

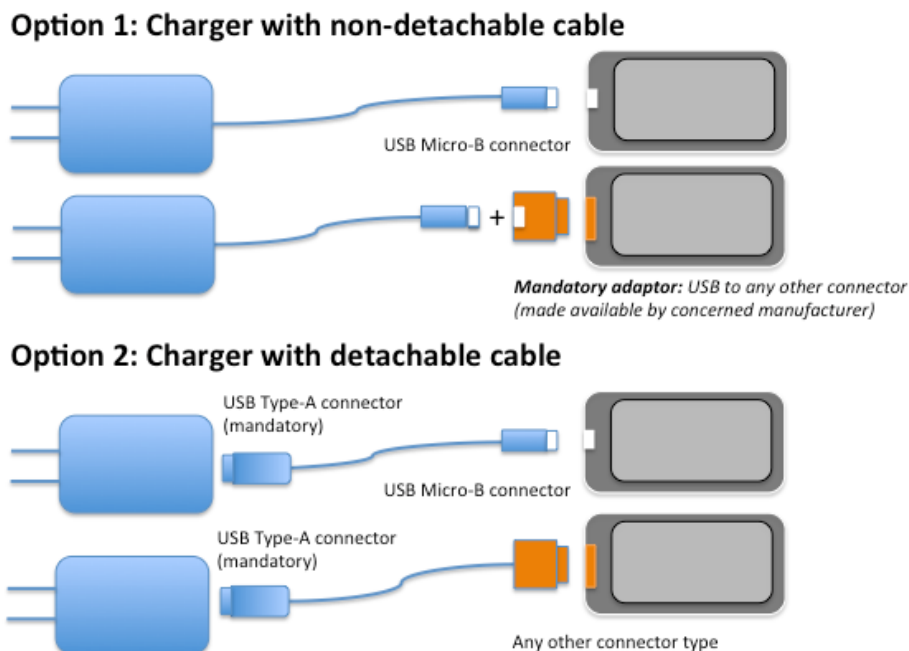
FAQs - Common Charging Capability for Smartphones

1) What is a mobile phone charger and what is a connector?

A charger is the AC/DC converter which is plugged into the mains power source to charge the battery of the mobile phone.

A connector is used for connecting the charger and mobile phone together. There is a connector in both the charger and the device. The connector on the device is usually Micro-USB (also called Micro USB-B). Some manufacturers use another connector and provide a Micro-USB adapter (see also Questions 4 and 6). In smartphones, the same connector is used for both charging and data transfer to/from computer.

Today, the charger cable is usually detachable. This offers many benefits e.g. charging from computer's USB-A port during data transfer. Also captive (integrated) cables are still in use.



2) What does creating a common charging capability actually mean and what devices does it refer to?

The common charging capability¹ means standardising the interoperability aspects of chargers so that they can be used with data enabled mobile phones (usually called “smartphones”) from different manufacturers. Smartphones use typically the same connector and cable for both charging and data transfer between the smartphone and the computer.

¹ As agreed in the 2009 MoU.

3) What exactly have the major mobile phone manufacturers voluntarily agreed to do to make consumer's lives easier and to avoid excessive waste and clutter of cables, plugs etc. in cupboards and in landfills?

Manufacturers have voluntarily agreed to use the same technical interoperability specifications for their chargers. The main consumer benefit is that smartphone chargers are widely reusable as they will work with new smartphones of major manufacturers. Hence, instead of being recycled, consumers can continue to use their existing chargers with their new smartphone.

Additionally, as most chargers come with a separate, multifunctional cable that is used for charging and data transfer, the amount of cables placed on the market has been reduced significantly. Also if a cable is broken, it can be replaced easily, instead of having to buy an entirely new charger with an integrated cable. This is important as cables and connectors are "consumables" that have usually a more limited life span than chargers. The separate cable can also be used for charging from any USB-A outlet (e.g. laptop's USB-A port) available for end users.

4) The "Micro-USB" interface is the socket in the phone and the plug that fits into it, right? If so, doesn't "common charging capability" therefore involve the connector as well as the charger?

The common charging capability requires a Micro-USB connector, but explicitly allows for other connectors provided that the respective manufacturer makes an adaptor/dongle available (Micro-USB to other connector).

5) In 2009 companies agreed that signatories selling smartphones with non-Micro-USB connector sockets must provide adaptors to the Micro-USB connector. Does that agreement still stand?

Yes. In a Letter of Intent on 10 March 2014 signatories confirm their intention to place smartphones on the market that provide the common charging capability (mobile phones as defined in 2009 MoU).

6) Why not include an adaptor in the box?

Devices that don't have a micro USB connector plug do include a cable that connects to the charger, and that cable is effectively an adaptor. Manufacturers that do not use Micro-USB connectors in their devices agreed to make adaptors available with female Micro-USB sockets on one side and the male plug of another connector on the other side. Manufacturers usually do not include them in the box because they are not essential for using their devices.

7) Why do mobile phone manufacturers insist on being allowed to develop their own connectors?

Connectors on smartphones are typically multi-functional, as cables can connect various devices to synchronise data, to deliver audio and video-content or to charge the mobile phone. As data volumes increase it is important to increase speed of data transfer and to allow faster charging of higher capacity batteries (needed to power tomorrow's smartphones). Therefore connectors are regularly improved to meet these new market requirements. Not following these trends would lead to a technological standstill and result in a disadvantage for the consumers.

8) Leading mobile phone manufacturers declared in April 2013 and March 2014 their intention to supply chargers to the EU market which conform to the 2009 MoU on common charging. Which companies signed this statement of intent, and which of the original signatories to the 2009 agreement chose not to sign?

In June 2009, fourteen companies signed a Memorandum of Understanding (MoU) to develop common charging capabilities for data-enabled mobile phones. The MoU signatories were Apple, Atmel Emblaze Mobile, Huawei Technologies, LGE, Motorola Mobility, NEC, Nokia, Qualcomm, Research In Motion (BlackBerry), Samsung, Sony Ericsson, TCT Mobile, Texas Instruments.

In April 2013 eight leading smartphone manufacturers in Europe published a Letter of Intent (LoI) on mobile phone common charging. In the LoI eight DIGITALEUROPE members have declared their intention to continue supplying chargers to the EU market, which conform to the 2009 MoU on common charging. The signatories were Apple, BlackBerry, Huawei, LGE, NEC, Nokia, Samsung and Sony.

On 10 March 2014 five leading smartphone manufacturers in Europe again stated in another Letter of Intent (LoI) their intention to continue supplying chargers to the EU market, which conform to the 2009 MoU. Signatories are Apple, BlackBerry, Huawei, Samsung and Sony Mobile. It is difficult to directly compare the quantity, names and market share of the signatories because of the very high dynamics in this market, however it is estimated that the common charger LoI today impacts more than 90% of the European smartphone market. In addition the leading manufacturers are globally supporting Micro USB charging for more than 90% of the global market.

9) Why does the European Parliament argue that the Radio Equipment Directive (RED) will result in a common charger. Is this the case?

Not necessarily. Article 3 (3) of RED enables the European Commission the option to regulate on a common charger if they deem it necessary. While a recital recognises the need for a renewed effort for a common charger for mobile phones in particular, there is no specific provision in the text of the directive itself.

10) What will happen when the Radio Equipment Directive comes into force?

The European Parliament's press release seems to have misinterpreted the option to regulate chargers under certain conditions as a mandate to the European Commission. But there is in fact no such mandate and it may be that no action at all is necessary. The Commission has already started an impact assessment which is likely to be finalised in Mid-2014. The outcome of the impact assessment will be studied carefully and taken into account by the Commission when evaluating what actions – if any – are necessary.

11) What would the impact be if the European Commission decides to make use of the option in Article 3 (3) of the Radio Equipment Directive and regulate on a common charger?

Not only chargers but also smartphones would be higher priced and have fewer advanced features. Europe would be held back due to older technologies and lower market volumes compared to the rest of the global market. This would have a severe impact on European competitiveness and consumer choice, considering the very high growth in the mobile industry and the high-speed connectivity it provides for many other European economy sectors.

12) Why don't we have harmonised connectors?

The importance of having a future choice of suitable connectors is about the ability to innovate in order to offer new exciting features to consumers. Forcing manufacturers to adopt one harmonised connector will hinder innovation in the market place and deprive consumers of valuable associated benefits and technological advances.

13) What other innovations have happened in chargers during the last years?

The energy-efficiency of chargers has significantly improved: today's chargers consume much less energy in standby than older chargers. Replacing old chargers with new chargers is an important benefit for the environment and lowers consumers' electricity bills and carbon footprint. New chargers are smaller and weigh around 60% less than when the MoU was signed. This led to an outstanding reduction in electronic waste.

The adoption of interoperable chargers in the mobile industry has also made a strong impact on the global environment since similar charger designs are used globally.

14) Why should consumers use branded chargers when provided with the devices?

Chargers provided by the leading smartphone manufacturers have been tested extensively with the smartphones, to ensure they are safe and fit for purpose. Unfortunately, recent reports showed that several chargers manufactured by 3rd parties were unsafe, causing damage to the smartphone device and other consumer safety issues, and should not have entered the market place.