TECHNICAL SPECIFICATIONS

IMPACT ASSESSMENT STUDY ON COMMON CHARGERS OF PORTABLE DEVICES
IMPLEMENTING FRAMEWORK CONTRACT 575/PP/2016/FC

1. BACKGROUND OF THE STUDY

1.1 Overall purpose and justification

This study is intended to provide input for the Impact Assessment (IA) accompanying a new initiative aiming to limit fragmentation of the charging solutions for mobile phones and similar devices, whilst at the same time not hampering future technological evolution.

1.2 Policy context of the initiative

The Memorandum of Understanding (MoU) and the common charger

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

The MoU aimed at guaranteeing interoperability between chargers and new mobile phones on the market, therefore reducing the need to buy or continuously exchange chargers and cables and a consequent reduction of e-Waste in line with the Circular economy and Energy Union strategies. At the same time, interoperability was considered key for the development of a competitive Digital Single Market, at the benefit of both industry and consumers. The MoU was also to ensure that citizens could benefit from reliable, energy-efficient and safe chargers, whether they were provided by the smartphones’ manufacturers or they were sold as standalone products.

Upon signing the MoU, the signatories agreed to develop a common specification based on the USB 2.0 Micro B (Micro-USB) interface, which would allow full charging compatibility with mobile phones to be placed on the market. For those phones that did not have a Micro-USB interface an adaptor was allowed under the terms of the MoU.

Before the MoU, in 2009 there were 500 million mobile phones in use in the EU countries, but they were only compatible with specific mobile telephone chargers as more than 30 different types of charger were on the market. Other than inconvenience to the consumer, that situation was estimated to generate more than 51,000 tons of electronic waste per year in the EU. 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.

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1 More information relevant to the common charger is available at

2 http://ec.europa.eu/environment/circular-economy/index_en.htm
In 2014, a study\(^3\) confirmed that the number of different charging connectors for mobile phones on the market had declined substantially and the vast majority of handset owners now had a MoU-compliant phone, which enabled many to charge their phones using chargers of friends, colleagues, etc. The study also highlighted the improvements in waste reduction and resource efficiency in line with the circular economy goals and the policy initiatives of the Commission.

**State of Play**

The MoU expired after two letters of renewal in 2014, and the Commission started fostering the adoption of a new voluntary agreement. The new voluntary agreement was aiming to take into account the new USB Type C technology for the common interface between the charger and the mobiles, but also further developments in the sector, as for instance that of a wireless charger.

Still in 2014, the co-legislators, and the European Parliament in particular, called for renewed efforts to complete the harmonization of chargers. For this purpose, they also included in the new Radio Equipment Directive (RED), the possibility to mandate a common interface. The Consumer Associations joined this call, fostering a complete harmonization of chargers. Several discussions with the manufacturers took place, with the Commission commenting or suggesting several options aiming to fulfil the spirit of the request of the co-legislators (the one single common charger solution).

Beginning of 2018, the Commission received from the mobile manufacturers a new voluntary agreement.

This MoU was made public on 20 March 2018 by DigitalEurope\(^4\), but did not guarantee the possibility to use the same chargers as proprietary solutions were proposed together with the previous USB 2.0 Micro B and the new USB Type C solutions. More specifically, at least four technologies would be concurrently available (Apple Lightning\(^5\) proprietary solution, USB 2.0 Micro B and USB Type C on the phone side, and USB Type A and USB Type C on the external power supply side).

Not only reduction and prevention of the fragmentation of the chargers and consequently the e-waste reduction policy were not fully addressed, but that proposal would not exclude the possibility to have other new proprietary solutions in the future. In addition, 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.). Finally, it has to be noted that the proposal does not make any clause to innovation aspects, nor it does mention new technologies such as fast charging and wireless charging.

As the proposal was considered not to fulfil the request of the co-legislators in Article 3(3)(a) of the RED, as allowing different charging solutions and therefore not guaranteeing full interoperability between mobile phones, there was no endorsement from the Commission.

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\(^3\) “Study on the impact of the MOU on harmonisation of chargers for mobile telephones and to assess possible future options”


Legal context of the initiative

The safety of chargers, other than wireless chargers, is governed by 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.”

For electromagnetic compatibility risks, the Electromagnetic Compatibility Directive 2014/30/EU is applicable to chargers.

The safety and electromagnetic compatibility of radio equipment, such as data-enabled mobile telephones, are governed by the Radio Equipment Directive (RED) 2014/53/EU. In addition the RED sets essential requirements for the efficient use of the radio and provides the basis for further regulation governing some additional aspects. One of them, referring to common chargers, is Article 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 [...]”, which empowers the Commission to define the classes or categories of radio equipment concerned by that provision. This could provide a legal basis for taking a regulatory action in relation to ‘common’ chargers, that is, would cover the socket side interface on the electronic equipment.

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.

2. **APPROACH AND METHODOLOGY**

The contractor shall ensure robustness of information by trying to acquire it from more than one source. In particular findings from consultations should be complemented when possible by official statistics and studies.

The contractor must support findings and recommendations by explaining the degree to which these are based on opinions, analysis and objectively verifiable evidence. Where opinions are the main source, the degree of consensus and the steps taken to test the opinions should be given.

The contractor will have a free choice as to the methods used to gather and analyse information and for making the assessment, but must take account of the following tools for data collection and data analysis:

The tasks to be delivered shall be fully in accordance with the Commission Better Regulation Guidelines and Better Regulation Toolbox. The choice and a detailed description of the methodology must form part of the offer submitted. Advantages, limitations and risks involved in using the proposed tools and techniques should be explained.

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2.1 **Tasks of the study**

2.1.1 **Evaluation of Memorandum of Understanding and refinement of problem definition**

The overarching objective of this task is to assess to what extent the Memorandum of Understanding achieved its objectives and to analyse the current problems after the expiry of MoU.

The contractor shall in particular analyse the following issues:

**Assessment of the previous memorandums of understanding and voluntary agreements (2009 to 2014).**

**Market data related to charging solutions:**
- an analysis of the market (main figures and trends) of mobile phones sold in Europe;
- an analysis of the market for chargers sold alone in Europe including the illicit market for counterfeit chargers,
- an updated analysis of the market (main figure and trends, charging solution used ) of other small portable electronic devices requiring similar charging capacity, such as tablets, laptops, GPS receivers, radio controlled toys, smartwatches, etc.
- an analysis of the technical evolution of the charging solutions, actual figure and future trends (in particular in the context of wireless charging);

**Environmental impacts:**
An analysis of the environmental impact of the MoU and how this would evolve after the expiry of MoU.

**Consumer impact:**
- An analysis of consumer detriment stemming from:
  - Inconvenience related to the need of using different chargers;
  - Reduction of performance of replacement chargers;
  - Cost related to replacement chargers.
- An analysis of consumers’ role in the effectiveness of MoU e.g. attachment to brand and lack of knowledge/ trust to use "non-original" chargers.

**Impact of safety:**
- An analysis of safety impacts related to chargers mostly related to non-original replacement chargers.

**Benefits for EU industry and employment in the EU:**
- An analysis of costs and benefits of the MoU for mobile manufacturers and after the expiry of MoU.

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7 As an indication of the magnitude and type of devices to be taken as reference, the contractor may refer to the outcomes of the ‘Study on the impact of the MOU on harmonisation of chargers for mobile telephones’.
Indirect impacts:
- An analysis of indirect impacts of MoU concerning other similar devices.

2.1.2 Assessment of impacts of policy options

The study is intended to analyse the impacts of the following policy options, their cost-effectiveness, their impact on consumers, their impact on e-waste and their impact on industry:

- Baseline scenario\(^8\) (acceptance of the proposed MoU);
- Voluntary approach (implementation of an improved version of the actually proposed MoU);
- Regulatory options, 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 policy 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.
   b. 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.

In addition to the technical scenarios defined in 1.a.i., 1.a.ii. and 1.a.iii., the study will provide an overview of the new charging solutions, with a view to recognise any limitations to present and future interoperability.

More specifically the technical analysis will take into account (1) fast charging and (2) wireless charging, and will list the actually used technologies and protocols and individuate the factors that could limit interoperability of devices using fast and wireless charging. Specifically for the fast charging, the above options will need to be assessed against their suitability for the fast charging feature.

\(^8\) As “baseline scenario” it is considered a situation that corresponds to the proposal received from manufacturers
In that respect, the study should assess the option to set out ad-hoc performance parameters. In that respect -as previously mentioned under policy options bullet point 3- other legal basis could be considered other than Article 3(3)(a) of the RED in order to extend the possibility for radio equipment to interwork with accessories and common charger by including those additional features. Under that policy scenario, the study will have to analyse the specific performance criteria (fast charging, wireless charging, etc.), make assumptions on the technical solutions that may be compatible with them and assess what legal basis that could better suit their implementation.

The study shall compare the policy options and their impact on the market for mobile telephones and chargers, by specifically providing:

- an analysis of the benefits for consumers in terms of potential savings (the possibility not to include chargers with new phones, the possibility to reuse owned chargers and to avoid purchasing additional ones, etc.);
- an analysis of the consumers’ role on the potential success of the common charger solution (attachment to brand, need for information campaigns, etc.);
- an analysis of impacts on economic operators (manufacturers and importers of mobile telephones, chargers and other accessories interworking with mobile phones and similar devices, shops, online sales distributors, etc.) and in particular on SMEs that could be directly or indirectly impacted by any measure in this area (for instance, EU manufacturer of hi-fi docking stations and portable Digital Audio Converters (DACs));
- an analysis of the impact on the environment in terms of waste reduction, raw materials and overall environmental impact;
- an analysis of the impact on the safety of chargers;
- an analysis of impacts on innovations and competitiveness of the EU industry and for EU employment;
- an analysis of the impact on the illicit market for counterfeit chargers (i.e. violation of intellectual property rights in patents, trademarks, design, etc.).

The analysis shall be quantifiable and in particular deliver cost-benefits values for each of the identified options.

The analysis shall take into account aspects related to the protection of intellectual property.

The analysis shall be future-proof by taking into account new trends and innovation aspects, while still keeping a view to prevent fragmentation of the market.

Lastly and importantly, the analysis shall feed itself from the results of the evaluation of the low-voltage directive\(^9\), insofar these impact chargers, and will make a thorough assessment of previous memorandums of understanding and voluntary agreement.

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2.2 Analysis of possible scope of the initiative

Taking into account the possibility to allow chargers to interwork with a variety of electronic and electrical equipment, the study shall provide an analysis of the possible indirect impact on the EU market for other small portable electronic devices requiring similar charging capacity, such as tablets, laptops, GPS receivers, radio controlled toys, smartwatches, etc\textsuperscript{10}. The study will assess whether under the proposed scenarios it will be possible to extend the scope of any possible regulatory option beyond smartphones, and the related impacts in particular costs/benefits.

2.3 Data collection tools

2.3.1 Desk research/ literature review

The contractor should collect data and information from a wide range of publicly available sources, including, among other:

- Studies and other reports;
- Relevant academic research;
- Other relevant consultations reports/studies on the fields;
- National/international official statistics;
- Qualitative and quantitative analysis of existing data (e.g. market data);
- Structured analysis of the provisions of the legislation and of its implementation;
- Analysis of existing documents;

2.3.2 Stakeholder consultation

On the basis of the consultation strategy agreed by the Interservice Steering Group, the contractor shall implement the plan that will allow all stakeholders to be duly consulted. Stakeholders will be consulted either to collect evidence or to test/validate already existing analysis or evidence coming from different sources.

The relevant parts of the Commission Better regulation guidelines and Toolbox concerning stakeholder consultation shall be followed.

The consultation strategy must include a 12-week internet-based public consultation, but should be complemented by other approaches and tools in order to engage all relevant stakeholders and to target potential information gaps.

For each proposed consultation tool and for each category of stakeholder the contractor shall analyse the potential gaps and propose a mitigation strategy. An analysis of possible overlap between the different tools shall also be put forward (in particular between the public and targeted consultation).

\textsuperscript{10} As an indication of the magnitude and type of devices to be taken as reference, the contractor may refer to the outcomes of the 'Study on the impact of the MOU on harmonisation of chargers for mobile telephones'.
2.3.3 Public consultation

The contractor shall prepare a questionnaire for the mandatory internet-based Public Consultation which has to be agreed with the Steering Group. Public consultation is open to all – anyone interested to provide input - and so it is able to reach a broad range and large number of stakeholders.

The questionnaire will be available in 23 EU languages. Translations will be provided by Commission’s translation service (DGT).

The consultation will usually be encoded in a Commission tool, EUSurvey, run on the Commission web-site and the answers received (in the original language) will be forwarded to the contractor for analysis.

The minimum time period for public consultation is 12 weeks (additional time should be given in case they run during major holiday periods).

The contractor shall respect the European Commission standards for data protection when analysing responses.¹¹

2.3.4 Targeted consultation

The targeted consultations will collect the specialist view of the different categories of stakeholders. It can take place at any time point during the study. There is no minimum mandatory period for target consultation, but sufficient time should be given in order to collect as many replies as possible.

Questionnaires shall be customised to different stakeholder categories such as industry associations, companies (including SMEs), consumers, enforcement authorities, etc. – taking into account their different level of engagement and experience with the measure. The contractor shall propose mitigation strategies in case of low number of replies.

Targeted stakeholders’ consultations can be organized using the Commission tool EUSurvey, or any other tool proposed by the contractor and agreed upon by the Steering Group.

Any other operational works related to the survey itself will be the responsibility of the contractor. The contractor remains the sole responsible for the analysis. The contractor shall respect the European Commission standards for data protection when analysing responses.

2.3.5 Interviews

The contractor shall carry out a number of structured/semi-structured interviews. Whereas most interviews could be done via phone or video conference, face to face interviews will be needed at an early stage to get a better understanding of the sector. Further interviews may be needed when analysing the information received via the targeted and public consultation.

The Commission may issue a Recommendation Letter that the Contractor will be able to present to approached stakeholders.

In conducting the interviews the Contractor shall respect data protection and privacy standards of the Commission. The responses and transcripts of interviews shall be given to the Commission.

The selection of interviewees should be based on their knowledge of the subject and should be agreed with the Commission service.

Interviews should be conducted with

- Representative from EU
- Relevant National Administration, Notified Bodies, Standardisation Authorities
- Selected representatives from organisation of stakeholder's categories (Industry and SMEs, consumers, etc.)
- Selected number of Enterprises
- NGOs, civil society

The approximate overall number of interviews that the contractor is expected to conduct is around 30, either as face-to-face or as remote interviews.

2.4 Data analysis

Considerable emphasis should be placed on the analysis of the information/data collected. The contractor will have a free choice as to the methods used to analyse information and for making the assessment, but must, at least, take account of the following:

2.4.1 Identification of the most relevant impacts (intended and unintended)

The contractor shall establish an initial comprehensive list of all potential direct and indirect impacts that the various options may cause: economic impacts on manufacturers and on users, including on small and micro-enterprises specifically and including administrative burden/simplification; impacts on public administration impacts on consumers; impacts on competitiveness and innovation; safety impacts; environmental impacts.

The selection of the most significant likely impacts shall be based on clear criteria, including their expected magnitude, relevance to the stakeholders and importance for the EU general objectives.

2.4.2 Cost-effectiveness, cost-benefit analysis

The contractor is asked to map regulatory and administrative costs and benefits stemming from different policy options. Costs should be disaggregated to specific actions necessary. For the quantifications the contractor should follow as much as possible the logic of the cost-benefits analysis and more generally the methods described in the Better Regulation Toolbox\(^{12}\). This shall include the identification of the stakeholders' groups impacted and how they would be affected (this will include the SME test).

The contractor shall try to estimate benefits of the initiative. The contractor shall try to estimate other benefits of the measure that will emerge during the course of analysis.

2.4.3 Analysis of other impacts and comparison of options

Based on identification of possible impacts, the contractor shall quantify the most significant impacts in particular impacts on waste and impacts on consumers.

The contractor shall assess the options against the baseline scenario. The assessment will be quantitative, clearly describing the methodology, any assumptions and their robustness, any limitations of the approach and carrying out sensitivity analysis. For impacts that cannot be quantified, the contractor shall explain in details why quantification is not possible and provide a thorough qualitative assessment.

The contractor shall prepare a comparison of the options which will be based on the assessment of the various impacts and their distribution across affected stakeholders’ groups. The comparison shall consider effectiveness (the extent to which each option would achieve the objectives), efficiency (the cost benefit analysis of each option), synergies and trade-offs in the case of combined options and sub-options.

2.4.4 Case studies

The contractor shall use case studies in order to provide practical examples; these could also be used to present examples of costs and benefits for manufactures of specific products (success stories).

The analytical and reporting tasks to be delivered shall be fully in accordance with the Commission Better Regulation Guidelines and Better Regulation Toolbox.

3. AVAILABLE INFORMATION AND DATA SOURCES

The following documentation and information is an input for the contractor to develop the work:

- The Commission website on the Electrical and Electronic Engineering Industries\textsuperscript{13}
- The Commission website on the Radio Equipment Directive website\textsuperscript{14} including, the RED Guide,\textsuperscript{15} documents adopted or endorsed by the Telecommunication Conformity Assessment and Market Surveillance Committee (TCAM)\textsuperscript{16}, FAQs, reports, information documents, and Commission's opinions under the framework of RED: http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_en
- Specific web page on common chargers campaign, with links to main activities and previous study: http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive/common-charger_en

\textsuperscript{13} http://ec.europa.eu/growth/sectors/electrical-engineering/ec-support_en
\textsuperscript{14} http://ec.europa.eu/growth/sectors/electrical-engineering/red-directive_en
\textsuperscript{15} http://ec.europa.eu/docsroom/documents/2332
\textsuperscript{16} TCAM public documents are also available on https://circabc.europa.eu/faces/jsp/extension/wai/navigation/container.jsp?FormBanner:_idcl=navigationTitle&FormBanner_SUBMIT=1&org.apache.myfaces.trinidad.faces.STATE=DUMMY&Id=75ddbd4d-d635-4fb8-93c0-571f720964e4&javax.faces.ViewState=alk923rFtjsXYBzv52Njxj1Ft1cD%2Fz7maFajOQy4OkA3ynYZPKE4jA8A6wpOwky8XvWLOzC%2FctHLERx9Qbivq8QFh%2FBj4Edch2dS7pRBhvInn6F1frGPemaCROs8YGY9w1VbbJdPafgGh95gR5qc1LdsoAY%3D
Website on Administrative Cooperation Groups (AdCos)\(^{17}\), including reports from the ADCO RED.
ICSMS (Information and Communication System for Market Surveillance) – an internet-supported information and communication system for the pan-European market surveillance: [https://webgate.ec.europa.eu/icsms](https://webgate.ec.europa.eu/icsms)


Background documents:

- Memorandum of Understanding (MoU) 2009 (Annex 1)
- Annex I: List of Signatories (Annex 2)
- Mandate M/455 on a common charging capability for mobile phones (Annex 4)

**Previous evaluations and other reports**

A 'Study on the impact of the MOU on harmonisation of chargers for mobile telephones'\(^{18,19}\) 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 (such as digital cameras, tablets, music players, GNSS receivers, etc.). The study also provided an ex-ante assessment of the expected impacts of different future policy options. 3 policy options were considered – 1) no harmonisation, 2) voluntary approach and 3) EU legislation - and at that time it resulted mainly suggesting the voluntary approach as the best option, especially in view of the new announced technology USB Type-C which was expected to allow an extension of the application of the MoU to other devices than just mobile phones.


\(^{19}\) Final report [http://ec.europa.euDocsRoom/documents/7432/attachments/1/translations](http://ec.europa.euDocsRoom/documents/7432/attachments/1/translations)
4. **COMMISSIONING BODY AND PUBLICATION**

The present Impact Assessment study is commissioned by Unit C3 of DG Internal Market, Industry, Entrepreneurship and SMEs.

The steering group contributes to the development of the evaluation project and is part of its management structure. The steering Committee for the present evaluation is composed by representative of DG GROW (C3 and 01), SG, DG CNECT, DG COMP, DG ENER, DG ENV, DG JRC, DG JUST, DG R&I, DG TRADE.

The results may be shared with other interested bodies inside and outside the European Commission.

5. **REPORTING AND DELIVERABLES**

5.1  **General reporting requirements**

The contractor shall provide the required reports and documents in accordance with the timetable below.

The contractor must ensure that all deliverables under this contract are clear, concise and focused on their purpose. All deliverables shall be written in English, reviewed and corrected by a native speaker before submission.

Electronic files must be provided in *(specify, e.g. Microsoft ® Word)* format. Additionally, besides Word, the Final Report must be delivered in pdf format and in 3 hard copies.

All deliverables are presented as draft documents to be discussed with the Steering group and finalised based on the comments received from Commission services.

The Commission shall have 30 days to approve or reject the report. The contractor shall have 30 days in which submit additional information or a new report.

5.2  **Deliverables**

For the purpose of this specific contract, the following deliverables will need to be produced:

<table>
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<tr>
<th>Deliverable 1 (D1)</th>
<th>At the latest 1 month after signature of the contract by the last contracting party</th>
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<tr>
<td>An <em>inception report</em> (around 10 pages) will specify the detailed work programme and planning for the study and describe the methodological approaches and working assumptions to be used for the tasks defined. The report will also identify any additional needs.</td>
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<th>Deliverable 2 (D2)</th>
<th>At the latest 5 months after signature of the contract by the last contracting party</th>
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An **interim report** (10-20 pages) will summarise results reached until that moment and raise any problems encountered with sufficient information to permit reorientation if appropriate and required. It will demonstrate what preliminary conclusions have been drawn and give clear indications and detailed planning of the work to be carried out during the rest of the period of completion of the tasks. This report will also include the proposed structure of the final report.

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<tr>
<th>Deliverable 3 (D3)</th>
<th>At the latest 7 months after signature of the contract by the last contracting party</th>
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<tr>
<td><strong>A draft final report</strong> (around X pages + Annexes) will be delivered to the Commission, taking account of the comments made earlier on in the process. It will cover all points of the work plan and shall include sound analysis of findings and factually based conclusions and recommendations, in line with the purpose and objectives described above.</td>
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The Commission will accept the draft final report in the definitive form or comment on it within 20 days of its reception. If the Commission does not react within this period, the final study shall be deemed to have been approved.

Should the Commission still not consider the final report acceptable, the Contractor will be invited to amend until the Commission is satisfied within 30 days. In cases of late delivery, the Commission reserves its right to apply the corresponding liquidated damages according to the provisions of Article II.15 of the Framework Contract.

The Interservice Steering Group reserves the right to carry out a quality assessment of the final report and publish it along with the study.

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<tr>
<th>Deliverable 4 (D4)</th>
<th>At the latest 9 months after signature of the contract by the last contracting party</th>
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<td><strong>The final report</strong> (of around 75 pages + Annexes). Annexes to the final report will include any graphical material, the main bibliographic and information sources, verbatim of interviews.</td>
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<tr>
<th>Deliverable 5 (D5)</th>
<th>At the latest 9 months after signature of the contract by the last contracting party (submitted as annex to D5)</th>
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<tr>
<td><strong>An executive summary</strong> (around 3 pages) summarising the purpose, methods used, key findings and possible recommendations of the study.</td>
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<td>Deliverable 6 (D6)</td>
<td>At the latest 9 months after signature of the contract by the last contracting party (submitted as annex to D5)</td>
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<td>All the data collected under this contract, as well as all the summaries, analyses, underlying calculations and findings, which will be the property of the Commission and must be handed over in the agreed format.</td>
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The Commission shall have 30 days to approve or reject the reports. The contractor shall have 30 days to submit additional information or a new report.

6. **Publications**

The study (including executive summary, abstract, annexes) will be published on the DG Internal Market, Industry, Entrepreneurship and SMEs internet site, on the [EU Bookshop website](https://ec.europa.eu/europa/), and on other web-sites in relation to the study.

In view of its publication, the final report must be of high editorial quality. In cases where the contractor does not manage to produce a final report of high editorial quality within the timeframe defined by the contract, the contracting authority can decide to have the final report professionally edited at the expense of the contractor (e.g. deduction of these costs from the final payment) according to Article II.16 of the framework contract.

7. **Work Organisation**

7.1 **Meetings with the Commission**

The contractor is expected to take part in maximum 4 meetings with the Commission services which will take place on Commission premises in Brussels:

- a kick-off meeting at the beginning of the study;
- one interim meeting;
- a draft-final meeting;
- a final meeting to present the results of the study.

The 'kick-off' meeting will allow for the discussion of the draft outline approach and work programme elaborated by the contractor for the execution of the contract.

The 'interim' meetings will allow an in-depth discussion of the progress/interim draft reports.

The 'final' meeting will allow an in-depth discussion of the draft final report and requirements for the completion of the Final report.

7.2 **Work Plan**

The contract shall enter into force on the date on which it is signed by the last contracting party.

It is expected to be signed by October 2018. The provision of the services shall not exceed 9 months.
Given the time constraints, a correct project planning and resources allocation will be considered crucial for the successful completion of the project.

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<tr>
<th>Deliverables (D), Meetings (M), and Payments (P)</th>
<th>Deadline (Month)</th>
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<tbody>
<tr>
<td>M1: Kick-off meeting with the Commission in Brussels</td>
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<td>D1: Inception report</td>
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<tr>
<td>D2: First interim report</td>
<td>5</td>
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<tr>
<td>M2: Interim meeting with the Commission in Brussels</td>
<td></td>
</tr>
<tr>
<td>P1: Interim payment</td>
<td></td>
</tr>
<tr>
<td>D3: Draft final report</td>
<td>7</td>
</tr>
<tr>
<td>M3: Draft-final meeting with the Commission in Brussels</td>
<td></td>
</tr>
<tr>
<td>D4: Final report</td>
<td>9</td>
</tr>
<tr>
<td>M4: Final meeting with the Commission in Brussels</td>
<td></td>
</tr>
<tr>
<td>D5: Executive Summary of the final report</td>
<td></td>
</tr>
<tr>
<td>D6: All data collected</td>
<td></td>
</tr>
<tr>
<td>P2: Final payment</td>
<td></td>
</tr>
</tbody>
</table>

7.3 Proposed team

<table>
<thead>
<tr>
<th>Task</th>
<th>Name</th>
<th>Role in the team</th>
<th>Staff Category</th>
<th>Expertise</th>
<th>Languages</th>
<th>Unit price</th>
<th>Man days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cat. I - Team Leader</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cat. II - Senior Consultant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cat. III - Junior Consultant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cat. IV</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total days

The tender must include a description of the proposed team, its composition, its expertise and the work effort planned for each member in terms of man/days for each task of the project.

8. Price

The maximum budget available for this project is € 230,000.
The offer must include a detailed proposed budget. The tenderer should provide a quote of the total cost of the services to be provided (fixed price) in its financial tender following the table below:

<table>
<thead>
<tr>
<th>Price component</th>
<th>Staff category</th>
<th>Unit price (= daily rate for Human Resources including the travel and subsistence expenses linked to the five meetings with the Commission on its premises in Brussels)</th>
<th>Quantity (= number of man days devoted to the project by person XY for Human Resources)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person X (name and a role)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Person Y (name and a role)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.....</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.....</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL (1+2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Payments

The payment scheme will consist of

- **one interim payment**, corresponding to a maximum of 30 % (each) of the price specified in article 3.1 of the specific contract;

- a **balance payment** corresponding to 70 % of the amount specified in article 3.1 of the specific contract;

The schedule and the procedure for the approval of payments and the documents to be submitted are described in Articles I.6, II.21, II.22 and II.23 of the framework contract.

10. Award of the specific contract

As specified in the tender specification for this FWC, the offers submitted within the re-opening of competition must contain:
a) **A technical part**, detailing the methodology, the composition and skills of the team and the responsible team leader for the specific agreement;

b) **A financial part** detailing the number of man-days to be multiplied by the man-day price as defined in the Framework Contract, and other cost items.

The Specific Contract will be awarded according:

- to the qualitative award criteria given below,

AND

- to the price of the financial tenders.

The formula used to rank tenders and to calculate which tender is the most economically advantageous tender is displayed in section b) below.

**A) TECHNICAL QUALITATIVE AWARD CRITERIA**
<table>
<thead>
<tr>
<th>No</th>
<th>Qualitative award criteria</th>
<th>Weighting (maximum points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clarity, relevance and coherence</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>This criterion will assess whether the offer is written in a clear language, whether it is well and logically structured, whether all the information requested in the specific contract is duly covered.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Quality of the proposed mechanisms for project management, including quality control, risk management and reporting</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>This criterion will assess the quality control system proposed for the services foreseen in the offer concerning the quality of deliverables, the language quality check, continuity of the service in case of absence of a member of the team, as well as the overall project management (organisation of work, contacts with the contracting party etc.). This quality control system should be detailed. A generic quality control system will result in a low score.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Balance of profiles and breakdown of tasks</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>This criterion will assess how the roles and responsibilities of the proposed team and of the different economic operators (in case of joint tenders, including subcontracting if applicable) are distributed for tasks specified in individual Terms of Reference for specific contracts. The tender should provide details on the rationale behind the choice of this allocation.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Relevance and quality of the methodologies to carry out data collection</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>This criterion will assess how the tenderer will collect data.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Quality of the proposed methodology to carry out data analysis</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>This criterion will assess how the tenderer will analyse the available and collected data.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total number of points</strong></td>
<td>100</td>
</tr>
</tbody>
</table>

The award criteria cannot be further supplemented during the evaluation procedure.

Only tenders that have reached a total score of a minimum of 60% and a minimum score of 50% for each criterion will be taken into consideration for awarding the specific contract.
B) AWARD METHOD

The contract will be awarded to the tender which is the most cost-effective (offers the best value for money) on the basis of the ratio between the total points scored and the price using the following formula:

Score for tender X = \left( \frac{\text{Lowest price(*)}}{\text{Price of tender X}} \right) \times 100 + \text{Price weighting (30%)} + \text{Total quality score (out of 100) for all award criteria of tender X} + \text{Quality criteria weighting (70%)}

(*) Only tenders passing minimum quality levels are ranked. The lowest price refers to the lowest price among the tenders that have passed the minimum quality levels.