already last year actual performance was below the necessary trend line; now the gap is about 20%.

Public funding for ICT R&D in the EU



Source: JRC-IPTS estimate based on Eurostat

Broadband markets

Digital Agenda Scoreboard 2014

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Broadband coverage: Basic broadband is available to everyone in the EU, while fixed technologies cover 97% leaving 6 million homes unconnected. Next Generation Access (NGA) covers 62%, up from 54% a year ago. Deployment of 4G mobile increased sharply. Rural coverage remains significantly lower, especially in NGA.

Basic broadband is available to all in the EU, when considering all major technologies (xDSL, Cable, Fibre to the Premises, WiMax, HSPA, LTE and Satellite). Taking only fixed, fixed wireless (WiMAX) and mobile wireless (HSPA and LTE) into account, the coverage goes down to 99.4%. Fixed and fixed-wireless technologies cover 97.2% of EU homes.

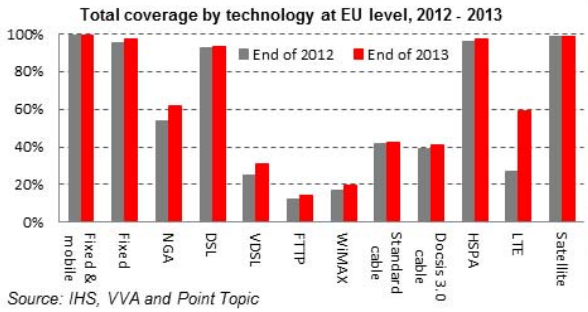
Next Generation Access technologies (VDSL, Cable Docsis 3.0 and FTTP) capable of delivering at least 30Mbps download are available to 62%.

Coverage in rural areas is substantially lower for fixed technologies (89.8%), and especially for NGA (18.1%)

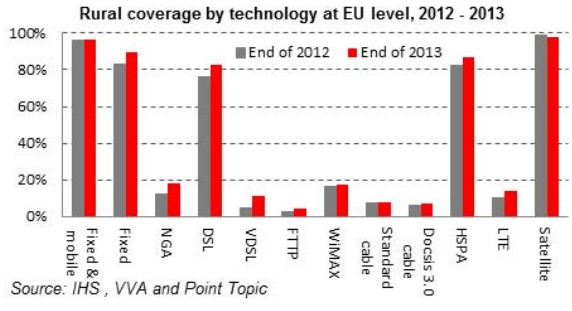
Our Target

Basic broadband for all by 2013: 100% in 2013

Fast broadband (>30Mbps) for all by 2020: 62% in 2013



Source: IHS, VVA and Point Topic

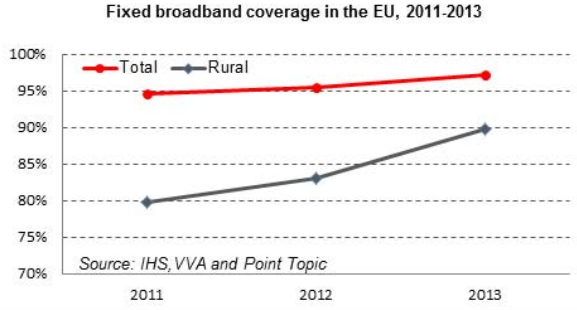


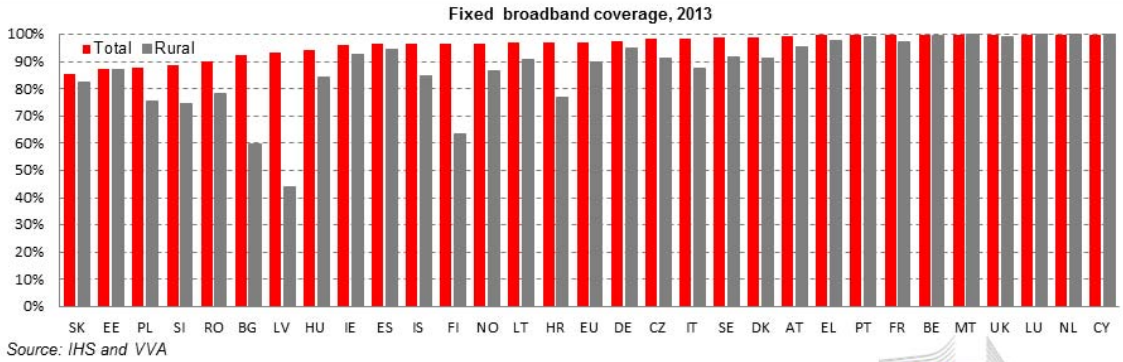
Source: IHS , VVA and Point Topic

Coverage of fixed broadband technologies continued to increase slightly with a focus on rural areas. In four Member States, all homes are covered by at least one fixed technology.

Primary internet access at home is provided mainly by fixed technologies. Among these technologies, xDSL has the largest footprint (93.5%) followed by Cable (42.7%) and WiMAX (19.7%). Fixed coverage is the highest in the Member States with well-developed DSL infrastructures, and is over 90% in all but four Member States.

Overall coverage of fixed broadband increased by 2 percentage points in the last two years, but there was a remarkable progress in rural areas from 79.9% in 2011 to 89.8% in 2013.

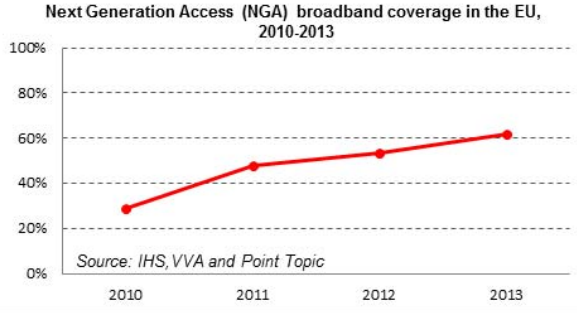


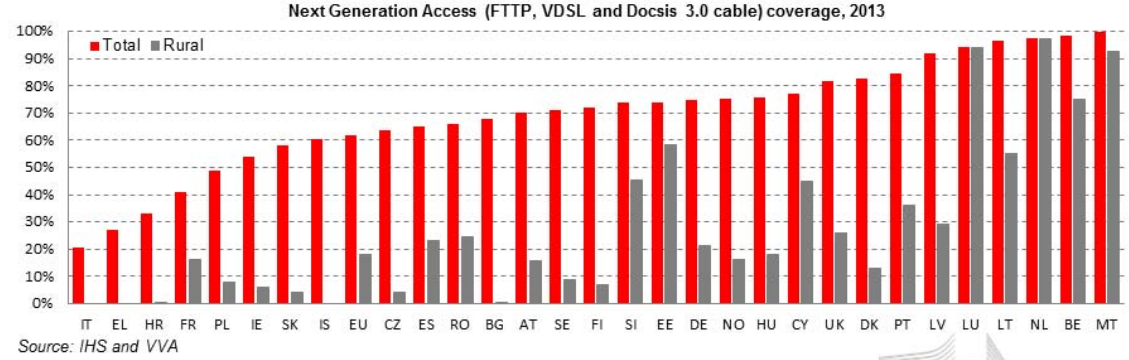


Source: IHS and VVA

The coverage of Next Generation Access technologies doubled since 2010. While Malta, Belgium and the Netherlands are close to full coverage, Italy, Greece and Croatia are lagging behind.

For the purpose of this report, Next Generation Access includes VDSL, Cable Docsis 3.0 and FTTP. At the end of 2013, Cable Docsis 3.0 had the largest NGA coverage at 41.2%, followed by VDSL (31.2%) and FTTP (14.5%). Developments until 2012 were dominated by the upgrade of cable networks, while VDSL coverage grew by more than 60% in the last two years. NGA networks are currently very much limited to urban areas: rural coverage is only 18.1%, coming mainly from VDSL.

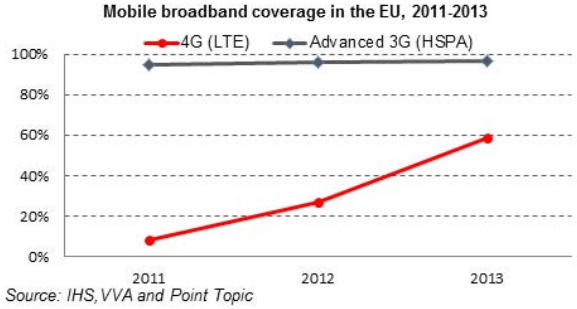




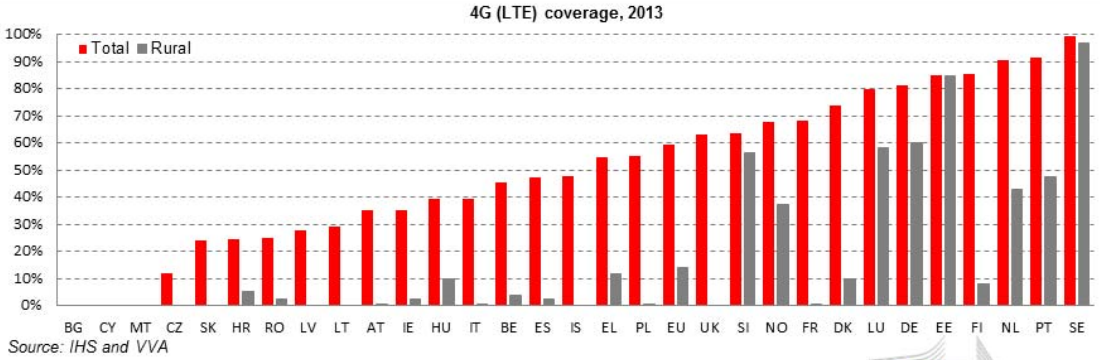
Source: IHS and VVA

4G mobile broadband availability reached 59%, up from 27% a year ago. 4G has been commercially launched in all but three Member States.

In 2013, deployments of 4G (LTE) speeded up. Nevertheless, 4G coverage is still substantially below that of 3G (HSPA). As of October 2013, close to 60% of Mobile Network Operators in the EU offered 4G services on LTE networks. LTE deployments have focused so far on urban areas except for Sweden, Estonia, Germany, Luxembourg and Slovenia. LTE is most widely developed in Sweden, Portugal and the Netherlands, and has not yet been launched in Bulgaria, Cyprus and Malta.



Source: IHS, VVA and Point Topic



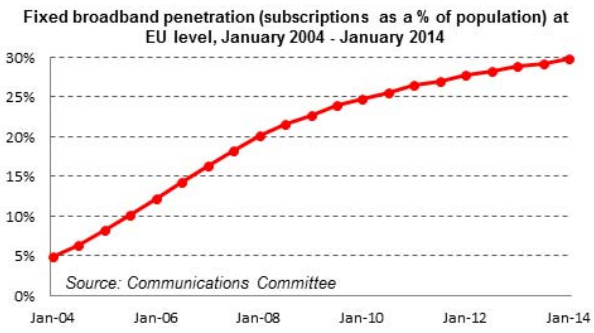
Source: IHS and VVA

There are 30 fixed broadband subscriptions per 100 people in the EU, which corresponds to a take-up of 76%* of homes. The number of subscriptions are still increasing, but the growth rate is low.

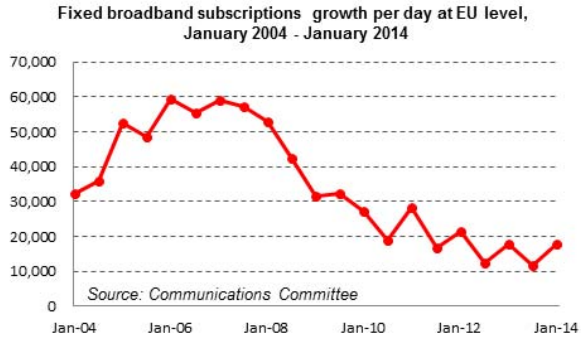
The fixed broadband subscriptions market is still on the increase. The growth in penetration stabilised between 1 to 1.3 percentage points per year. The market grew by 5.4 million subscriptions in the last twelve months.

The slowdown is caused by the saturation of the most advanced Member States, as well as a modest migration from fixed to mobile technologies.

Penetration in the EU is higher than in the OECD (27%), and the same as in the US.



Source: Communications Committee



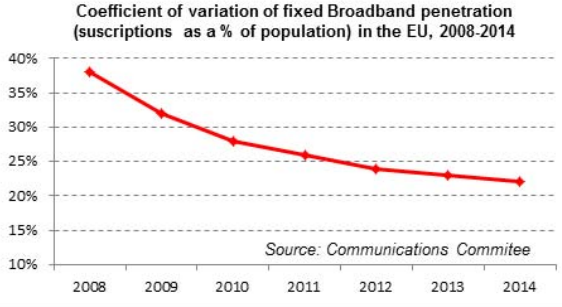
Source: Communications Committee

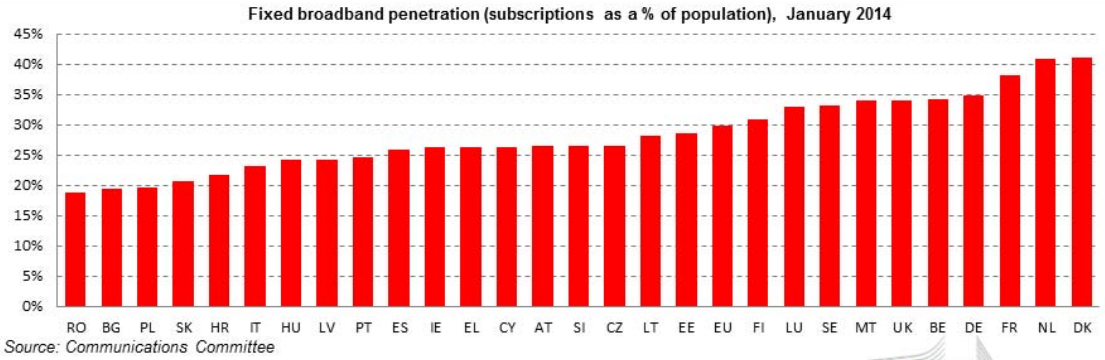
* *Source: Eurostat*

Take-up by Member State varies greatly, from 19 to 41 subscriptions per 100 people. Denmark and the Netherlands are among the leaders worldwide, while Romania, Bulgaria and Poland are lagging behind.

Although still very large differences can be observed in take-up across Europe, the coefficient of variation measuring the dispersion among the Member States decreased from 38% in 2008 to 22% in 2014.

The Netherlands and Denmark are traditionally on the top of the list. They are followed by France, Germany, Belgium, the UK and Malta. At the bottom of the list, we can find five Eastern European Member States (Romania, Bulgaria, Poland, Slovakia, and Croatia).





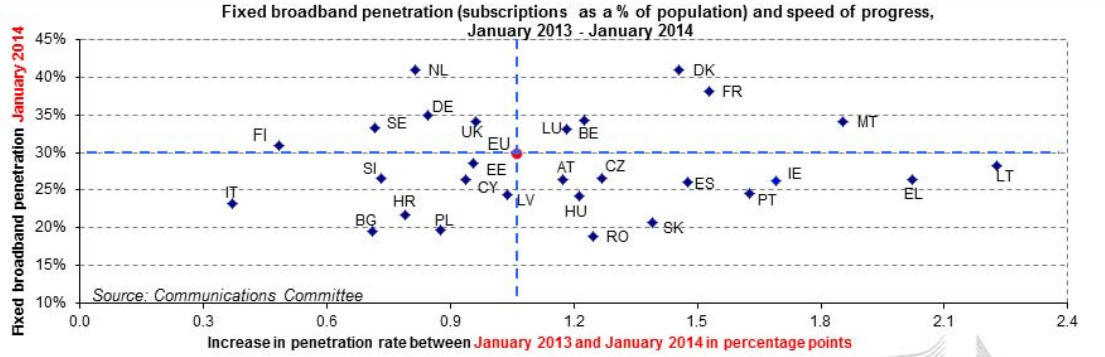
Progress by Member State in take-up shows a mixed picture. Lithuania and Greece are catching up, but little growth was recorded in Bulgaria and Poland despite their low penetration levels.

There is very weak correlation between the current fixed broadband penetration and the progress made in the last 12 months. The situation is worrying in those Member States in the lower left hand corner of the chart. Italy made the smallest progress last year, despite the fact that it has a relatively low take-up. The same applies to Bulgaria, Poland and Croatia, who are among the countries with the lowest take-up.

On the other hand, take-up in Lithuania and Greece went up by more than 2 percentage points, and as a result they got closer to the EU average. Progress was also higher than average in Ireland, Portugal and Spain. Romania and Bulgaria having the lowest penetration levels in the EU progressed only a little bit faster than the average.

Looking at the top right corner, Malta increased the most, followed by France and Denmark.

In the top left corner, Finland and Sweden exhibited fairly low growth rates, as the markets are getting close to saturation.

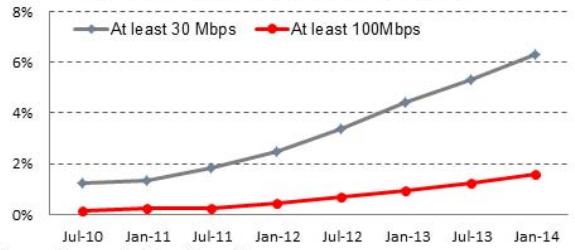


>30Mbps subscriptions are getting popular, while >100Mbps is still rare in the EU. An estimated 15% of homes subscribe to fast or ultrafast broadband.

With the increasing availability of NGA networks, fast broadband subscriptions are getting more and more widespread in Europe. Currently there are 6.3 fast broadband subscriptions (offering a headline download speed of minimum 30 Mbps) per 100 people in the EU, up from 2.5 two years ago.

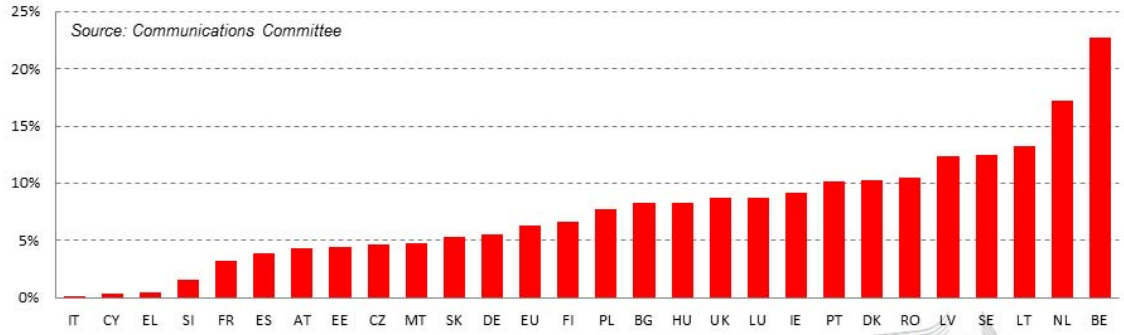
Fast broadband connections are most widely used in Belgium, the Netherlands, Lithuania, Sweden and Latvia. Cable Docsis 3.0 and VDSL play a major role in Belgium and the Netherlands, while in Lithuania, Sweden and Latvia FTTB and FTTH are the prevailing technologies. On the other hand, Italy, Cyprus and Greece has less than one fast broadband subscription per 100 people.

Fast and ultrafast broadband penetration (subscriptions as a % of population) at EU level, July 2010 - January 2014



Source: Communications Committee

Fast broadband (at least 30Mbps) penetration (subscriptions as a % of population), January 2014



Take-up of ultrafast (>100Mbps) broadband remains marginal at 1.6 subscriptions per 100 people corresponding to 3% of homes.

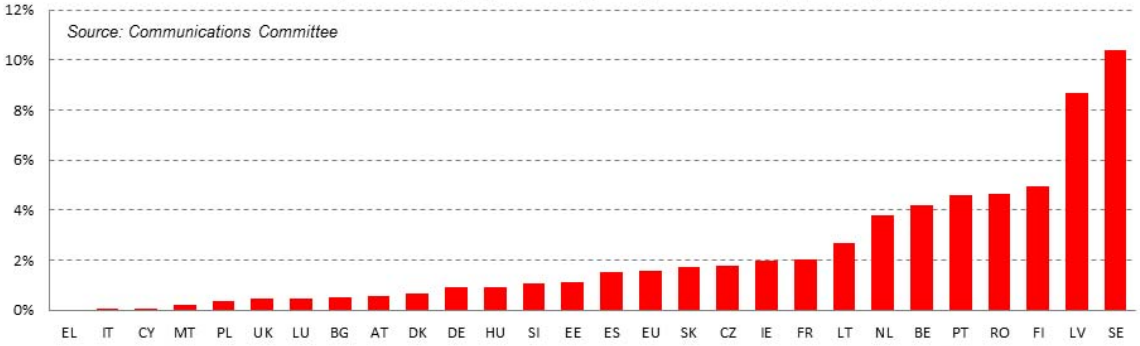
Ultrafast connections represent only a fraction of fixed broadband subscriptions despite the fact that FTTH/B and Cable Docsis 3.0 networks are capable of delivering such a speed.

Sweden is by far the leader in this product category, followed by Latvia, Finland, Romania, Portugal, Belgium and the Netherlands.

Our Target

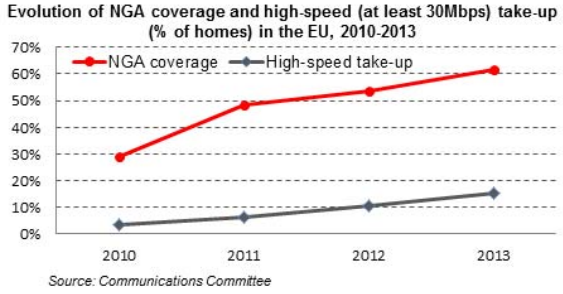
50% of homes subscribing to at least 100Mbps by 2020 - 3% in 2013

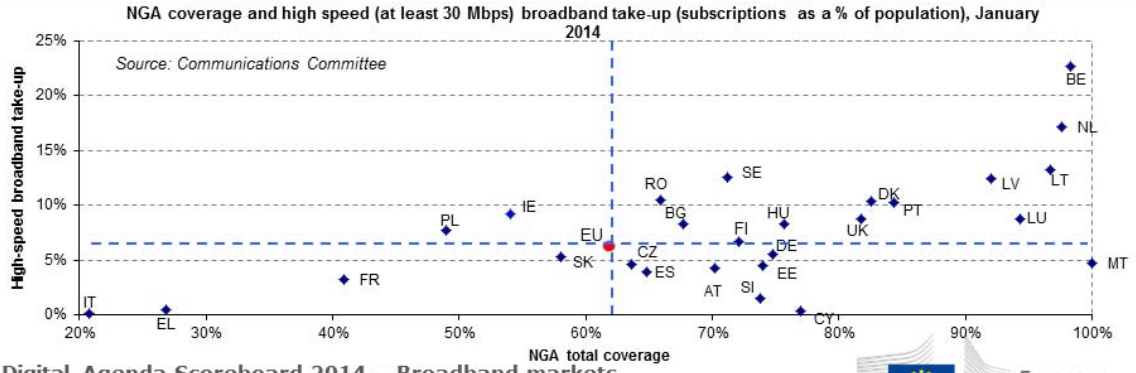
Ultrafast broadband (at least 100Mbps) penetration (subscriptions as a % of population), January 2014



The take up of fast broadband (at least 30 Mbps) falls well below the NGA coverage: NGA is available to 62% of homes in Europe, but only an estimated 15% subscribe to fast broadband.

Countries with higher NGA coverage tend to have higher high-speed broadband take-up, but very large differences can be seen across Member States. For instance, looking at the countries with the highest NGA availability, Belgium has 23 fast broadband subscriptions per 100 inhabitants as opposed to only 5 in Malta and 9 Luxembourg.

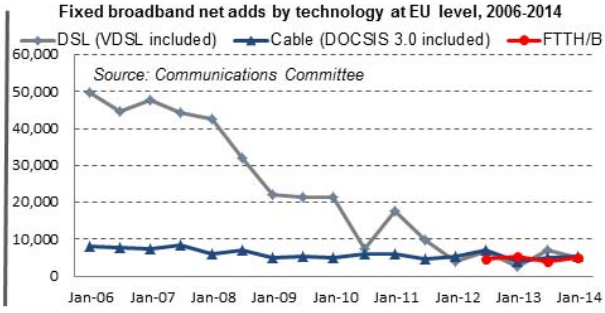


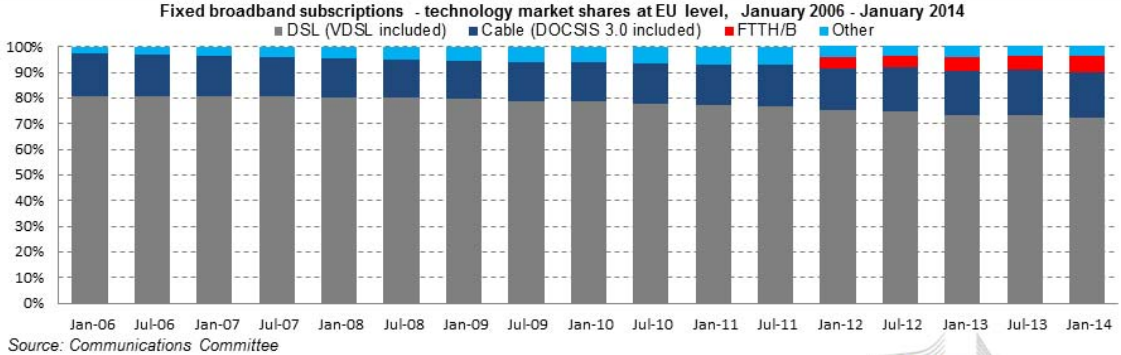


Over 70% of subscriptions are xDSL, although xDSL is slightly losing market share. Cable is second with 18% of the market. Fibre to the Home/Building is emerging.

Although DSL is still the most widely used fixed broadband technology, its market share declined from 80% in 2009 to 72% in 2014. The main challenger, cable somewhat increased its share during the same time period, but most of the gains were posted by alternative technologies, especially FTTH/B. Net gains of DSL, cable FTTH/B were in the same magnitude over the last two years.

Nevertheless, DSL continues to be predominant, and it's position can be strengthened thanks to the increased VDSL coverage.



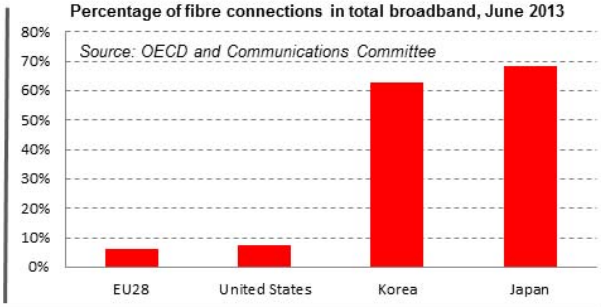


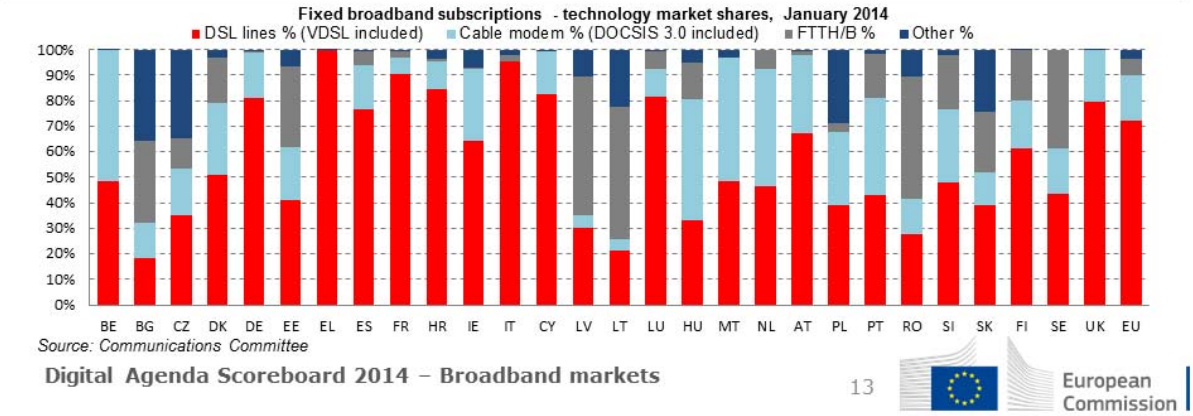
Source: Communications Committee

xDSL is particularly predominant in Greece and Italy, and has the lowest share in Bulgaria, Lithuania and Romania. Cable has very high market share in Belgium, Hungary, Malta and the Netherlands. FTTH/B is the most important technology in Lithuania, Latvia and Romania.

The share of xDSL ranges from 18% in Bulgaria to 100% in Greece. DSL is generally less dominant in Eastern Europe. Looking at alternative technologies, cable is present in all but two Member States and it is the most important competitor of DSL in the majority of the Member States.

FTTH and FTTB together represent only 6% of EU broadband subscriptions. In these technologies, Europe is very much lagging behind South Korea and Japan.

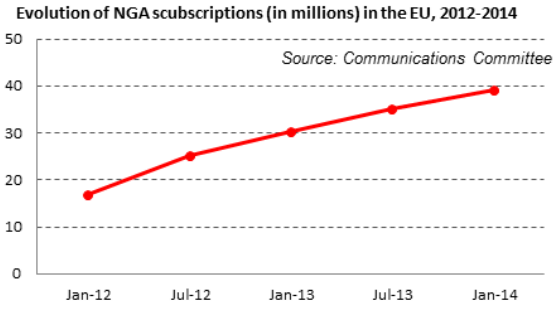


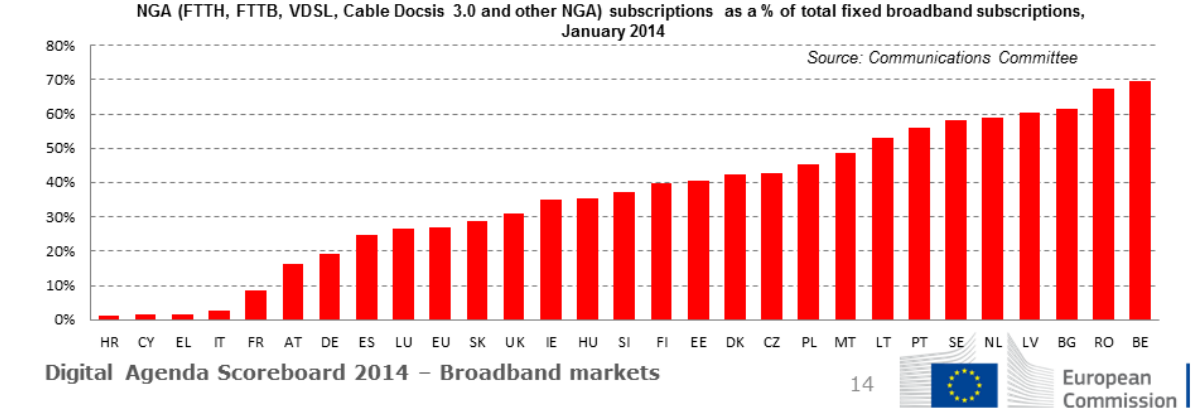


NGA subscriptions more than doubled in the last two years, but only one in four subscriptions are NGA. Over two thirds of subscriptions are NGA in Belgium and Romania, while less than 5% in Croatia, Cyprus, Greece and Italy.

Next Generation Access accounts for 27% of all EU fixed broadband subscriptions. Its sharp increase of the last two years is to a great extent because of the evolution of cable markets. Now, that close to 80% of cable subscriptions have already been upgraded to DOCSIS 3.0, the growth can only continue with higher take-up of VDSL and FTTH/B.

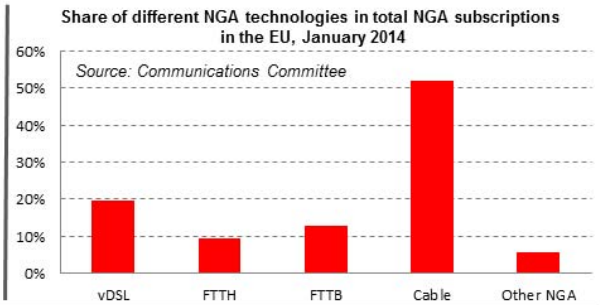
The majority of broadband subscriptions are NGA in Belgium, Romania, Bulgaria, Latvia, the Netherlands, Sweden, Portugal and Lithuania. At the same time, Croatia, Cyprus Greece and Italy is very much behind all other Member States.

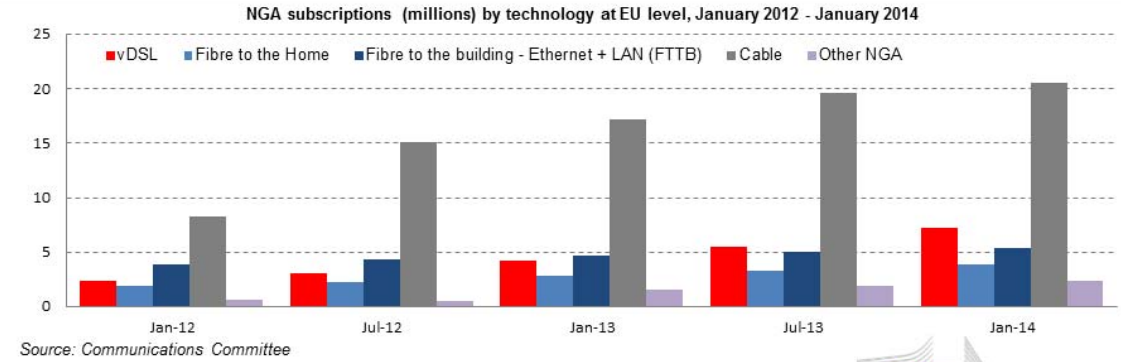




Cable Docsis 3.0 is currently the largest NGA technology in the EU both in terms of coverage and take-up. VDSL subscriptions went up by 39% in the last six months.

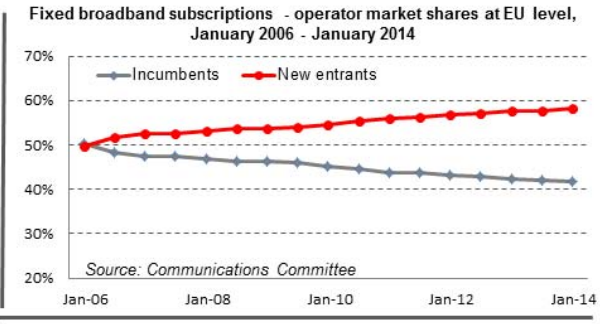
Over 50% of NGA subscriptions are Docsis 3.0, which is remarkable given that cable broadband in total represents only 18% of all EU fixed broadband subscriptions. While the vast majority of cable networks have been upgraded to NGA, in xDSL, only 1/3 of the network is VDSL. Nevertheless, VDSL coverage went up by 25% and the number of subscriptions by 72% in the last twelve months. FTTH and FTTB have 10% and 13% share in total NGA, respectively.

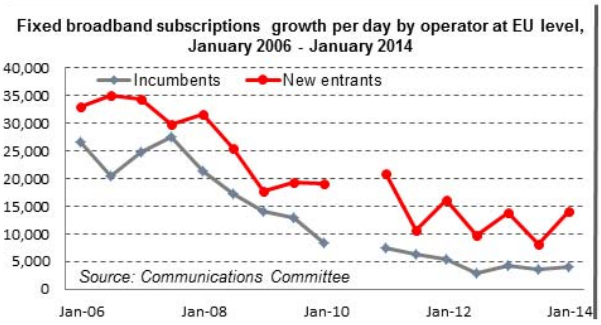


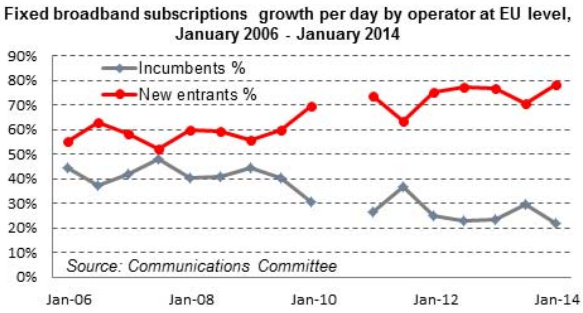


Competition in the fixed broadband market: new entrant operators are continuously gaining market share, but incumbents still control 42% of the subscriptions.

Incumbent operators are market leaders in almost all Member States, although their market share is decreasing. During the last eight years, new entrant operators always posted higher net gains then the incumbents. In the last six months, new entrants yielded 80% of the total net gain in the market. This, however, could not result in a large change in the overall market share of new entrants because of the low growth rate of the total market.



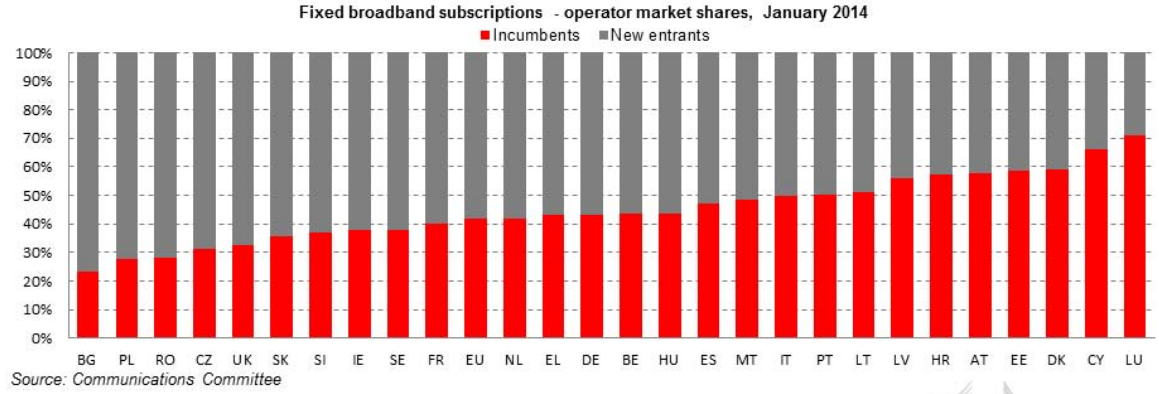




The market share of incumbents show very large differences across Europe. In 9 out of the 28 Member States, more than half of the subscriptions are provided by the incumbent operator.

Market shares are calculated at the national level for the incumbents and new entrants. However, broadband markets are geographically fragmented suggesting that a large number of homes are served by only one provider (most likely by the incumbent operator in this case).

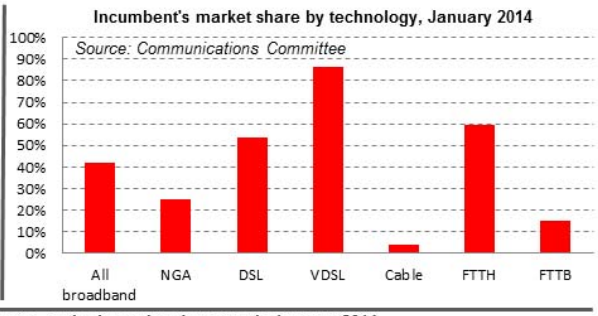
Incumbents have the highest subscription market share in Luxembourg and Cyprus, where the small market size may favour concentration. Incumbents are the weakest in Europe in four Eastern European Member States: in Bulgaria, Poland, Romania and the Czech Republic. In all these four Member States, most of the subscribers use technologies other than xDSL.

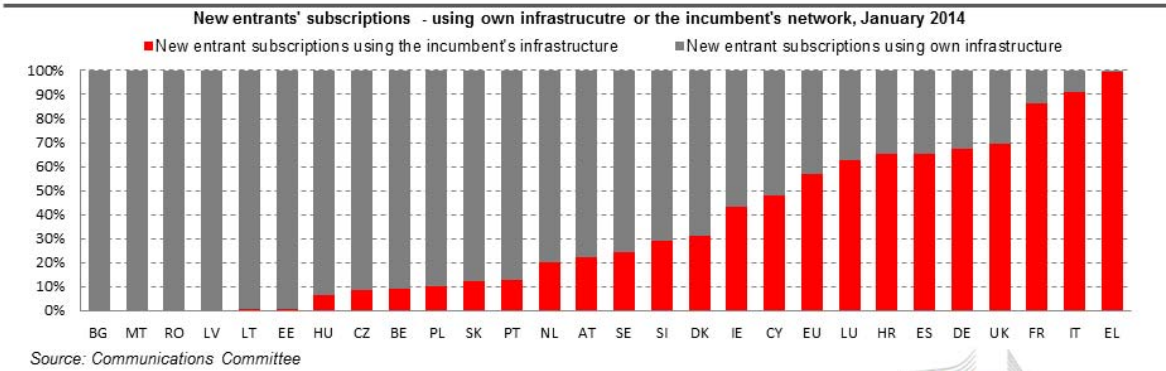


Source: Communications Committee

In the DSL market, unbundling reduced the dominance of incumbents, but in VDSL incumbents have over 80% of subscriptions. Nevertheless, NGA is provided mainly by new entrants because of the high share of cable. More than 50% of new entrant subscriptions use the incumbents' network infrastructure.

New entrant operators can compete with the incumbents by using either the incumbent's network or their own network to offer internet access. In Greece, competition is purely service based, in Italy and France over 80% of new entrant subscriptions use the incumbent's network. In the Eastern European Member States, competition is rather based on competing infrastructures. This applies also to Belgium, Malta, Portugal and the Netherlands.

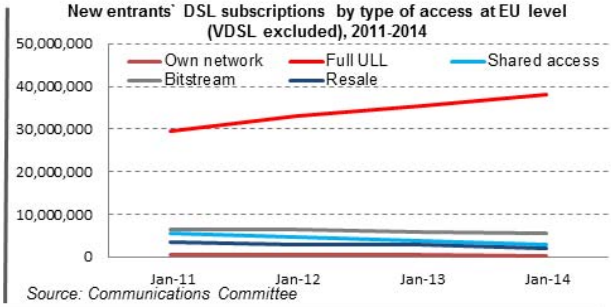


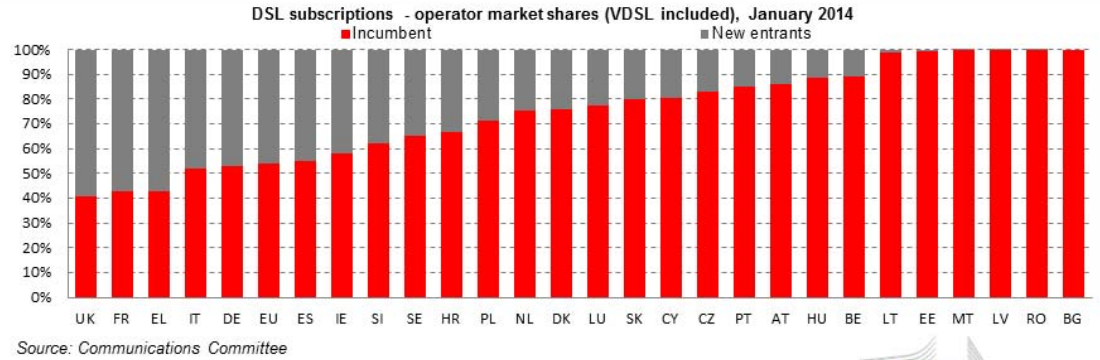


Source: Communications Committee

54% of DSL subscriptions belong to the incumbents. New entrants mainly use Local Loop Unbundling to sell DSL. In six Member States, the new entrants' presence in the DSL market is marginal. In all these Member States, alternative technologies are significant.

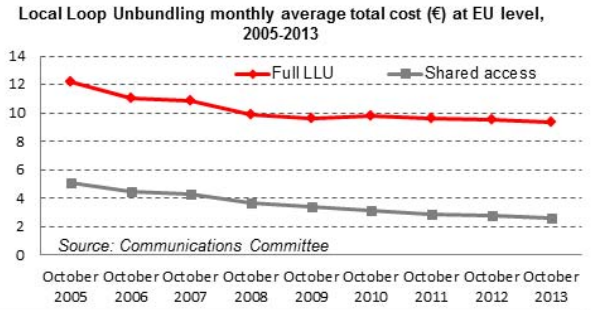
In Bulgaria, Romania, Latvia, Malta, Estonia and Lithuania, there is virtually no competition in the DSL market. These Member States, however, have strong platform competition. At the same time, in the UK, Greece and France, new entrants have the majority of xDSL subscriptions, followed by Italy and Germany. In all these Member States, the vast majority of new entrants' DSL subscriptions are provided through Local Loop Unbundling, but in Italy bitstream is also important.

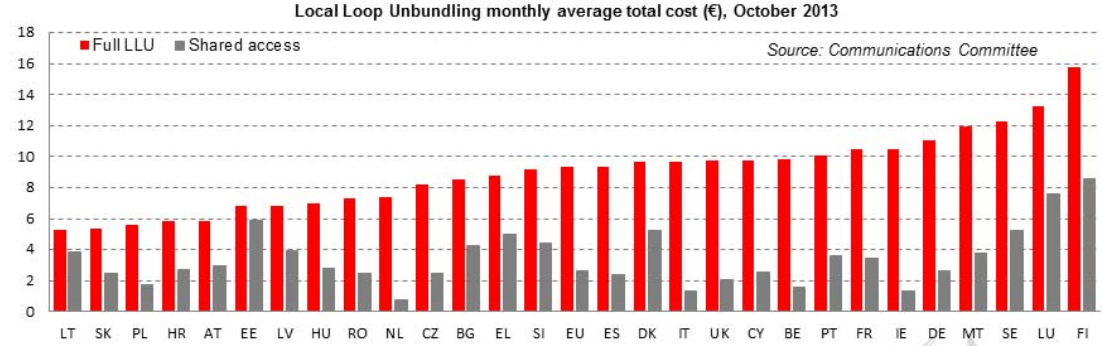




The wholesale charges of Local Loop Unbundling went down by 25% for full access, and by 50% for shared access since 2005.

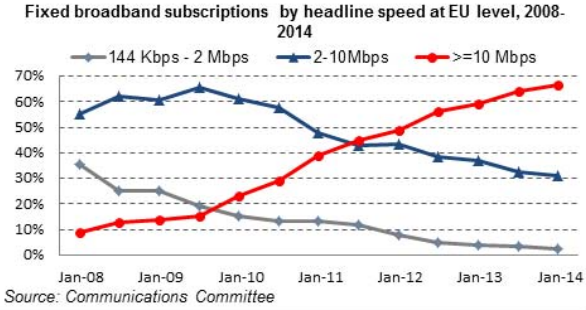
The regulated wholesale charges giving access for new entrants to the local loop are important to effective service based competition in the xDSL market. The monthly average total cost (calculated as the monthly rental + the one time connection charge distributed over a three years period) stood at €9.35 for full access (provision of both voice and broadband) and at €2.61 for shared access (provision of broadband only) in October 2013. LLU charges decreased substantially in Ireland and Sweden last year.



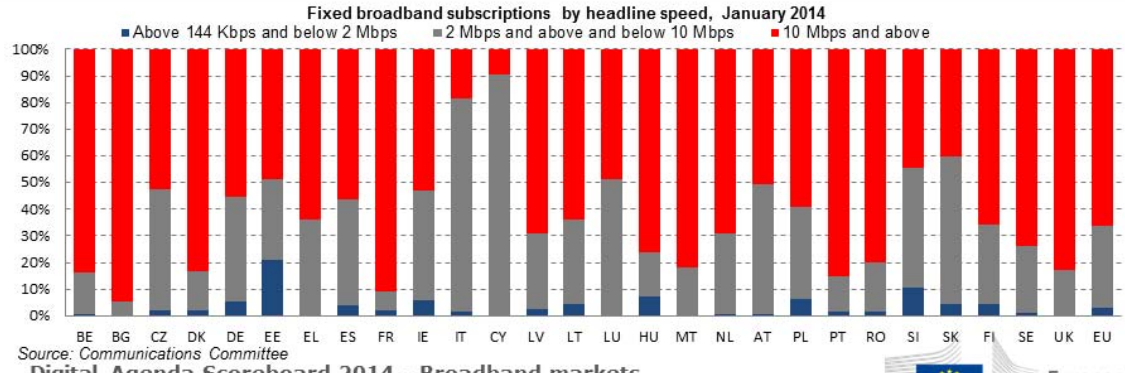


Fixed broadband speeds: 2/3 of subscriptions are at least 10Mbps. <2Mbps is marginal (3% of all subscriptions) except for Estonia and Slovenia.

Low speed fixed broadband subscriptions are getting marginal: only 3% of all subscriptions have lower than 2 Mbps advertised download speed as opposed to 36% six years ago. At least 10Mbps applies to two thirds of subscriptions, up from 9% in 2008. However, broadband connections are still slow in Italy and Cyprus, where less than 20% of subscriptions are at least 10Mbps. In Estonia and Slovenia, still a relatively large proportion of subscriptions are below 2Mbps.



Source: Communications Committee

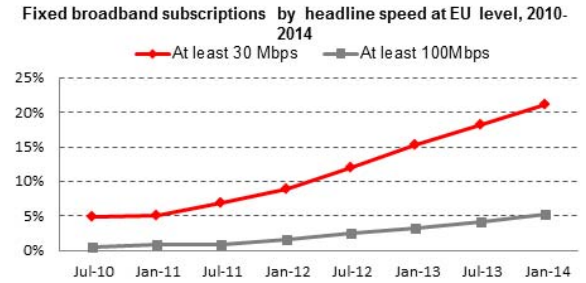


Source: Communications Committee

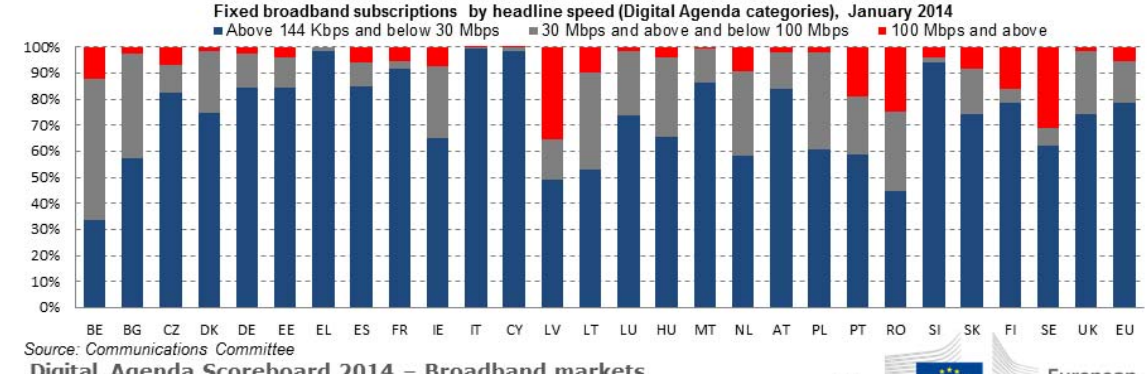
Fast and ultrafast broadband subscriptions grew by 44% in twelve months. In Belgium, Latvia and Romania, the majority of subscriptions are at least 30Mbps. Ultrafast (at least 100Mbps) is most widespread in Latvia, Sweden and Romania.

Despite the growth of fast and ultrafast subscriptions, they are still rare in the EU. In January 2014, only slightly more than one in five subscriptions were at least 30 Mbps and only 5.3% at least 100Mbps.

In Belgium, Latvia and Romania, already more than 50% are at least 30Mbps, while the same ratio is less than 10% in Italy, Greece, Cyprus, Slovenia and France. In ultrafast (at least 100 Mbps), Sweden, Latvia and Romania are the most advanced with more than 20% of subscriptions.



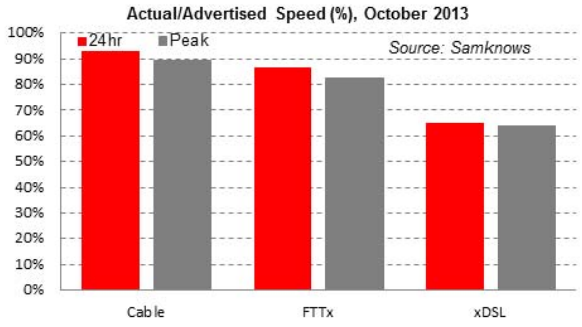
Source: Communications Committee

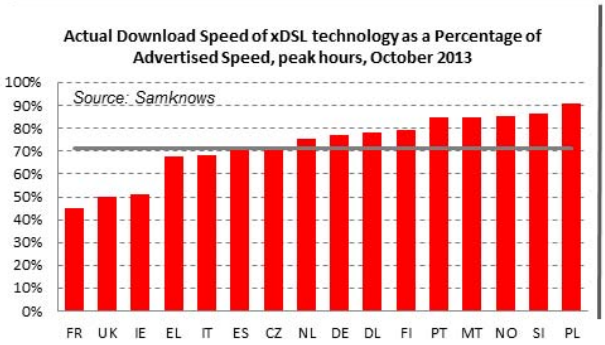


Source: Communications Committee

Actual speeds of broadband connections are significantly lower than advertised speeds. DSL delivers only 64% of the speed advertised by the operators in peak hours.

Speeds of broadband products are advertised as "up to a certain Mbit/s", but there are significant differences between the advertised speed and the actual speed that consumers receive. In the EU, the actual download speed is 76% of the advertised speed. DSL delivers only 63.8% of the advertised headline download speed, compared to 89.5% for cable and 82.7% for FTTx.





Despite the fact that in the US 96% of the advertised download speed is delivered, the actual download speeds attained in Europe are considerably higher than those in the US for all the three major technologies.

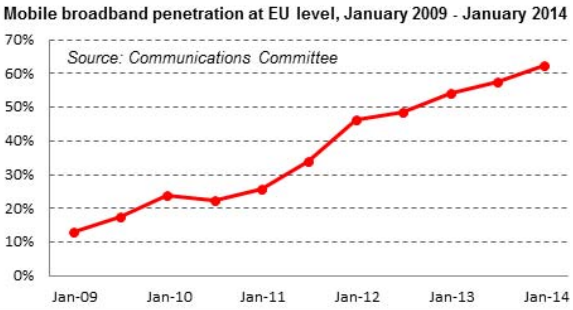
Regarding peak hours, we can see that the performance is only very slightly below the 24 hour average.

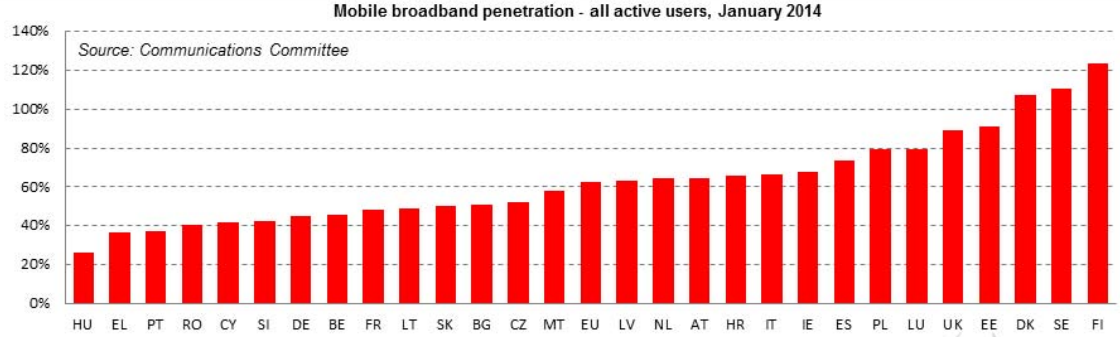
As for the xDSL being the most widely used technology in Europe, there are large differences across Member States: 90% of the advertised download speed is attained in Poland, but only 45% in France and 50% in the UK and Ireland.

There are 62 active mobile broadband SIM cards per 100 people in the EU, up from 26 three years ago. The growth in subscriptions somewhat slowed down in the last twelve months.

Mobile broadband represents the fastest growing segment of the broadband market, although the growth somewhat slowed down in the last twelve months in terms of active subscriptions. Take-up increased by 15% in 2013 compared to 18% in 2012.

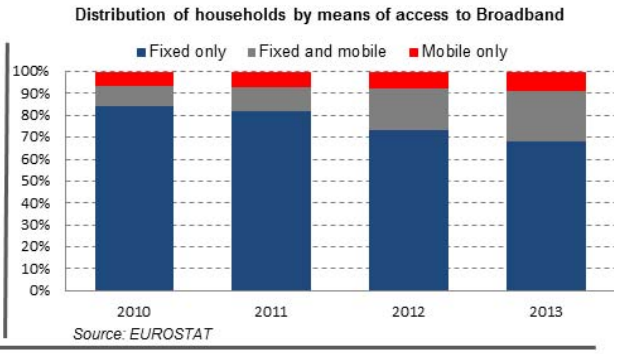
In the Nordic countries, there are already more than 100 subscriptions per 100 people, while in Hungary, Greece and Portugal the take-up rate is still below 40%. Most of the mobile broadband subscriptions are used on smartphones rather than on tablets or notebooks.

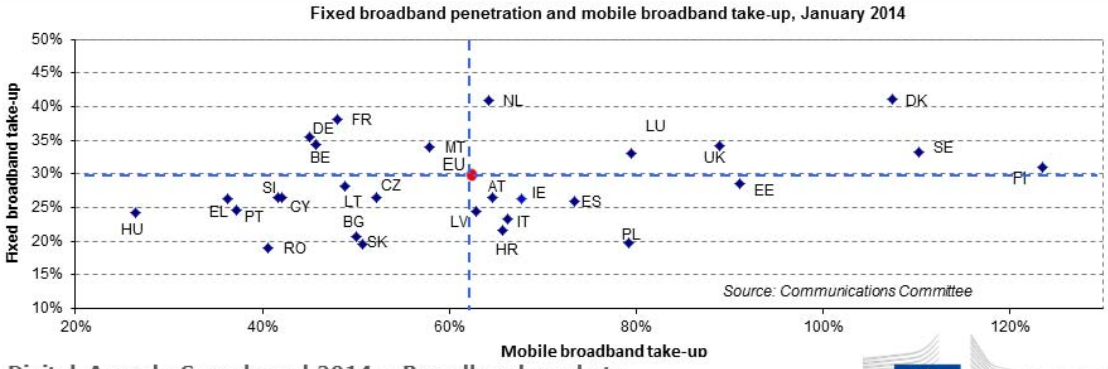




Mobile broadband is mainly used a complementary connection rather than a substitute to fixed broadband.

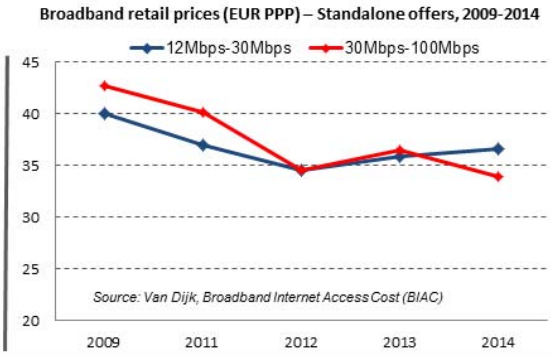
The correlation between fixed and mobile broadband take-up remains rather weak in the EU. More than 30% of homes with internet access use mobile broadband, up from 16% in 2010. However, in most of the cases, mobile broadband does not substitute a fixed connection: only 8% of homes with internet access rely purely on mobile technology. Exceptions are Austria, Finland and Sweden, where mobile broadband is more widely used as a primary connection.

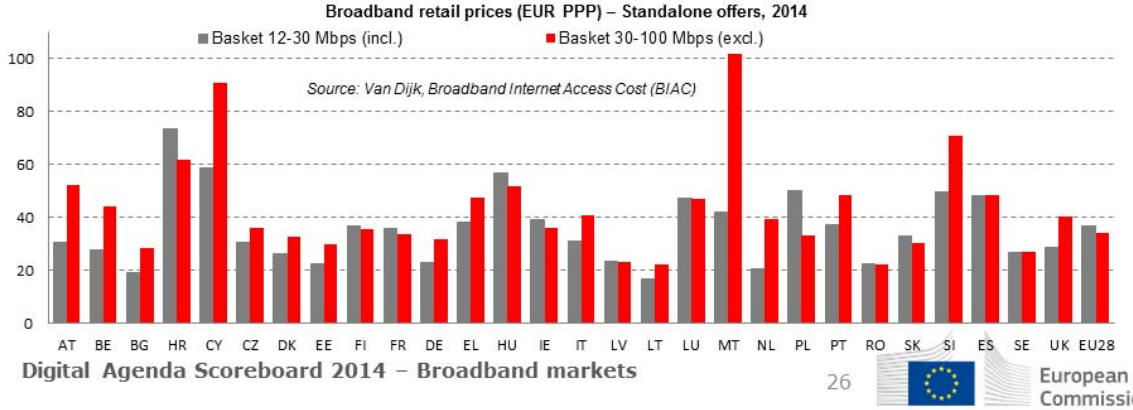




Prices of high speed broadband access across the EU Member States tend to decrease over time but remain dispersed across Member States.

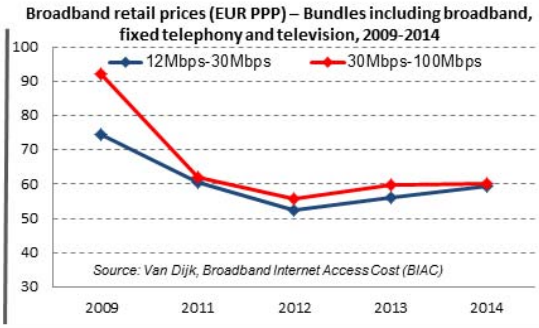
Broadband access prices remain dispersed across Europe: the median prices (calculated on Purchasing Power Parity) vary between €22 and €102 for a standalone offer with a download speed between 30 and 100 Mbps. The median prices were the lowest in Romania (€22), Lithuania (€22) and Latvia (€23) and the highest in Malta (€102), Cyprus (€91) and Slovenia (€71). In Croatia, Cyprus, Greece and Italy, fast broadband (at least 30Mbps) is still rare, representing less than 5% of all subscriptions. The median price of standalone offers of 30 to 100Mbps decreased from €43 in 2009 to €34 in 2014.

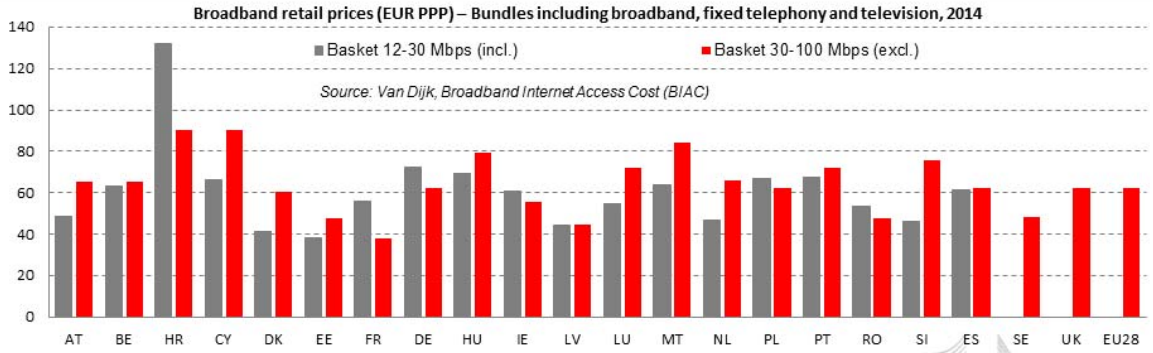




Prices of triple play bundles including broadband access, fixed telephony and television went down considerably since 2009.

The median prices of triple play bundles including broadband access (with a download speed between 30 and 100 Mbps), fixed telephony and television vary between €38 and €90 in the EU. The median prices were the lowest in France (€38), Latvia (€44) and Estonia (€48) and the highest in Croatia (€90), Cyprus (€90) and Malta (€84). Prices decrease over time, with the median going down from €92 in 2009 to €62 in 2013.

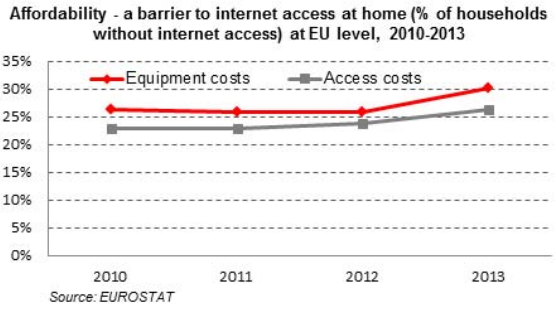


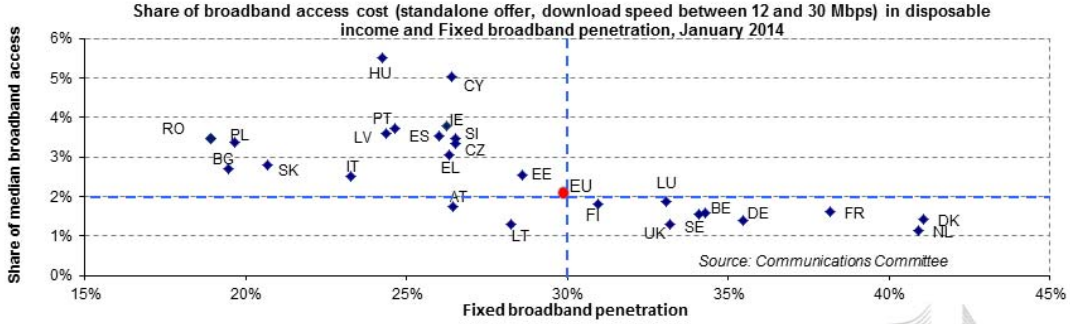


Broadband take-up tends to be lower in countries where the cost of broadband access accounts for a higher share of income.

The correlation between fixed broadband take-up and the relative price of broadband access is negative (-66%), so broadband take-up tends to be lower in countries where the cost of broadband access represents a higher share of the income.

26% of those households without internet access considers the broadband access prices a barrier to take-up, while for 30% the required equipment is not affordable.





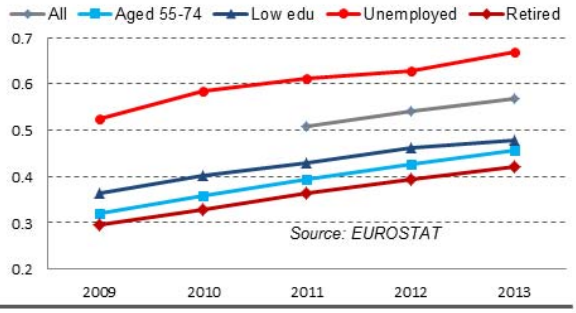
Digital Inclusion and Skills

Digital Agenda Scoreboard 2014

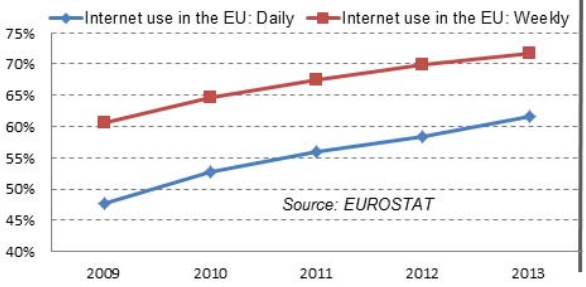
72% of EU population uses the internet weekly and 57% of disadvantaged do so.
Most of EU population (62%) uses the internet every day.

The number of internet users in the population continues to increase, with 72% of the EU population reporting that they used the internet at least weekly in 2013.For most people, use of the internet is a daily activity, with 62% of EU citizens reporting using it daily in 2013. Use by disadvantaged people also continues to rise; with 57% reporting using the internet at least weekly in 2013. This steady increase in internet use of the EU population suggests that the Digital Agenda targets on internet use will be met by their target date of 2015.

Weekly use of internet by disadvantaged people in the EU (% of individuals)



Daily and weekly use of internet in the EU (% of population)

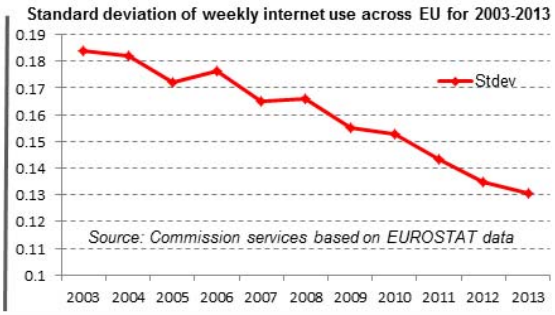


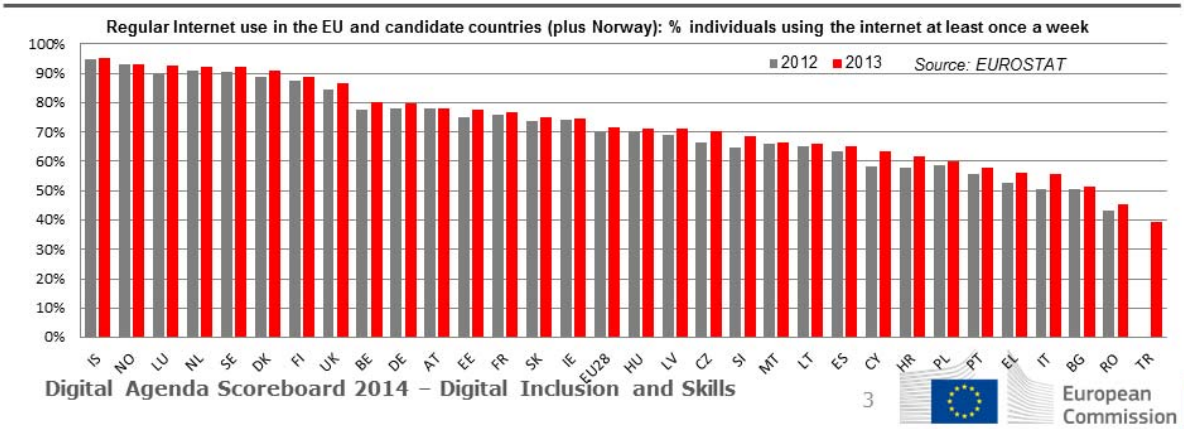
Our Target

Weekly use of the internet at 75% by 2015 72% in 2013
Weekly use by disadvantaged people at 60% by 2015
57% in 2013

Rates of weekly internet use across the EU Member States are still very dispersed, but some catch up is visible.

Across Europe rates of weekly internet use remain dispersed and the rankings of countries with the highest and lowest rates have changed very little over time. The highest rates of weekly internet use are found in the Nordic countries, Luxemburg and the Netherlands, where rates are around 90% or more. At the other end of the scale, countries with the lowest rates of weekly internet use (RO, BG, IT and EL) have around half of their populations, or more, not using the internet on a weekly basis. However, convergence is taking place; with, generally speaking, larger annual increases in rates of weekly use of the internet in counties with the most catching up to do.



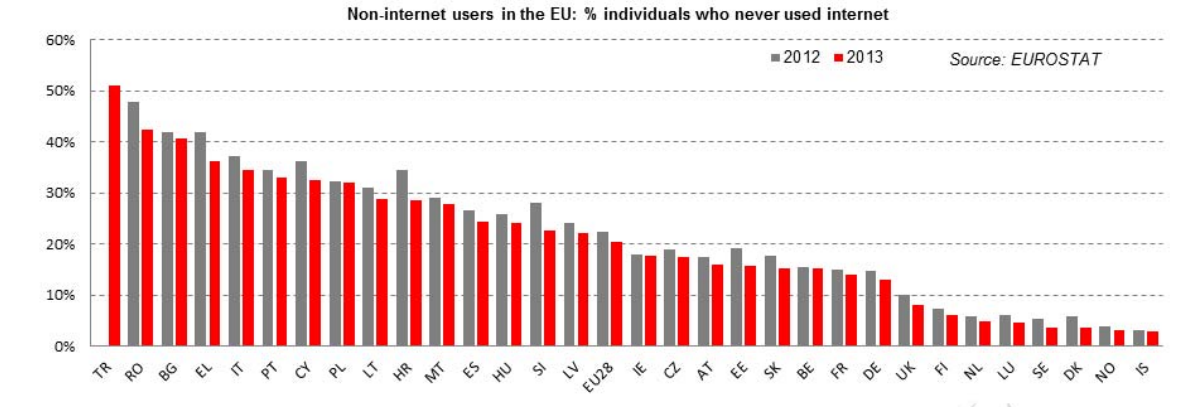


The number of non-internet users continues its gradual downward trend and big improvements have been made in some countries with large rates of non-users. However 20% of the EU population has still never used the internet.

The rate of non-internet users in the EU fell marginally in 2013, to 20% from 22% a year earlier. All Member States made some improvement in reducing rates of non-users. The biggest improvements were made in Croatia, Greece, Romania, Slovenia, Cyprus, Estonia and Italy. However, most of these countries still need to do more to reduce their relatively high rates of non-internet users. Furthermore, a number of countries (BG, PT, PL and MT) with above average rates of non-users made little improvement in the last year in.

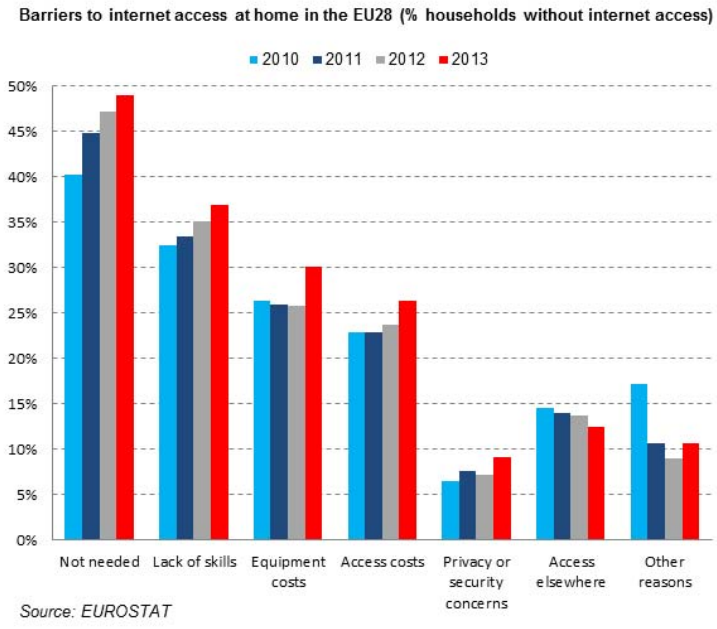
Our Target

Halve the number of non-users from 30% (in 2009) to 15% by 2015 – 20% in 2013



The biggest barriers to internet access at home in the EU are lack of need, insufficient skills and cost barriers. For families with children and low income households costs are particularly important

The three most important reasons for households not having internet access are that it is not needed (49%), due to a lack of skills (37%) and because the equipment (30%) and access (26%) costs are too high. All three reasons have become increasingly important over time. However, cost reasons have gained substantially in importance over the last year. Looking at different household types, cost factors are substantially more important reasons for not having internet access at home amongst households with children and those on low incomes.



Source: EUROSTAT

47% of the EU population has insufficient digital skills, 23% has none at all.

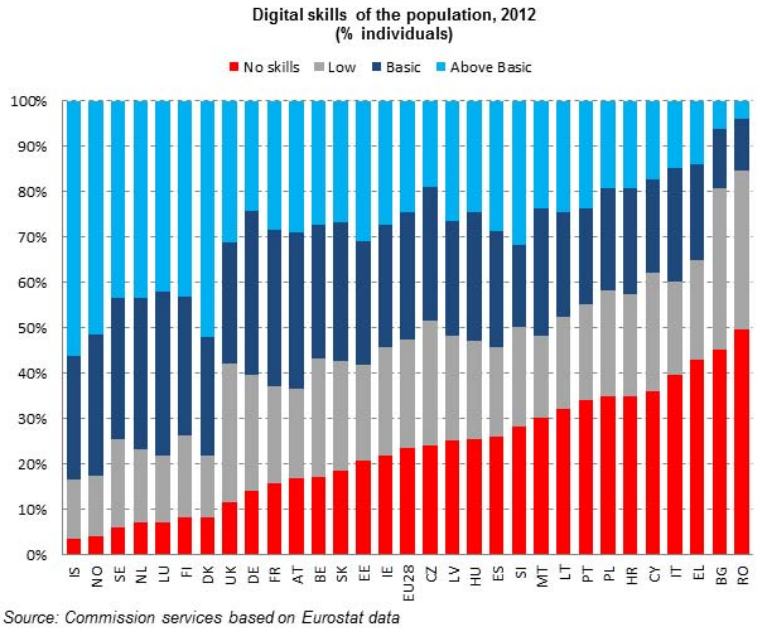
According to a newly constructed **Digital Skills Indicator***, based on the Digital Competence Framework** (developed by DG EAC and IPTS on-going), 23% of the EU population has no digital skills (2012); ranging from 6% in Sweden to 50% in Romania. In ten countries (MT, LT, PT, PL, HR, CY, IT, EL, BG and RO) 30% or more of the population have no digital skills. In four countries (IT, EL, BG, RO) rates are 40% or more. In Italy, with its large population, this equates to almost 18 million people without digital skills.

Considering that to function effectively in the digital society one needs more than low level skills, almost half the EU population (47%) can be considered as insufficiently digitally skilled (having either low or no digital skills).*** In eleven Member States (CZ, SI, LT, PT, PL, HR, CY, IT, EL, BG, RO) rates are at or above 50% of the population. In Bulgaria (81%) and Romania (85%) most of the population does not have the digital skills they need.

* Measuring Digital Skills across the EU: EU wide indicators of Digital Competence

** Ferrari, A. (2013). DIGCOMP: A Framework for Developing and Understanding Digital Competence in Europe. JRC Scientific and Policy Reports.

*** To be classified as Low skilled an individual has to have carried out activities from only one of the four Digital Competence domains included in the index (information, communication, content-creation and problem-solving). To have basic skills, an individual has to have basic in at least one domain, but no more. To be classified Above basic the individuel has to score above basic in each of the four domains.



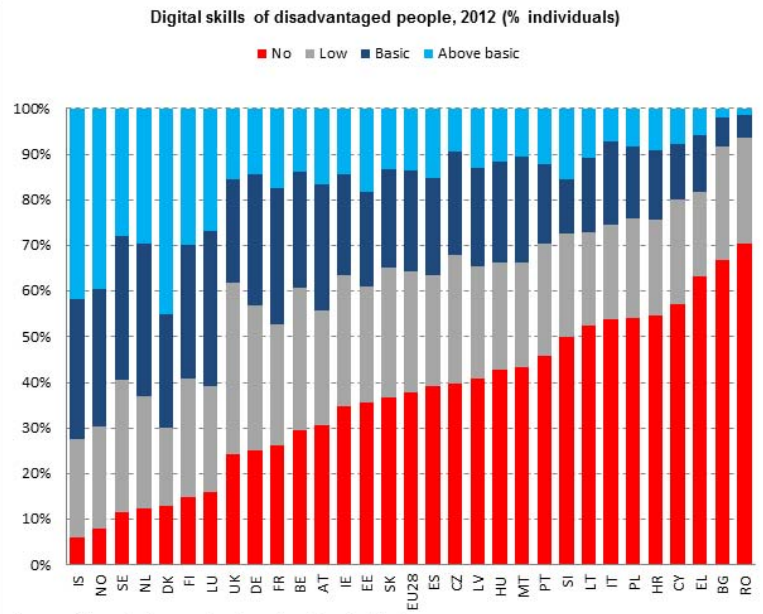
Source: Commission services based on Eurostat data

64% of disadvantaged people (aged 55-74, low educated, or unemployed, retired or inactive) have an insufficient level of digital skills, 38% have no digital skills.

The digital skills of disadvantaged people* are generally significantly lower than those of the average population. In the EU28 38% of disadvantaged people have no digital skills at all. The EU countries with the lowest rates of no skills among disadvantaged people are Sweden (11%), the Netherlands (12%), Denmark (13%), Finland (15%) and Luxemburg (16%). The countries with the highest rates are Romania (70%), Bulgaria (67%), Greece (63%), Cyprus (57%), Croatia (55%), Poland (54%), Italy (54%), Lithuania (52%) and Slovenia (50%).

Adding to this figure those individuals with only low level skills the figure rises considerably. Indeed almost two thirds of disadvantaged people in the EU (64%) have an insufficient level of digital skills (having either low or no digital skills). Fourteen Member States (CZ, LV, HU, MT, PT, SI, LT, IT, PL, HR, CY, EL, BG, RO) have rates above this. In Bulgaria (92%) and Romania (94%) most disadvantaged people have low or no digital skills.

*Disadvantaged people are defined as individuals belonging to at least one of the following three groups: aged 55-74, low educated or unemployed, retired or inactive.

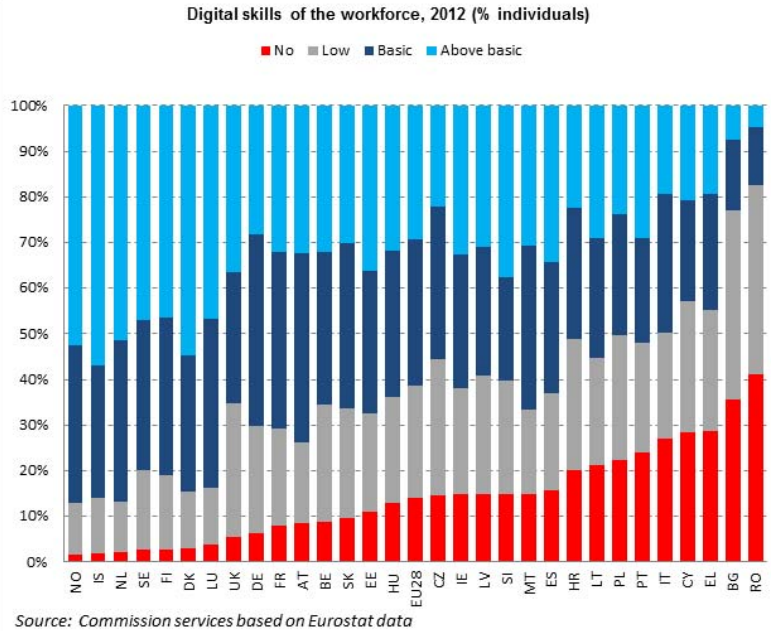


Source: Commission services based on Eurostat data

39% of the EU workforce has insufficient digital skills, 14% has no digital skills at all.

Rates of **digital skills amongst the workforce** are on average higher than for the average population in the EU. Only 14% of the EU workforce has no digital skills. However, in some countries rates are still relatively high. In nine countries (HR, LT, PL, PT, IT, CY, EL, BG and RO) rates are at or above 20% of the workforce. In Romania and Bulgaria a third or more of the workforce has no digital skills.

If we also add to this the percentage of the workforce who have only a low level of skill, we get a figure of around two fifths of the EU workforce (39%) that can be considered to be insufficiently digitally skilled. In twelve Member States (SI, LV, CZ, LT, HR, PL, PT, IT, CY, EL, BG, RO) the percentage is higher. In Bulgaria (77%) and Romania (83%) it is most of the workforce.



Source: Commission services based on Eurostat data

On average ICT specialist employment has grown over 4% a year since 2000, seven times higher than total employment growth over the same period.

Over the period 2000-2012 employment of ICT specialists in the EU-27 grew significantly. Based on a narrow definition*, ICT skilled employment grew by 2 million over this period from 3.1 million in 2000 to 5.1 million in 2012. ** This resulted in an increase in the share of ICT employment in total employment from 1.6% to 2.4% over this period. Based on a broad definition***, it increased to 6.1 million, or 2.8% of total employment in 2012, up from 1.9% in 2004. On average, ICT employment growth was 4.3% p.a. (narrow definition) over the period 2000-2012, more than 7 times higher than total employment growth over this period. Under a broad definition, the rate of growth appears to be higher.

* Essentially, ISCO codes 25 and 35.

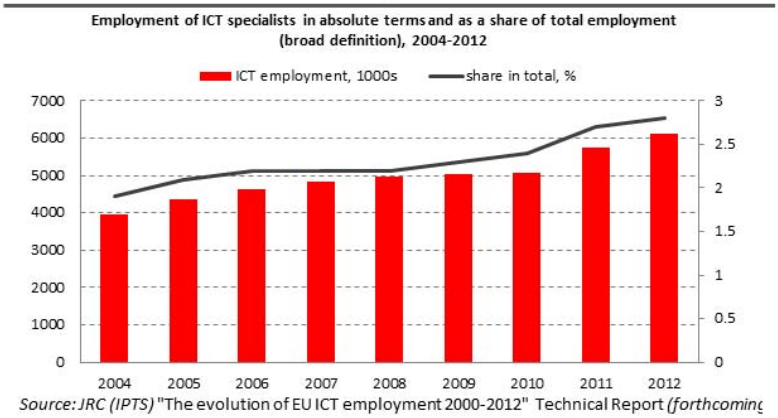
** JRC (IPTS) "The evolution of EU ICT employment 2000-2012" Technical Report (forthcoming).

*** ISCO codes 25 and 35 plus ICT graduates in certain adjacent ISCO codes.

**** Empirica (February 2013), "E-Skills Monitoring and Benchmarking Policies and Partnerships", final report draft version.

Most EU countries have increased their share of ICT specialist employment. In 2012, the highest ICT shares were recorded in Sweden (4.8%), Finland (4.7%) and the UK (4.2%), the lowest in Romania (1.3%) and Greece (1.4%).

The biggest employment gains have been made in the ICT services sector (+ 25% since 2000) and in non-ICT sectors (+27%) of the economy.**** Employment of ICT professionals in the ICT-manufacturing sector has fallen (-28%), though the size of the decline is small relative to increases made in the other sectors.



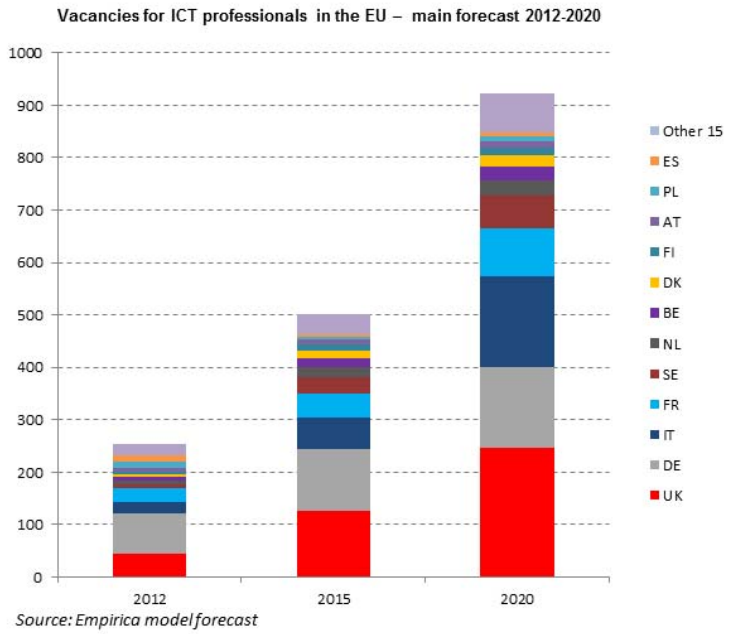
Source: JRC (IPTS) "The evolution of EU ICT employment 2000-2012" Technical Report *(forthcoming)*

The EU has a growing deficit of ICT professional skills, forecast to reach 900,000 by 2020.

Despite the strong positive evolution in the employment of ICT professionals in the EU over the past decade, the **employment potential of ICT is underexploited**. Evidence shows that there is a growing gap emerging between the demand and supply of ICT specialists in Europe. This gap has been projected could reach 900 000 by 2020 if not addressed.

It is the purpose of the Commission's **Grand Coalition** for Digital Jobs initiative to address this issue of lacking ICT professional skills.

Currently the largest ICT professional skills gap is to be found in **Germany**. However, latest forecasts suggest that over the period up to 2020 the ICT professionals skills gaps will be severely aggravated in the **UK** and **Italy** in particular; largely due to the insufficient production of ICT graduates to keep up with strongly increasing demand for ICT professionals in these countries.



Source: Empirica model forecast