# 1. Internet: Anytime, Anywhere



"We are all now connected by the Internet, like neurons in a giant brain."

Stephen Hawking, theoretical physicist

## CHECKLIST FACT SHEET 1 – GETTING CONNECTED

Have you made sure that your Internet connection is secured by setting up an antivirus, a firewall and by setting a password for your Wi-Fi router?

Have you set up an acceptable use policy (sometimes called a responsible use policy) for anyone using/accessing the Internet through your network and devices?

Have you set up "guest" accounts on devices that are used by your children?

#### CHECKLIST FACT SHEET 2 – ONLINE PRESENCE AND THE CLOUD

Have you included contact details in your website or blog?

Have you taken steps to protect your online privacy?

Have you checked that the content that you are using for your website/blog is in accordance with copyright law?

## CHECKLIST FACT SHEET 3 - WEB 2.0, WEB 3.0 AND MORE

Systematically seek permission from people featuring in the photos and videos you post online.

User recommendations on travel and product sites can be helpful, but are you sure they are real?

User-generated content fosters creativity and freedom of expression, but also places the onus on you if the Internet is to become a better place.

## CHECKLIST FACT SHEET 4 – BLOGS AND VLOGS

Protect your privacy by using a pseudonym and hold back certain personal details.

Protect your blog or vlog from hackers by setting up appropriate security precautions and saving your content regularly.

Understand your blog goal and audience when posting content.

#### **CHECKLIST FACT SHEET 5 – INTERNET ON THE GO**

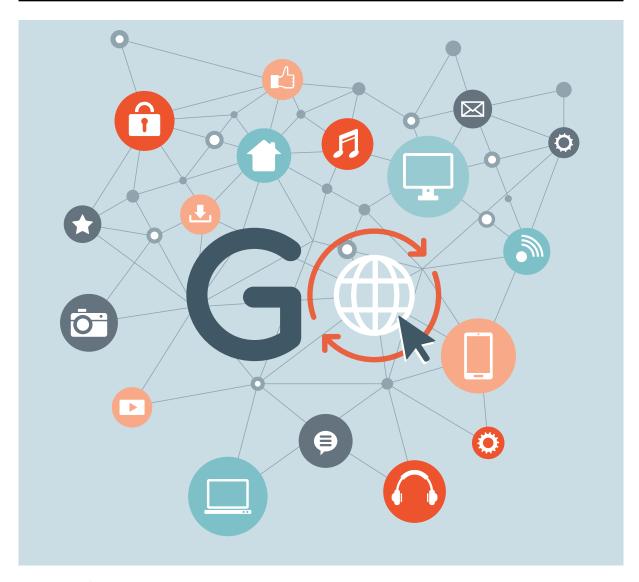
At what age can children safely begin to use mobile devices and which ones are most appropriate for very young children?

Do you understand geolocation and Bluetooth sufficiently to use your mobile devices comfortably and safely?

M-learning and mobile wallets are areas in which the use of mobile devices is changing the way we learn, work and shop. What do you know about these recent evolutions?

## Fact sheet 5

# Internet on the Go



The use of the Internet on the Go – using the Internet on a portable computer or handheld device via mobile or wireless connection – is on the rise as individuals take advantage of new ways to connect when they are away from home or work.

- In 2012, 36% of people aged 16 to 74 within the EU-28 used a mobile device to connect to the Internet. Two years later, the number had risen to 51%. Studies¹ show that the most common mobile devices for Internet connections were mobile or smart phones, laptops, notebooks, netbooks or tablet computers.
- Few people bought mobile phones when they first became available in 1983. In 1995, there were five mobile subscriptions per 100 inhabitants in the European Union. According to Eurostat, in 2003 the figure was 80 mobile phones per 100 inhabitants among the enlarged EU of 25 countries.
- Ten years later, the number of smartphone subscriptions was around 400 million, representing almost 40% of total handsets. By the end of 2020, Ericsson forecasts the number of smartphones in Europe to reach 800 million<sup>2</sup>.

 $<sup>1. \</sup> http://web.archive.org/web/20160413105315/http://ec.europa.eu/eurostat/statistics-explained/index.php/Information\_society\_statistics\_-\_households\_and\_individuals$ 

 $<sup>2. \</sup> http://web.archive.org/web/20150324081657/http://www.ericsson.com/res/docs/2014/emr-november 2014-regional-appendices-europe.pdf$ 

The lines between mobile technology and personal computing have become blurred as most mobile phones have Internet browsing and e-mail capabilities, and more computers are wireless.



## **MOBILE TECHNOLOGY**

Mobile technology is the technology used for cellular communications and some argue that mobile technology is the future of computing<sup>3</sup>.

#### **SMS**

Short message services (SMS) is the text messaging service feature of phone, Web, or mobile communication systems<sup>4</sup>.

#### **MMS**

Multimedia message services (MMS) is a feature which allows users to send messages that include multimedia content to and from mobile phones<sup>5</sup>.

### **M-learning**

Mobile learning or m-learning refers to learning with the aid of mobile technologies, such as mobile phones, handheld computers and personal digital assistants (PDAs)<sup>6</sup>.

#### Geolocation

- Geolocation is the ability to identify an object's real-world geographic location, such as a mobile phone or Internet-connected computer terminal.
- Mobile technology users should understand the geolocation function on their devices and be able to set standard privacy settings on mobile devices (for more information on privacy settings, see Fact sheet 9).

#### **Apps**

- A mobile application or app is a computer program specifically designed to run on mobile devices such as smartphones, tablet computers, smart watches and in some cases, wearables<sup>7</sup>. For more information on wearables, see Fact sheet 23.
- The amount of apps has increased in direct proportion to the amount of mobile phone users and the app economy is estimated to create revenues of more than €10 billion per year within the European Union<sup>8</sup>.
- There is a huge variety of apps available that are either free or paid and it is advisable to read the reviews on apps before download or purchase because free apps can finish up being costly through in-app purchases (see Fact sheet 13 on online shopping).

### **Mobicash**

- With the increase in mobile phone users, financial institutions have introduced a single cashless mobile financial platform, which offers transaction processing and mobile payments.
- "Orange money", for example, which describes mobile money services from the provider Orange, is available in 13 countries: Botswana, Cameroon, Cote d'Ivoire, Egypt (under the name Mobicash), Guinea, Jordan, Kenya, Madagascar, Mali, Mauritius, Niger, Senegal and Uganda<sup>9</sup>.
- UK reports British consumers are likely to spend as much as \$30.5 billion by 2021 on purchases through their mobile handsets<sup>10</sup>.

<sup>3.</sup> https://en.wikipedia.org/wiki/Mobile\_technology

<sup>4.</sup> https://en.wikipedia.org/wiki/Short\_Message\_Service

<sup>5.</sup> https://en.wikipedia.org/wiki/Multimedia\_Messaging\_Service

<sup>6.</sup> https://en.wikipedia.org/wiki/M-learning

<sup>7.</sup> https://en.wikipedia.org/wiki/Mobile\_app

<sup>8.</sup> http://web.archive.org/web/20160617033122/http://www.visionmobile.com/product/the-european-app-economy/

<sup>9.</sup> https://goo.gl/4LQveU

<sup>10.</sup> https://goo.gl/8a7Dx7



# **IMPORTANCE IN UNDERSTANDING THE ISSUES**

- There are concerns about children receiving mobiles or tablets too early, as long-term research
  has not yet been carried out to investigate what developmental issues can be posed by early
  access to mobiles or tablets.
- Additional concerns for children include online shopping and engagement in e-commerce without understanding the implications.
- Research is inconclusive about the dangers of radiation exposure over time, however minimal this may be.
- Although computer use is often still regulated within the home, many parents consider that
  mobile phone use is "private". Emboldened by newfound freedom, children can get themselves
  into financial trouble by spending money on prize "giveaway" media campaigns or accessories
  such as ringtones.
- Mobiles may be used as tracking devices through the geolocation facilities they contain. The issue of safety versus freedom is a controversial one.
- Bluetooth technology<sup>11</sup> raises security issues such as hacking, and sending or receiving unsolicited messages.
- Moblogs<sup>12</sup> are mobile phone blogs (web diaries). They make it easy for young people to post information and photos and potentially compromise their own safety and that of others.
- Mobile bullying is of growing concern and is not only limited to smartphones and tablets, as smartwatches now exist with social networking apps pre-installed.
- Mobile phone cameras and easy Internet access capabilities can be a threat to privacy: there is a worrying trend amongst young people to take "compromising photos" (e.g. other young people in the gym changing room or in embarrassing situations, teachers in class), and even the morphing of these images before they are uploaded to the Web.
- Mobile phone costs: children are often unaware of the high costs of certain services, such as online voting, unwanted premium SMS services and in-app purchases.
- Because they are a distraction, mobiles can pose a risk while driving and, even more recently, they have been noted to pose risks when walking. So many individuals walk and text that there are even apps that allow you to see the ground as you text with your head down. Available on Apple<sup>13</sup> or Android<sup>14</sup>.
- Viruses<sup>15</sup> have been infecting mobiles since they became a household item, around 2004. F-Secure estimates that hundreds of mobile viruses exist and they are increasing in type and number all the time. Take a look at the most recent threats at "Threat descriptions" <sup>16</sup>.



## **ETHICAL CONSIDERATIONS AND RISKS**

- Internet "on the go" poses several risks because many do not give a thought to using appropriate privacy settings. The facility of use and availability of several devices per user make intrusions more likely.
- Many users take advantage of free wireless connectivity available in cafés, restaurants and other public locations and provide personal and financial information in these environments.

<sup>11.</sup> https://en.wikipedia.org/wiki/Bluetooth

<sup>12.</sup> https://en.wikipedia.org/wiki/Mobile\_blogging

<sup>13.</sup> https://itunes.apple.com/en/app/type-n-walk/id331043123?mt=8

<sup>14.</sup> https://play.google.com/store/apps/details?id=com.biztech.typewhilewalk&hl=en

<sup>15.</sup> http://en.wikipedia.org/wiki/Computer\_virus; https://en.wikipedia.org/wiki/Mobile\_virus and worms; http://en.wikipedia.org/wiki/Computer\_worm

<sup>16.</sup> https://www.f-secure.com/en/web/labs\_global/threat-descriptions

- Internet, anytime, anywhere, also means that there is no cool-off period for making decisions
  about what to upload or post online, about online purchases and other online activities. For
  instance, many apps allow live-streaming of events as they happen so your child may stream
  an embarrassing or violent scene unfolding in front of his/her eyes without being able to
  reflect on whether it is a good idea or not to record or publish such content.
- Due to the ease at which even very young children can make purchases via mobile devices, specialists warn of an emerging trend of what they call "virtualisation" of money, where children have difficulty grasping the real value of money.



## **HOW TO**

Mobile phones are popular and it is easy and relatively inexpensive to own one. Once you buy a handset you can choose to pay à la carte for certain increments of minutes or you can subscribe to a specific provider and pay a monthly fee for services.

Mobile devices such as smartphones, tablets, eReaders and hand-held games only require a Wi-Fi connection to provide access to the online world.



## **IDEAS FOR CLASSROOM WORK**

Since mobile phones are so popular with young people, teachers can engage students by incorporating the use of SMSs and so forth in classroom activities. The portability of handheld devices is beneficial for teachers who are on the move and for students working in groups or doing fieldwork. The use of mobile devices in learning both in school and out has been found to encourage students to take responsibility for their work and to make it less likely that they lose notes and assignments.

- While on a field trip, have students record their impressions on a mobile device, using photos and videos to supplement their assignments.
- Have students use various apps to detail their homework, for example Vine for short videos, Periscope for on-the-spot reporting, or Twitter and Facebook for academic updates.
- Ask students to identify the risks and challenges of using smartphones and mobile devices in the classroom. Do they think that a 100% tech classroom is possible? Why? Why not?



# **GOOD PRACTICE**

- Use a low-radiation mobile phone<sup>17</sup>, that is an ear SAR rating of no more than 0.56 W/kg and a body SAR rating of less than 0.57 W/kg, and a head-set the best ones are equipped with a frequency filter.
- Encourage young people to restrict their use of mobile phones and tablets. Do not prohibit use, however. Mobile phone use and various messaging services are a widespread phenomenon among teens and in many circles it is essential for networking among peers.
- Do not leave Bluetooth on if it is not being used, in order to avoid security risks.
- As with e-mail, accept data only from trusted sources. Beware of SMS spam: only share your mobile number with people you know well.
- Before publishing pictures, make sure they will not breach the legal rights of others.
- Talk to your children about exchange of harmful content and stress that it could be against national youth protection laws.
- Be considerate with your use of the phone and tablet. People around you may not appreciate having to listen to your conversation.

- If you are bothered by unwanted calls or SMSs, contact your mobile operator or your national Insafe helpline<sup>18</sup>.
- Many mobile phones have a filter option: use a black list to block unwanted numbers or a
  white list to only accept elected numbers (for example only numbers in the address book).
  You can also download parental control filters from the Internet (freeware) or buy one from
  your mobile operator.
- Remember that mobile phones are not the only devices that can be used to communicate: tablets and smart watches also have messaging and voice capabilities.
- For younger children, or teens who are not yet able to manage their finances responsibly, choose a "pre-paid" plan instead of a monthly subscription in order to avoid unpleasant surprises. Discuss their spending and ensure that they understand the real value of money.
- Do not forget to configure your child's smartphone upon purchase. Most devices come with fully fledged features (camera, GPS, near field communication (NFC), Bluetooth, etc.) and are configured by default for adults. Do not hesitate to search for online guides on setting up your child's smartphone. Some of the steps recommended are: set up a child's account protected with a password, disable in-app purchases, disable installation of new apps (for very young children), disable geolocalisation and the use of GPS and install parental control software.
- Beware that once a password is entered to make a purchase on a mobile device, the password may remain active for up to 15 minutes allowing another purchase to be inadvertently made<sup>19</sup>.



## **FURTHER INFORMATION**

- A GSMA report can help understand the mobile economy:
   <a href="http://web.archive.org/web/20160411155639/http://www.gsmamobileeconomy.com/GSMA\_Global\_Mobile\_Economy\_Report\_2015.pdf">http://www.gsmamobileeconomy.com/GSMA\_Global\_Mobile\_Economy\_Report\_2015.pdf</a>>.
- Europe's social, digital and mobile landscape in 2014 gives a range of infographics: <a href="http://web.archive.org/web/20151211195326/http://wearesocial.net/blog/2014/02/social-digital-mobile-europe-2014/">http://wearesocial.net/blog/2014/02/social-digital-mobile-europe-2014/</a>.
- S212 is an independent UK site for reviewing mobile phones and other devices: <a href="http://www.s21.com/mobile-phones.htm">http://www.s21.com/mobile-phones.htm</a>.
- UNESCO has published a report on the future of mobile learning and its implication for policy makers and planners: <a href="http://unesdoc.unesco.org/images/0021/002196/219637E.pdf">http://unesdoc.unesco.org/images/0021/002196/219637E.pdf</a>>.
- "Children and mobile phones, an agenda for action" is an online publication by Childnet International: <a href="http://www.childnet.com/ufiles/CMPAAA">http://www.childnet.com/ufiles/CMPAAA</a> A4.pdf>.
- The British Board of Film Classification has taken over from the Independent Mobile Classification Body (IMCB) to provide the independent framework that underpins the mobile operators' code of practice: <a href="http://www.bbfc.co.uk/what-classification/mobile-content">http://www.bbfc.co.uk/what-classification/mobile-content</a>.
- Learn about protecting Bluetooth and how it works: <a href="http://web.archive.org/web/20160407133222/http://electronics.howstuffworks.com/bluetooth4.htm">http://web.archive.org/web/20160407133222/http://electronics.howstuffworks.com/bluetooth4.htm</a>.
- Mobile operator Vodafone has written a guide for parents: <a href="https://www.vodafone.com/content/parents/howto-quides.html">https://www.vodafone.com/content/parents/howto-quides.html</a>.

<sup>18.</sup> http://www.saferinternet.org/ww/en/pub/insafe/focus/national\_helplines.htm

<sup>19.</sup> http://www.creditcards.com/credit-card-news/whos-responsible-kids-unauthorized-charges-1279.php