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**Digital Agenda Scoreboard 2013**

**CHAPTER 4**

## **4. THE MOBILE USE OF THE INTERNET BY INDIVIDUALS AND ENTERPRISES**

### **4.1. Introduction**

This chapter looks at mobile use of the internet by individuals and enterprises, benefiting from new data collected in special modules on mobile use of the internet contained in the 2012 Eurostat survey on ICT (Information and Communication Technology) usage in households and by individuals and in the survey of enterprises. With regard to individuals, it first looks at progress made in the development in use by individuals of mobile internet in the EU and its Member States, and the types and frequency of access. It then looks at the relationship between skills levels and mobile internet use and between household income and mobile internet use. It also looks at the perceived barriers to mobile use of the internet. Finally, the chapter examines the types of activities undertaken online via mobile device and problems encountered. With regard to enterprises, the chapter presents data on provision of mobile devices to staff, how this varies by enterprise size, the sophistication and main uses of mobile devices and obstacles to use. The last section summaries and concludes the chapter.

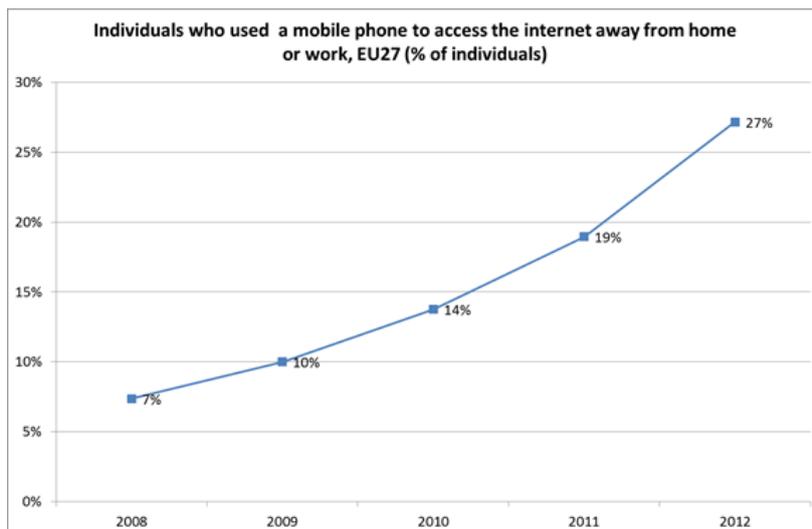
### **4.2. Mobile use of the internet by individuals in the EU27**

#### *4.2.1. Progression in individuals mobile use of the internet in the EU27*

In 2012, 87% of the EU population used a mobile phone or a smart phone (last three months). About one in three used them to access the internet. At the same time, the percentage of people who used the Internet on the move with a portable computer or a handheld device was 36%. Regarding portable computers, 7% of people have used a tablet.

In particular, accessing the internet via mobile phone or smart phone has seen a substantial increase in popularity in the EU27 over the past few years. The proportion of the population using a mobile phone to access the Internet has increased by 20 p.p., from 7% in 2008 to 27% in 2012, and the rate of growth has increased – while the increase was a mere 3 p.p. between 2008 and 2009, over the last year the increase was some 8 p.p..

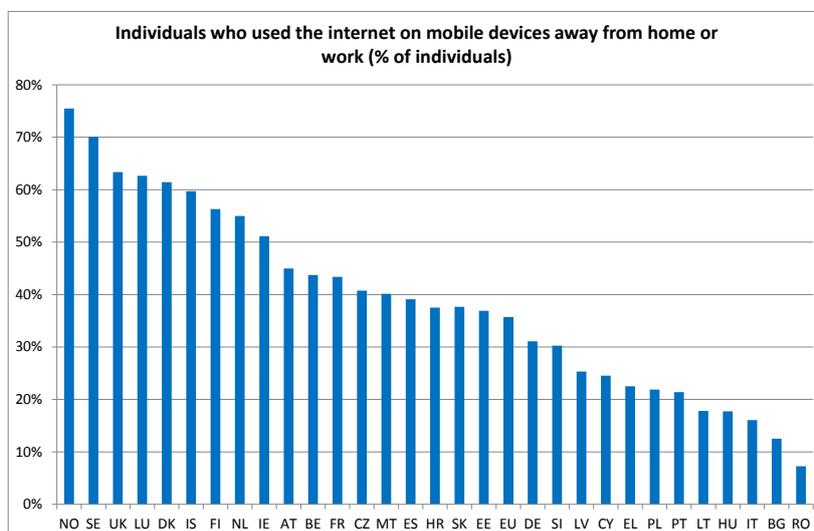
**Figure 101: Individuals who used a mobile phone to access the internet away from home or work, EU27 (% of individuals)<sup>1</sup>**



Source: Eurostat

Across the EU27 Member States, the percentage of people accessing the internet on the move in 2012 varies substantially. The percentage of the population using the internet on mobile devices (portable computer or handheld device<sup>2</sup>) away from home or work was higher than 60% in four Member States: Denmark (61%), Luxembourg (63%), the United Kingdom (63%) and Sweden (70%). However, it was less than 20% in Lithuania (18%), Hungary (18%), Italy (16%), Bulgaria (13%) and Romania (7%).

**Figure 102: Individuals who used the internet on mobile devices away from home or work (% of individuals)**



Source: Eurostat

<sup>1</sup> Data for 2008-2010 refers to the use of a mobile phone to access the Internet at any place.

<sup>2</sup> Portable computers include e.g. laptops, netbooks, tablet computers. Handheld devices include e.g. mobile phones or smartphones, mp3 player, games console, PDA.

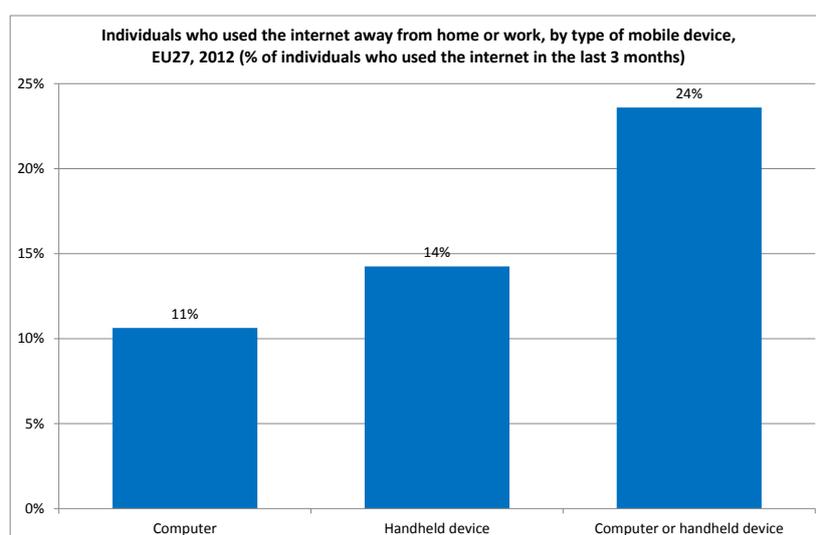
#### 4.2.2. Type and Frequency of mobile access to the internet

Looking at the at the devices used to access the internet on the move shows that most internet users use both a computer and a handheld device, significantly fewer people use only one or other: In 2012, 11% of the individuals who accessed the internet on the move did so by using a portable computer only, 14% of them used a handheld device only and 24% used both a portable computer and a handheld device.

Data on *frequency of mobile internet access in the EU* shows that most users are frequent users, accessing the internet via a mobile device every day or almost every day. On average in the EU, 62% of individuals who used the internet on the move with a portable computer in 2012 did so at least once a week. 41% of them used the Internet on the move on a daily basis, while 21% did so at least once a week, but not every day.

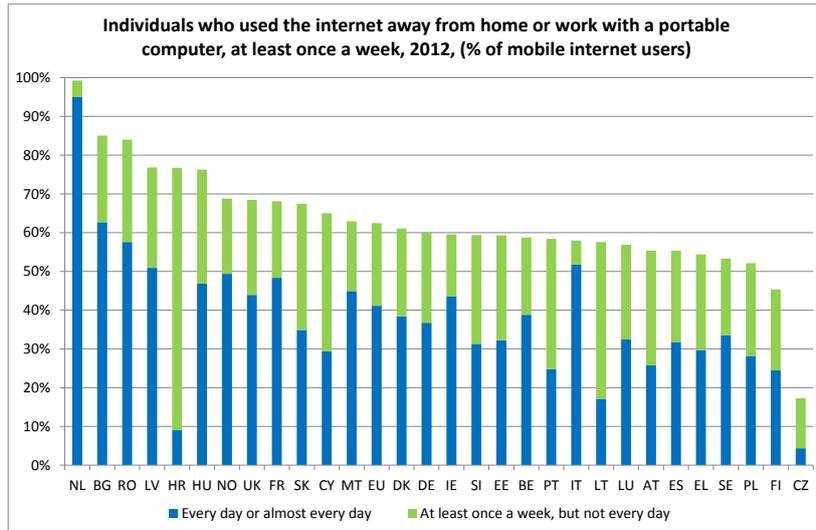
Across the EU27, the percentage of individuals who used the Internet on the move with a portable computer at least once a week was above 80% in three Members States: the Netherlands (99%), Bulgaria (85%) and Romania (84%). While at the other end of the scale it was less than 50% in Finland and less than 20% in Czech Republic.

**Figure 103: Type of device used for mobile access to the internet (% individuals who used the internet in the last three months)**



Source: Eurostat

**Figure 104: Individuals who used the internet away from home or work with a portable computer at least once a week, 2012 (% of mobile internet users)**

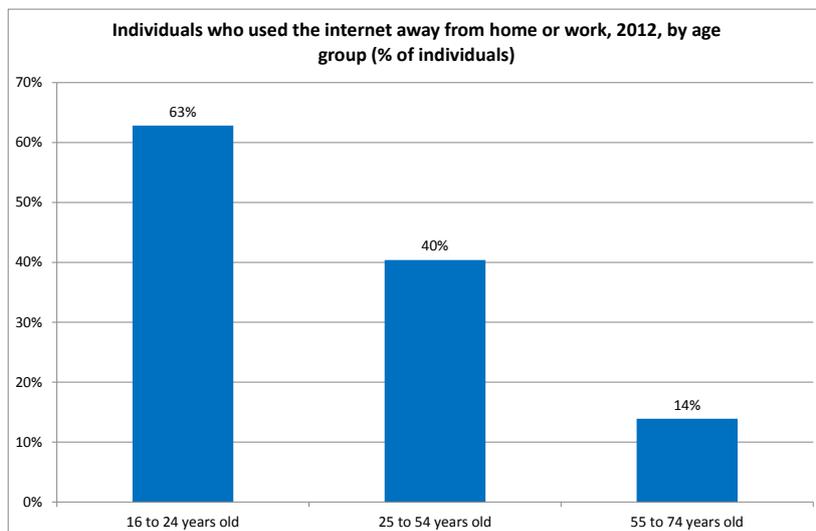


Source: Eurostat

#### 4.2.3. Mobile use of the internet by age category

In general, the young population is adopting mobile internet use more readily than other population segments. While 63% of the people aged 16-24 used the Internet on the move, for individuals aged 55 to 74 it is less than 15%.

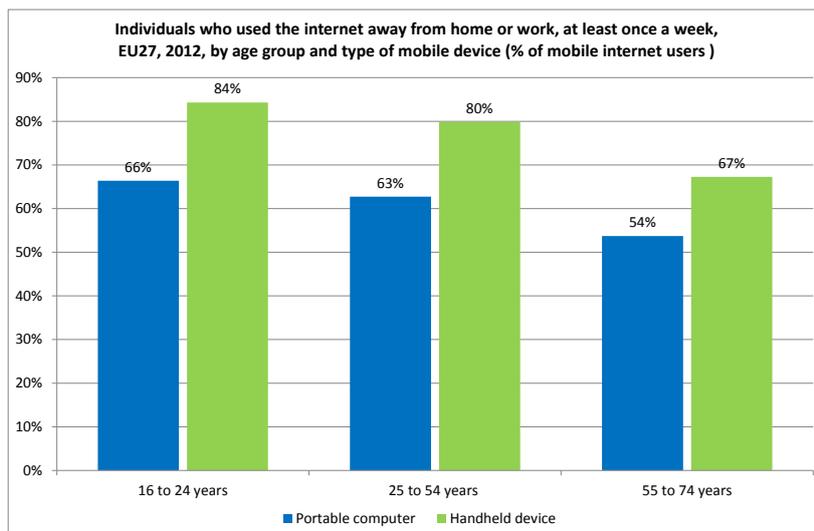
**Figure 105: Individuals who used the internet away from home or work, 2012, by age group (% individuals)**



Source: Eurostat

Their frequency of use is also higher: young people tend to use mobile internet more often than people aged 55 to 74. 84% of individuals who used the internet on the move aged 16-24 do so at least once a week with a handheld device. This falls to 67% for the 55-74 years age group. For portable computer use, which is somewhat less popular, the figures are 66% for the 16 to 24 age group but 54% for those aged 55 to 74 years.

**Figure 106: Mobile use of the internet by age group, at least once a week, 2012 (% mobile internet users)**

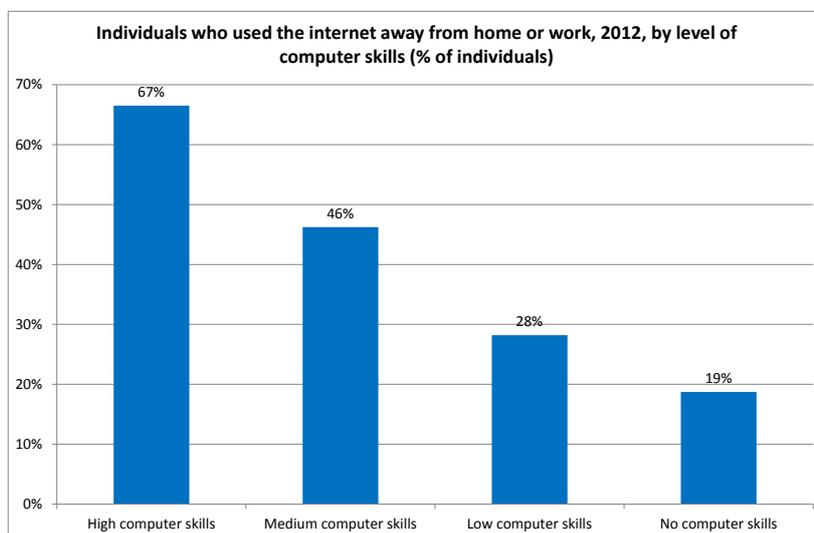


Source: Eurostat

#### 4.2.4. Skills and mobile use of the internet

The level of computer skills has a big influence on the use of the internet on the move in the EU27.<sup>3</sup> Indeed, 67% of people who had high computer skills used the Internet on the move in 2012. The rate falls already substantially to 46% for those with medium skills and again to 28% for those with low skills. For individuals with no computer skills at all it is less than 20%.

**Figure 107: Individuals who used the internet away from home or work, 2012, by level of computer skills (% individuals)**



Source: Eurostat

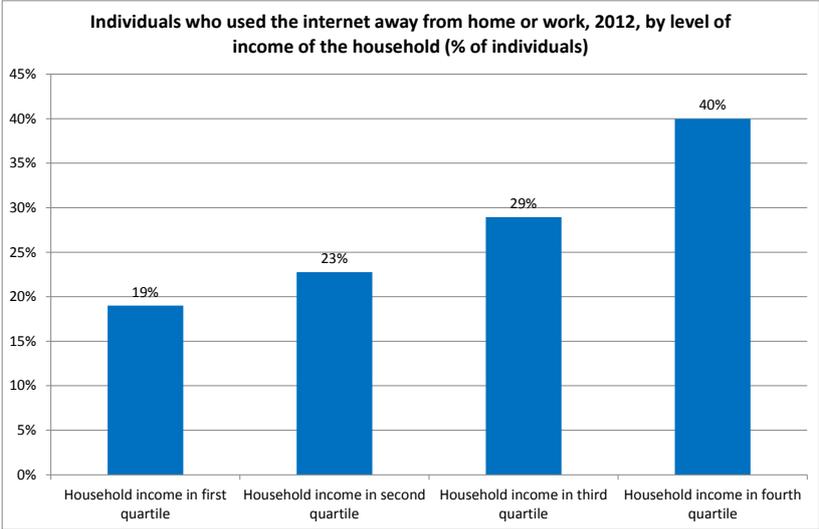
#### 4.2.5. Mobile internet use by income category

Mobile use of the internet is also significantly influenced by household income. In 2012, people belonging to a household with the highest income used about two times more the

<sup>3</sup> For the definition of levels of skills, see chapter 3.4.1.

Internet on the move than the ones with the lowest income. People belonging to a household with a lower income were also about 25% to give the cost of the service as a reason not to use it. In particular, students were about one third to declare that they didn't use the Internet on the move because the service was too expensive. One in four unemployed evoked the same reason. Retired and other inactive people were 16% to see the cost as a barrier.

**Figure 108: Individuals who used the internet away from home or work, 2012, by level of household income (% individuals)**

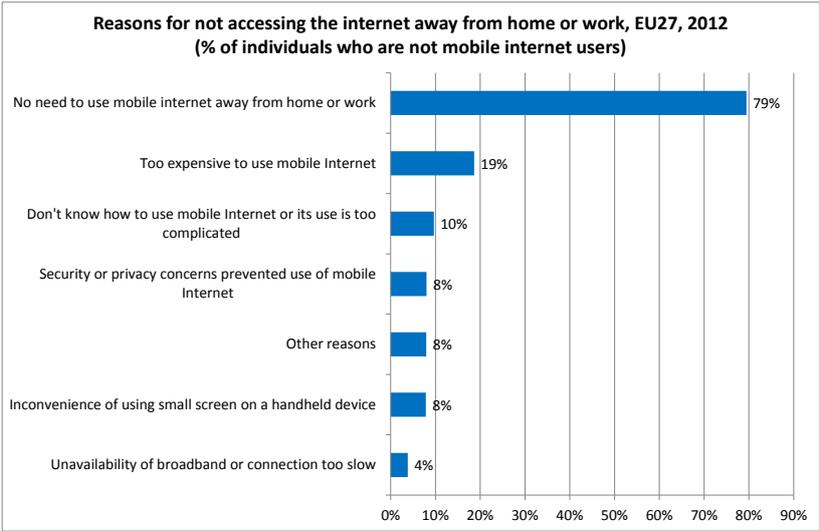


Source: Eurostat

4.2.6. *Perceived barriers to mobile use of the internet*

As with use of the internet overall, individuals who do not use mobile internet report a lack of need, lack of skills and costs as the three main factors preventing them from using mobile internet. However, the first factor, lack of need, is reported as by far the most important one – unlike for internet access in general. Indeed, about 80% of people who did not access the Internet on the move in 2012 replied that they didn't need it. It may well be the case that mobile access is perceived as less needed by non-mobile users than overall access to the internet by non-internet user, as many of them will have fixed internet access. However, mobile access is still in its relative infancy, as it develops lack of need may well become a less dominant reason for non-use, as both the supply of mobile internet services and the knowledge thereof increases.

**Figure 109: Reasons for not accessing the internet away from home or work (% of individuals who are not mobile internet users)**

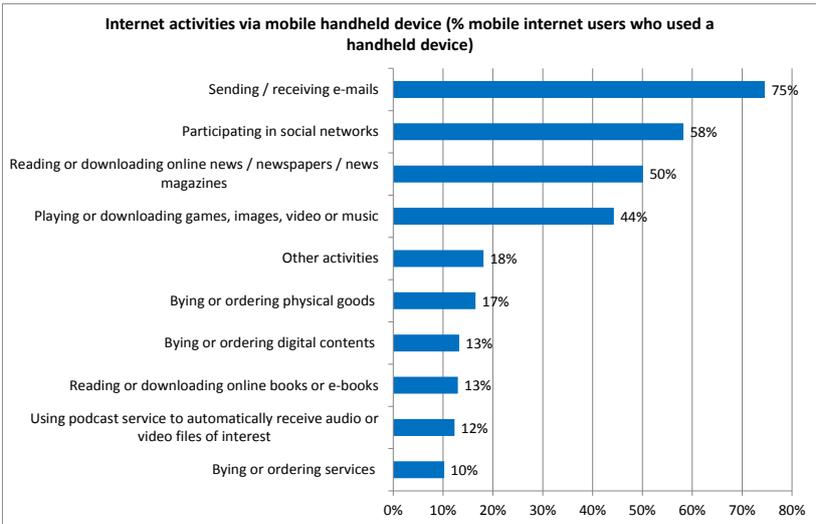


Source: Eurostat

4.2.7. Internet activities via handheld device

In the EU27, around three quarters of people who used the internet on the move communicated with their handheld device by email. Social media is an important mean of communication too, especially among young people. In 2012, 58% of people who used the internet on the move with a handheld device participated in social networks. About half of them used their handheld device to read the online news, newspapers or news magazines. 17% of the people bought or ordered some physical good (e.g. electronics, clothes, toys, food, groceries, books, CD/DVDs) via their handheld device, while 13% of them bought or ordered digital content (e.g. films, music, e-books, e-newspapers, games, paid applications, etc.). Of course, the size of the screen influences the type of activities for which people have used the internet on the move. In particular, it seems that buying goods and services via handheld device is a lot less frequently done via a handheld device than that over a computer, as the data on online purchases via any device in chapter 3.8.1 suggest.

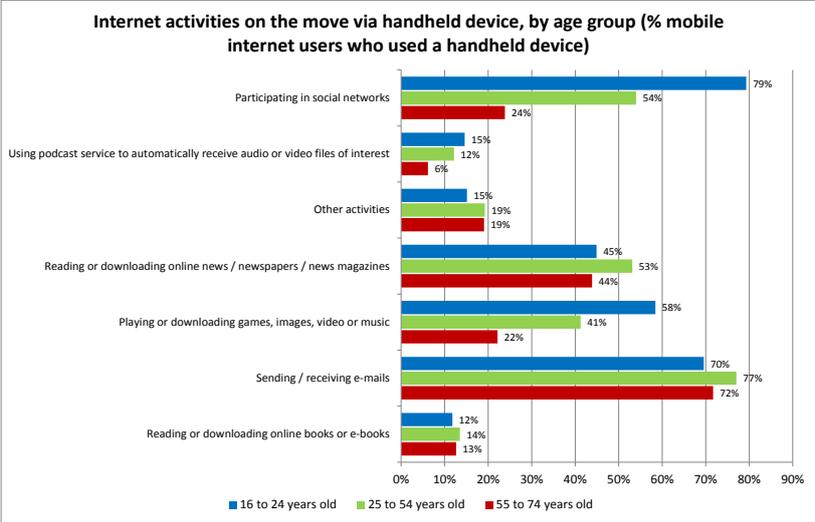
**Figure 110: Internet activities via handheld device (% mobile internet users who used a handheld device)**



Source: Eurostat

While age does not seem to affect activity levels via mobile device for most activities, for two activities there are marked differences in rates of use by age segment. In particular, contrary to people aged 55 to 74, young people use more social networks. Around 80% of them who used the internet on the move with a handheld device were active on these networks. Furthermore, while 58% of those aged 16 to 24 play games or download music, videos or images, it is only 22% for people aged 55 to 74; illustrating differences in choice of ways of communicating and social activities between age groups.

**Figure 111: Internet activities on the move via handheld device, by age group (% mobile internet users who used a handheld device)**

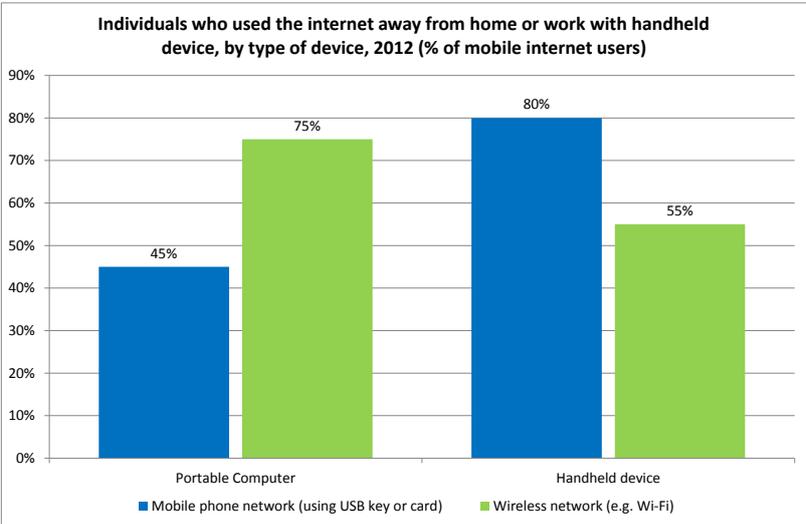


Source: Eurostat

4.2.8. Type of mobile connection used and problems encountered with them

In 2012, 80% of people who used a handheld device to access the Internet on the move used their mobile phone network and 66% of them used at least a 3G connection. More than half of the people who used a handheld device to access the Internet on the move used a wireless network. In comparison, 45% of people who used a portable computer to access the Internet on the move used their mobile phone network, with a USB key or card, while 75% of them used a wireless network (for example Wi-Fi).

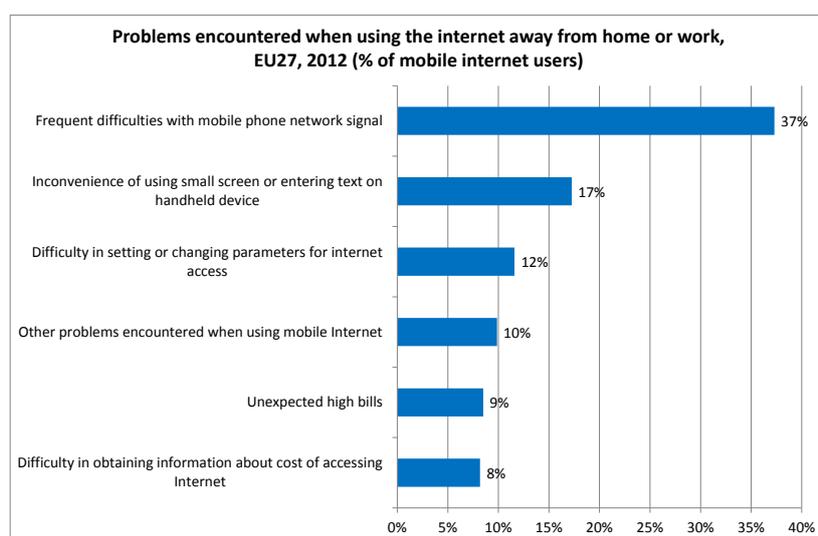
**Figure 112: Individuals who used the internet away from home or work with handheld device, by type of device (% of mobile internet users)**



Source: Eurostat

In the EU27, mobile Internet users had some issues with the quality of their network. For instance, 37% of them said they had frequent difficulties with their mobile phone network signal. Apart from that, 17% of the people who used the Internet on the move think that using small screen or entering text on handheld device is an issue. In that case, people aged 16-24 were less likely to raise the size of the screen as an issue. Finally, 12% of the users also had some difficulties in setting or changing parameters for their mobile Internet access.

**Figure 113: Problems encountered when using the Internet away from home or work (% mobile internet users)**



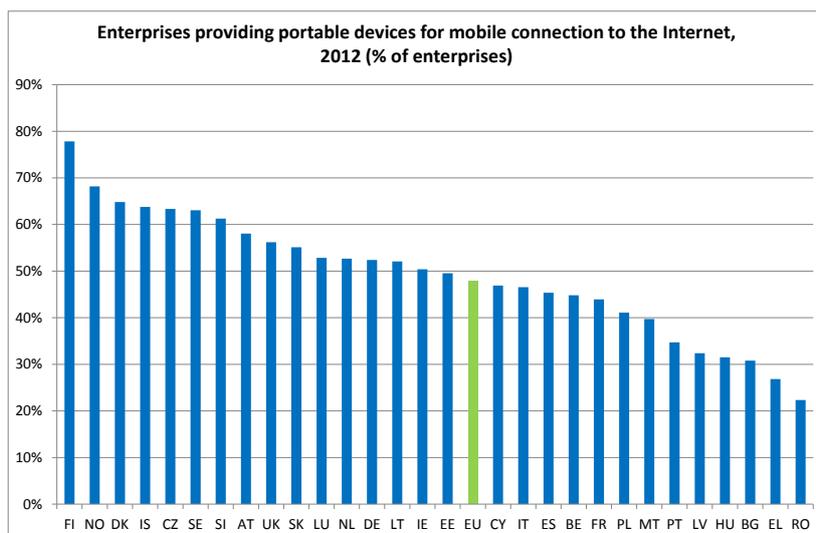
Source: Eurostat

### 4.3. Mobile use of the internet by enterprises in the EU27

#### 4.3.1. Provision of devices to staff

In 2012, 48% of enterprises in the EU27 provided some staff with portable devices for mobile connection to the Internet. The proportion of enterprises providing portable devices to some of their employees was more than 60% in Finland (78%), Denmark (65%), Czech Republic (63%), Sweden (63%) and Slovenia (61%). These shares were the lowest in Bulgaria (31%), Greece (27%) and Romania (22%).

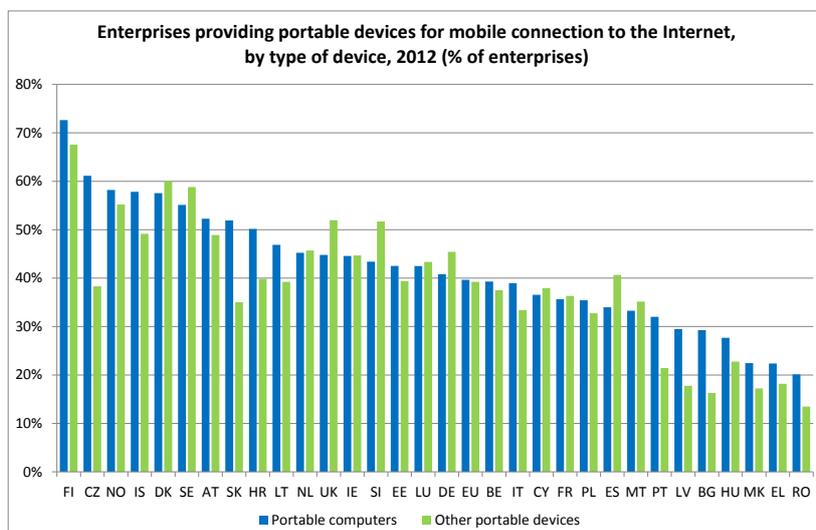
**Figure 114: Enterprises providing portable devices for mobile connection to the internet, 2012 (% enterprises)**



Source: Eurostat

In the EU27, enterprises provided portable computers (e.g. laptops, notebooks and tablets) and other portable devices (smartphones, PDA, etc.) in equal proportion. Some 40% of enterprises provide portable computers and 39% of enterprises provide other portable devices. Across countries, it is also pretty even; except in the Czech Republic, Slovakia, Portugal, Latvia and Bulgaria where portable computers outweigh considerably other portable devices.

**Figure 115: Enterprises providing portable devices for mobile connection to the internet, by type of device, 2012 (% enterprises)**

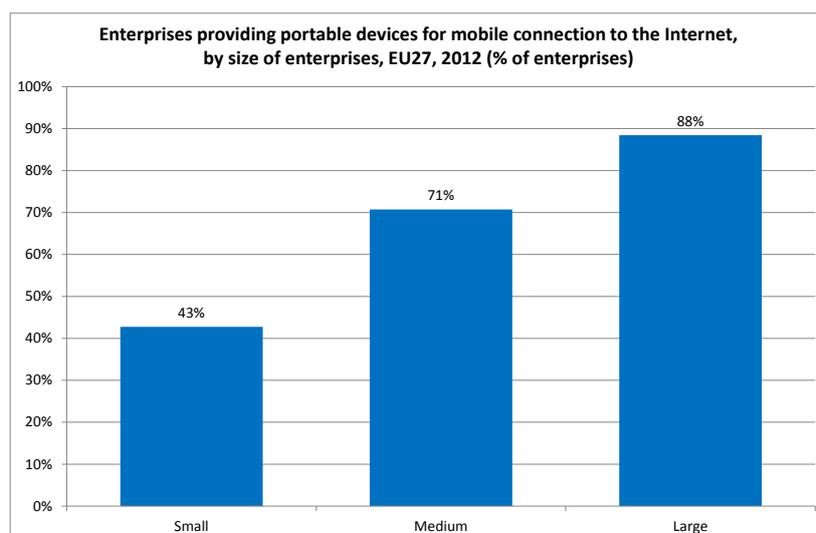


Source: Eurostat

#### 4.3.2. Companies supporting mobility

Almost 90% of large enterprises provided a portable device for mobile connection to the Internet in 2012. The proportions of small and medium enterprises were respectively 43% and 71%.

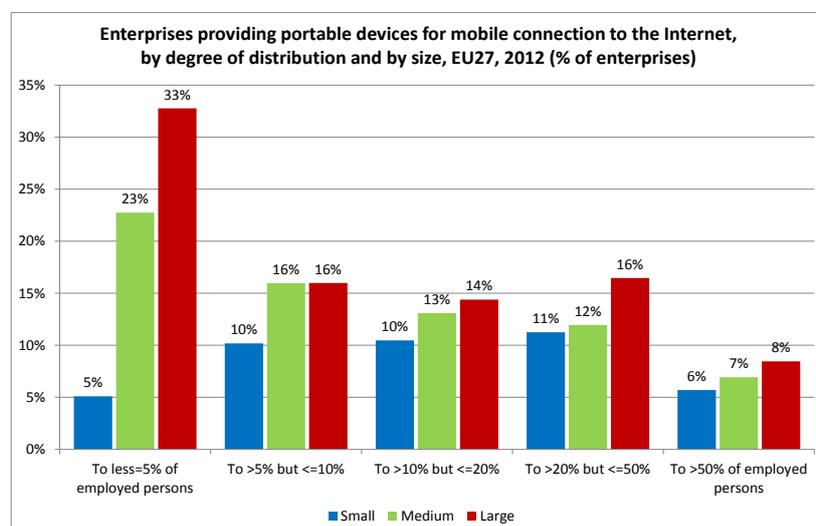
**Figure 116: Enterprises providing portable devices for mobile connection to the internet, by size of enterprise, 2012 (% enterprises)**



Source: Eurostat

More than a third of large enterprises providing a portable device for mobile connection to the Internet provide such portable device to less than 5% of their staff. This means that a lot of large enterprises tend to limit the provision of such devices to their management. The proportion of enterprises providing such device to more than 10% of their staff is relatively similar among small, medium and large enterprises.

**Figure 117: Enterprises providing portable devices for mobile connection to the internet, by degree of distribution, 2012 (% enterprises)**

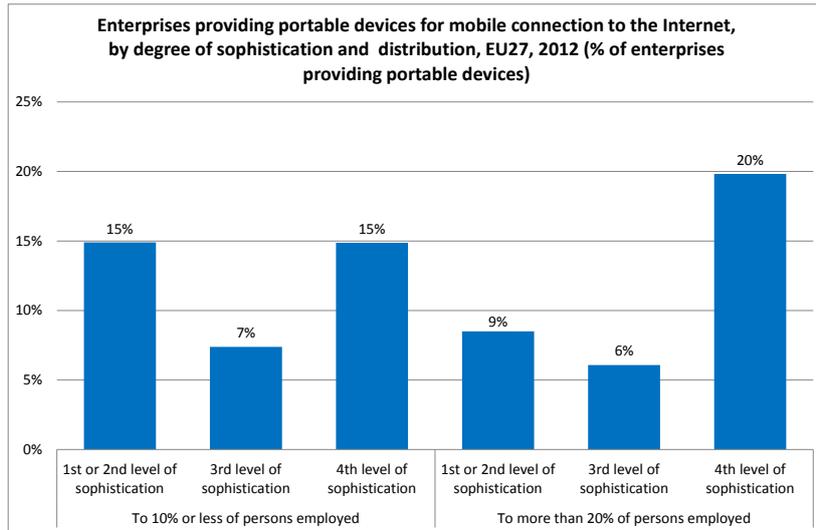


Source: Eurostat

#### 4.3.3. Sophistication and main uses of mobile devices

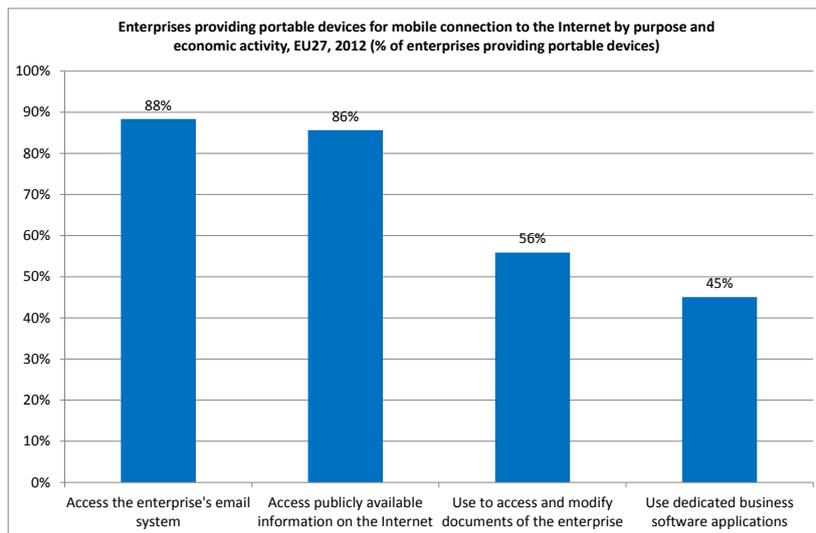
In 2012, 88% of enterprises providing portable devices used them to access the enterprise's email system. During the same period, 86% of enterprises used portable devices to access publicly available information on the internet. More than a half of these enterprises used such portable devices to access and amend documents (third level of sophistication) and 45% to use dedicated business software applications (fourth level of sophistication).

**Figure 118: Enterprises providing portable devices for mobile connection to the internet, by purpose and economic activity, EU27, 2012 (% enterprises providing portable devices)**



Source: Eurostat

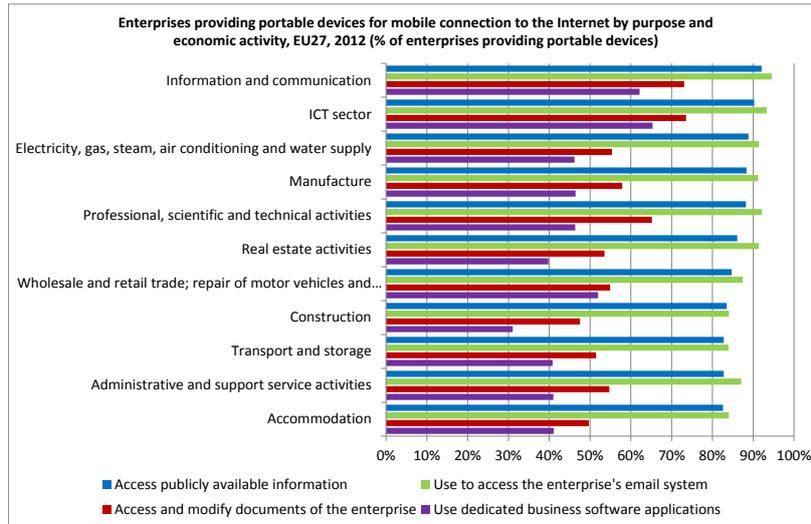
**Figure 119: Enterprises providing portable devices for mobile connection to the internet, by degree of sophistication and distribution, EU27, 2012 (% enterprises providing portable devices)**



Source: Eurostat

The use of mobile device to have access to e-mail was one of the main business uses of portable device in 2012. This is true across all sectors of activity. Enterprises in the ICT sector make more use of mobile devices to have access and to modify documents than enterprises in other sectors. They also make more use of dedicated business software applications.

**Figure 120: Enterprises providing portable devices for mobile connection to the internet, by purpose and economic activity, 2012 (% enterprises providing portable devices)**



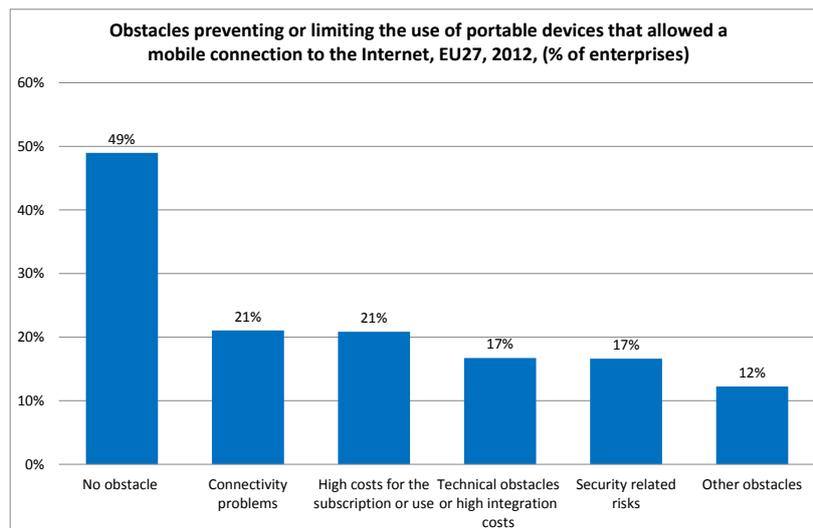
Source: Eurostat

#### 4.3.4. Obstacles to the use of mobile devices

Among enterprises that provided their staff with a portable device, about 40% reported no major obstacle. The main obstacle reported by these enterprises was the quality of the mobile telephone network. In general, large enterprises seem to be more concerned by security related risks than small enterprises.

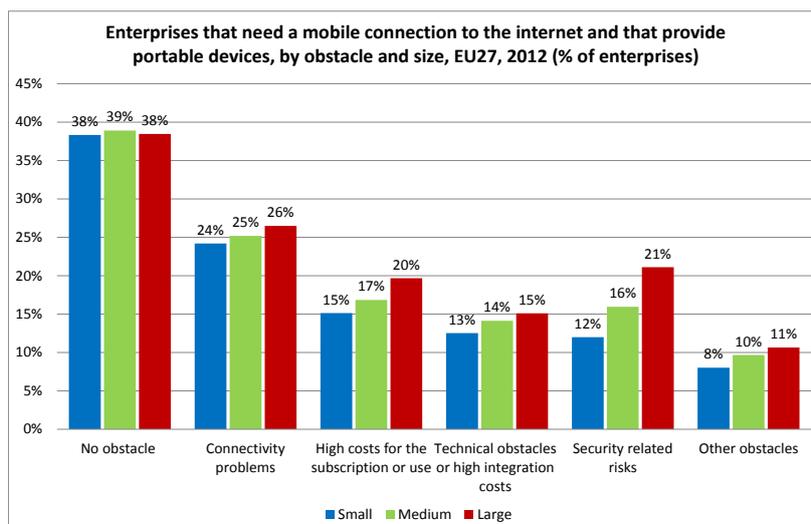
Some 21% of enterprises reported connectivity problems related to their mobile telephone network as a limitation. High cost for the subscription or use of the Internet was an obstacle for 21%. 17% of enterprises also mentioned the technical obstacles and the security related risks as an obstacle.

**Figure 121: Obstacles preventing or limiting the use of portable devices that allowed a mobile connection to the internet, EU27 2012 (% enterprises)**



Source: Eurostat

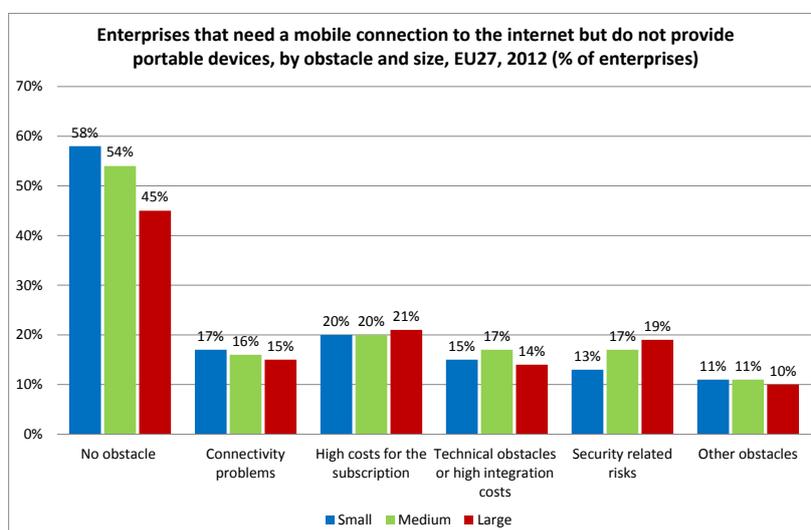
**Figure 122: Enterprises that need a mobile connection to the internet and provide portable devices, by obstacle and size, EU27, 2012 (% of enterprises<sup>4</sup>)**



Source: Eurostat

A large proportion of enterprises that did not provide their staff with portable devices but could identify some need for a mobile connection to the internet reported other obstacles. These enterprises might not yet have considered providing their staff with mobile devices. They may not be able to identify which potential obstacles might limit or prevent their use of mobile devices. Among the enterprises that have reported some obstacles, the connectivity problems and the high cost of subscription are seen as an important obstacle, especially for small enterprises.

**Figure 123: Enterprises that need a mobile connection to the internet but do not provide portable devices, by obstacle and size, EU27, 2012 (% of enterprises<sup>5</sup>)**



Source: Eurostat

<sup>4</sup> % of enterprises that need a mobile connection to the Internet for business uses and that provide to the persons employed portable devices that allow a mobile connection to the internet.

<sup>5</sup> % of enterprises that need a mobile connection to the Internet for business uses but that do not provide to the persons employed portable devices that allow a mobile connection to the internet.

#### 4.4. Summary and conclusions

This chapter has looked at mobile use of the internet by individuals and enterprises, benefiting from new data collected in special modules on mobile use of the internet contained in the 2012 Eurostat survey on ICT (Information and Communication Technology) usage in households and by individuals and in the survey of Enterprises.

First turning to **mobile use of the internet by individuals**: this new data show that mobile use of the internet is becoming increasingly popular: 27% of individuals now use their mobile phones to access the internet and 36% do so via a portable computer or handheld device. Most mobile internet users are frequent users, going online every day. As with internet access via any device, mobile use varies across countries. It is also strongly age dependent, with significantly higher rates of younger users (62% of those aged 16-24) accessing the internet on the move than older age categories (14% of those aged 55-74). Younger people accessing the internet on the move also show somewhat higher frequency of access than older users. Skills levels have a big influence on mobile use of the internet; with more than twice as many individuals with high skills going online on the move than those with low skills. Income too affects rates of use.

As with use of the internet overall, individuals who do not use mobile internet report a lack of need, lack of skills and costs as the three main factors preventing them from using mobile internet. However, the first factor, lack of need, is reported as by far the most important one – unlike for internet access in general. Indeed, about 80% of people who did not access the internet on the move in 2012 replied that they didn't need it. It may well be the case that mobile access is perceived as less needed by non-mobile users than overall access to the internet by non-internet user, as many of them will have fixed internet access. However, mobile access is still in its relative infancy, as it develops lack of need may well become a less dominant reason for non-use, as both the supply of mobile internet services and the knowledge thereof increases.

The most popular internet activities undertaken on the move via handheld device are sending and receiving email, participating in social networks, reading/down loading news and playing or downloading games, video, images or music. Making purchases online, reading and downloading books/eBooks and using podcast services were less popular; no doubt partly influence by screen size but also impracticality of performing such activities while on the move. Generally speaking age does not seem to affect which activities mobile internet users undertake. The main exceptions to this are for use of social networks and play games or download music, videos or images which are undertaken more often by younger people; illustrating differences in choice of ways of communicating and social activities between age groups. The most popularly cited issue surrounding internet access on the move was problems with network signals. To some extent screen size was a problem, but more so for older people than the young.

Turning to **mobile use of the internet by enterprises**, the data show that in enterprises too mobile use of the internet is popular. Almost 50% of enterprises provide staff with portable devices for mobile access to the internet in 2012, ranging from above 60% in Finland, Denmark, Sweden, the Czech Republic and Slovenia, to around 30% or less in Bulgaria, Greece and Romania. In most countries, portable computers and other portable devices are provided in more or less equal proportion. Larger companies (88%) more readily provide portable devices for access to the internet than small (43%) and medium (71%) sized firms. 88% of enterprises used portable devices to access the enterprise's email system, 86% to

access publicly available information on the Internet and around half used portable devices to access and amend documents as well as used dedicated business software applications. Across sectors, email and accessing publicly available information were the two most popular activities. Accessing and modifying documents was particularly popular in the Information and Communication and ICT sectors. The most reported problems regarding mobile access to the internet by enterprises related to connectivity problems and high costs for the subscription or use. (21% of enterprises each). Larger firms report more obstacles. Of firms that do not provide such devices, high cost is the most reported obstacle.