

INCEPTION IMPACT ASSESSMENT

Inception Impact Assessments aim to inform citizens and stakeholders about the Commission's plans in order to allow them to provide feedback on the intended initiative and to participate effectively in future consultation activities. Citizens and stakeholders are in particular invited to provide views on the Commission's understanding of the problem and possible solutions and to share any relevant information that they may have, including on possible impacts of the different options.

TITLE OF THE INITIATIVE	Common chargers for mobile telephones and other compatible devices
LEAD DG – RESPONSIBLE UNIT	DG GROW (Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs), UNIT C3 Advanced Engineering and Manufacturing Systems
LIKELY TYPE OF INITIATIVE	Legislative
INDICATIVE PLANNING	Q4 2019
ADDITIONAL INFORMATION	http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive/common-charger_en

The Inception Impact Assessment is provided for information purposes only. It does not prejudice the final decision of the Commission on whether this initiative will be pursued or on its final content. All elements of the initiative described by the Inception Impact Assessment, including its timing, are subject to change.

A. Context, problem definition and subsidiarity check

Context

In June 2009, following a request from the European Commission, major producers of mobile telephones agreed to sign a Memorandum of Understanding (“MoU”)¹ to harmonise chargers for data-enabled mobile telephones sold in the EU.

The main scope of the Memorandum of Understanding was to guarantee interoperability between chargers and mobile phones on the market, therefore reducing the need to buy or exchange continuously chargers and cables and consequent reduction of e-Waste in line with the Circular economy and Energy Union strategies². The MoU not only aimed at minimising waste and energy consumption, but interoperability was considered key for the development of a competitive Digital Single Market, at the benefit of both industry and consumers.

The “common charger” solution was based on the USB 2.0 Micro B³ socket. A progress report provided by the MoU signatories in February 2013 indicated that 90% of the new devices placed on the market by the signatories and other manufacturers by the end of 2012 supported the common charging capability. The MoU expired in 2014.

Problem the initiative aims to tackle

Following expiration of the MoU in 2014, the Commission started fostering the adoption of a new voluntary agreement. Several discussions with the manufacturers took place during the past years. The received proposals, culminating in the MoU circulated by the industry on 20 March 2018⁴, did not however guarantee full

¹ More information relevant to the common charger is available at http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive/common-charger_en

² http://ec.europa.eu/environment/circular-economy/index_en.htm

³ A list of USB receptacles (sockets) types is available at <https://en.wikipedia.org/wiki/USB>

⁴ http://www.digitaleurope.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=2630&language=en-US&PortalId=0&TabId=353

interoperability between mobile phones. Indeed, such proposal did not guarantee the possibility to use the same chargers or certain accessories and peripherals such as docking stations for speakers and keyboards with different brands of mobile phones, as proprietary solutions were proposed together with the previous USB 2.0 Micro B and the new USB Type C solutions. Consequently, reduction and prevention of the fragmentation of the chargers and consequently the e-waste reduction policy were not fully addressed in a situation in which at least three technologies would be concurrently available (actually Apple Lightning⁵, USB 2.0 Micro B and USB Type C) and that would not exclude the possibility to have other new proprietary solutions in the future. It has to be noted that, though under the first MoU regime adaptors were permitted (therefore allowing proprietary plugs to interconnect with USB 2.0 Micro B ones), the introduction of the USB Type C socket does not appear to provide any technical advantages to justify maintaining of proprietary solutions (in terms of current needs, reversibility of the connection, robustness, data transmission, etc.).

A situation without a common charging solution could result in a proliferation of several chargers types, as it was in 2009, when more than 30 proprietary solutions were on the market. Such a situation, other than causing inconvenience for consumers, could result in limited interoperability, performances and safety issues, increase of e-waste. As the 2014 study reported⁶ *“The MoU is estimated to have resulted in six to 21 million fewer standalone chargers over the period 2011 to 2013.”*

Basis for EU intervention (legal basis and subsidiarity check)

The European Union is empowered to adopt measures with the aim of establishing or ensuring the functioning of the Internal Market, in accordance with the relevant provisions of the Treaties (Article 26 and Article 114 of the Treaty on the Functioning of the European Union). In order to avoid fragmentation of the chargers internal market, EU action is needed to achieve a single market in this field, which is also a prerequisite for a well-functioning digital economy.

The objectives can be better achieved at the EU level, rather than by the Member States alone, in view of:

- The needs for standards and interoperable solutions;
- The global nature of industrial value chains, as well as the activity of global competitors working across the markets.

Therefore, the EU can adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, the proposed measures will not go beyond what is necessary in order to achieve those objectives.

Chargers are electrical equipment in the scope of the Low Voltage Directive (LVD) 2014/35/EU. Article 1 states that the LVD “ is to ensure that electrical equipment on the market fulfils the requirements providing for a high level of protection of health and safety of persons, and of domestic animals and property, while guaranteeing the functioning of the internal market.” .

The previous voluntary approach and the Memorandum of Understanding of 2009 allowed the possibility to use adaptors with proprietary solutions and did not therefore result in full harmonisation.

Radio equipment, such as data-enabled mobile telephones fall within the scope of the Radio Equipment Directive (RED) 2014/53/EU. Actually, Art. 3(3)(a) of RED, that states: “[...] Radio equipment within certain categories or classes shall be so constructed that it complies with the following essential requirements: (a) radio equipment interworks with accessories, in particular with common chargers [...]” empowers the Commission to impose harmonised solutions. This could provide the legal basis for the harmonisation of ‘common’ chargers.

Alternatively, the use of the ordinary procedure and a new legislation could be adopted in accordance with Article 114 TFEU (internal market), that enables the EU to adopt measures to harmonise the legislation of the Member States in order to ensure the establishment and functioning of the internal market. Such measures must take as a base a high level of protection of the health and safety of people and of the environment.

B. Objectives and policy options

The new initiative aims to limit fragmentation of the charging solutions, at the same time not hampering future technological evolution.

⁵ More details on the Lightning plug is available at [https://en.wikipedia.org/wiki/Lightning_\(connector\)](https://en.wikipedia.org/wiki/Lightning_(connector))

⁶ *“Study on the impact of the MOU on harmonisation of chargers for mobile telephones”* - <http://ec.europa.eu/DocsRoom/documents/7431/attachments/1/translations>

As “baseline scenario” it is considered a situation that would not oblige producers to implement common charging solutions.

The following policy options, will be considered at least:

- Baseline scenario;
- Voluntary approach;
- Regulatory option, whether under pursuant Article 3(3)(a) of the Radio Equipment Directive 2014/53/EU or a different legal basis.

At least the following technical scenarios will be taken into account as basis to assess the above mentioned options:

1. Plug charger with detachable cable.
 - a. USB Type A socket on plug charger and:
 - i. Cable from USB Type A to USB 2.0 Micro B;
 - ii. Cable from USB Type A to USB Type C;
 - iii. Cable from USB Type A to proprietary socket (e.g. Apple Lightning);
 - iv. Cable of the previously defined types plus external adaptor.
2. Plug charger with detachable cable.
 - a. USB Type C socket on plug charger and:
 - i. Cable from USB Type C to USB 2.0 Micro B;
 - ii. Cable from USB Type C to USB Type C;
 - iii. Cable from USB Type C to proprietary socket (e.g. Apple Lightning);
 - iv. Cable of the previously defined types plus external adaptor.
3. Plug charger with no detachable cable:
 - i. Cable terminating with USB 2.0 Micro B;
 - ii. Cable terminating with USB Type C;
 - iii. Cable terminating with proprietary socket (e.g. Apple Lightning);
 - iv. Cable of the previously defined types plus external adaptor.

Whereas it has to be noted that the current market trend mostly applies technical options indicated in 1.a.i., 1.a.ii. and 1.a.iii., the technical options to be considered will also take into account new charging technologies such as fast charging and wireless charging. In addition, the analysis shall be future-proof by taking into account innovation aspects, while still keeping a view to prevent fragmentation of the market. The proposed options should build on the standardisation working methods carried out so far⁷.

Finally, taking into account the possibility to allow chargers to interwork with a variety of electronic and electrical equipment, the IA shall assess whether under the proposed scenarios it will be possible to extend the scope of any possible regulatory option beyond smartphones, and the related costs/benefits.

As an indication, equipment that could fall under scope of this initiative could be tablets, cameras, portable GPS devices, radio controlled toys and any other devices with compatible current requirements.

C. Preliminary assessment of expected impacts

Likely economic impacts

The main macro-economic impacts of the measure appear to affect mainly:

- Manufacturers of mobile phones;
- Manufacturers of chargers and accessories.

As main producers of mobile phones, accessories and chargers are located outside Europe (both design and production), the measure appears to have minor impacts for the competitiveness of EU economy.

A limitation of the market fragmentation should increase competition in the sector, while facilitating achievement of the single market goals.

A limitation of new chargers envisaged by the measure should result in reduced import needs.

Minor impacts are expected on European SMEs, only for specific related sectors providing mobile phones accessories (for instance in the HiFi sector, companies selling docking stations and similar cradles).

Likely social impacts

The main social impacts expected from the initiative appear to be related to consumers' convenience. An

⁷ More details are on <http://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=search.detail&id=437>

increased competition could additionally result in lower prices and higher quality, therefore reducing the presence of counterfeit chargers and overall increase of users' safety.

Likely environmental impacts

Expected impacts are a reduction/minimisation of e-waste, by reducing the necessity to purchase different types of chargers and by giving the possibility to reuse already owned ones.

Likely impacts on fundamental rights

N/A

Likely impacts on simplification and/or administrative burden

N/A

D. Evidence base, data collection and better regulation instruments

Impact assessment

The impact assessment is being prepared to support the preparation of this initiative and to inform the Commission's decision.

Evidence base and data collection

- Ex-post evaluation^{8,9} of the MoU was performed in 2014. The main objective of that study was to evaluate the results achieved with the MoU in the 2009-2013 period, to analyse how the stated objectives to delivering benefits for consumers and for industry and to reducing electronic waste were achieved, and to provide elements in view of considering options for follow-up. The study assessed the benefits for consumers, for manufacturers of mobile telephones and chargers following the MoU and analysed its indirect impacts for other small portable electronic devices requiring similar charging capacity. The study also provided an ex-ante assessment of the expected impacts of different future policy options.
- A complete background and documents related to the topic is available on http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive/common-charger_en
- The TCAM and LVD working groups will be activated to provide support during the IA, and have already been informed.
- Whereas the previous study concentrated on the evaluation of the previous MoU an impact assessment Additional study is planned to gather data to provide indications for taking future policy options.

Consultation of citizens and stakeholders

The impact assessment process will include both public and targeted consultations. T
The different tools that will be used to reach stakeholders are:

⁸ "Study on the impact of the MOU on harmonisation of chargers for mobile telephones" - Executive summary <http://ec.europa.eu/DocsRoom/documents/7431/attachments/1/translations>

⁹ "Study on the impact of the MOU on harmonisation of chargers for mobile telephones" - Final report <http://ec.europa.eu/DocsRoom/documents/7432/attachments/1/translations>

- 12-week internet based open public consultation, in 24 languages, to be carried out through on-line consultation tools (EU Survey in order to ensure transparency and accountability and to give any interested party the possibility to contribute).
- Targeted consultations and interviews with the representatives of the stakeholders mentioned above (3 languages).

The public consultation will be open to the general public. The more specific consultations will take place by means of interviews and surveys with:

- the competent authorities in Member States responsible for the implementation of the LVD 2014/35/EU and RED 2014/53/EU Directives (including both respective market surveillance authorities);
- representatives from Industry, European federations and SMEs;
- representatives from consumer associations;
- representatives of the European Standardisation Organisations (CENELEC - European Committee for Electrotechnical Standardization and ETSI – The European Telecommunications Standards Institute).

Other tools might be proposed where deemed appropriate, in the course of the IA depending on the level of information needed.

More details about the consultation strategy will be made available on the webpage dedicated to this subject on the DG GROW website on EUROPA from http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_en .

Will an implementation plan be established?

N/A at this stage