

EUROPEAN COMMISSION

DIRECTORATE-GENERAL ENERGY

Directorate C, Renewables, Research and Innovation, Energy Efficiency

CALL FOR TENDERS

N° ENER C2/2015-410

Invitation to tender N°ENER C2/2015-410

Support to R&D strategy in the area of SET Plan activities for battery based energy storage

TENDER SPECIFICATIONS

TABLE OF CONTENTS

| 1. | INFO | ORMATION ON TENDERING | | | |
|----|--|---|--|--|--|
| | 1.1. | Participation | | | |
| | 1.2. | Contractual conditions | | | |
| | 1.3. | Joint tenders | | | |
| | 1.4. | Subcontracting | | | |
| | 1.5. | Content of the tender | | | |
| | 1.6. | Identification of the tenderer: legal capacity and status4 | | | |
| 2. | EVALUATION AND AWARD | | | | |
| | 2.1. | Evaluation steps | | | |
| | 2.2. | Exclusion criteria | | | |
| | 2.3. | Selection criteria | | | |
| | 2.4. | Award criteria | | | |
| | 2.5. | Technical offer9 | | | |
| | 2.6. | Financial offer9 | | | |
| 3. | TECHNICAL SPECIFICATIONS | | | | |
| | 3.1 General background and Introduction10 | | | | |
| | 3.2 General purpose of the contract | | | | |
| | 3.3 Specific objectives | | | | |
| | 3.4 Main Activities of the contractor (tasks)12 | | | | |
| | 3.5 Interaction of the Contractor with the Commission and stakeholders17 | | | | |
| | 3.6 Other considerations | | | | |
| | 3.7 Reports and documents to produce – Timetable to observe | | | | |
| | 3.8 Duration of the tasks | | | | |
| | 3.9 Place of performance and estimate of the budget involved | | | | |
| 4. | | TENT, STRUCTURE AND GRAPHIC REQUIREMENTS OF THE AL DELIVERABLES | | | |
| 5. | ANN | EXES | | | |

1. INFORMATION ON TENDERING

1.1. Participation

Participation in this tender procedure is open on equal terms to all natural and legal persons coming within the scope of the Treaties and to all natural and legal persons in a third country which has a special agreement with the Union in the field of public procurement on the conditions laid down in that agreement. Where the Multilateral Agreement on Government Procurement¹ concluded within the WTO applies, the participation to the call for tender is also open to nationals of the countries that have ratified this Agreement, on the conditions it lays down.

1.2. Contractual conditions

The tenderer should bear in mind the provisions of the draft contract which specifies the rights and obligations of the contractor, particularly those on payments, performance of the contract, confidentiality, and checks and audits.

1.3. Joint tenders

A joint tender is a situation where a tender is submitted by a group of economic operators (consortium). Joint tenders may include subcontractors in addition to the joint tenderers.

In case of joint tender, all economic operators in a joint tender assume joint and several liability towards the Contracting Authority for the performance of the contract as a whole.

These economic operators shall designate one of them to act as leader with full authority to bind the grouping or the consortium and each of its members. It shall be responsible for the receipt and processing of payments for members of the grouping, for managing the service administration and for coordination. The composition and constitution of the grouping or consortium, and the allocation of the scope of tasks amongst the members, shall not be altered without the prior written consent of the Commission.

The tenderers should indicate in their offer whether the partnership takes the form of:

a) a <u>new or existing legal</u> entity which will sign the contract with the Commission in case of award

or

b) a group of partners not constituting a new legal entity, who via a <u>power of attorney</u>, signed by an authorised representative of each partner (except the lead partner), designate one of the partners as lead partner, and mandate him as lead contractor to sign the contract with the Commission in case of award.

¹ See <u>http://www.wto.org/english/tratop E/gproc e/gp gpa e.htm</u>

1.4. Subcontracting

Subcontracting is permitted in the tender but the contractor will retain full liability towards the Contracting Authority for performance of the contract as a whole.

Tenderers must give an indication of the part of the services and proportion of the contract that they intend to subcontract.

Tenderers are required to identify subcontractors whose share of the contract is above 20%.

During contract execution, the change of any subcontractor identified in the tender will be subject to prior written approval of the Contracting Authority.

1.5. Content of the tender

The tenders must be presented as follows:

Part A: Identification of the tenderer (see section 1.6)

- Part B: Evidence for exclusion criteria (see section 2.2)
- Part C: Evidence for selection criteria (see section 2.3)

Part D: Technical offer (see section 2.5)

Part E: Financial offer (see section 2.6)

Part F: Power of attorney (for consortia only)

1.6. Identification of the tenderer: legal capacity and status

- The tenderer's identification form in **Annex 1** shall be filled in and signed by:
 - The tenderer (including any member of a consortium or grouping)
 - $\circ\;$ subcontractor(s) whose share of the work represent more than 20% of the contract.
- In order to prove their legal capacity and their status, all tenderers (including any member of a consortium of grouping) must provide a signed Legal Entity Form with its supporting evidence. The form is available on: http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities/legal_entities/legal_entities/legal_entities/legal_entities/legal_entities_en.cfm

Tenderers that are already registered in the Contracting Authority's accounting system (i.e. they have already been direct contractors) must provide the form but are not obliged to provide the supporting evidence.

• If it has not been included with the Legal Entity Form, tenderers must provide the following information

- For legal persons, a legible copy of the notice of appointment of the **persons authorised to represent the tenderer** in dealings with third parties and in legal proceedings, or a copy of the publication of such appointment if the legislation which applies to the legal entity concerned requires such publication. Any delegation of this authorisation to another representative not indicated in the official appointment must be evidenced.

- For natural persons, where applicable, a proof of registration on a professional or trade register or any other official document showing the registration number.

• The tenderer (only the leader in case of joint tender) must provide a **Financial Identification Form and supporting** documents. The form is available on: <u>http://ec.europa.eu/budget/contracts/info_contracts/index_en.cfm</u>

2. EVALUATION AND AWARD

2.1. Evaluation steps

The evaluation is based on the information provided in the submitted tender. It takes place in three steps:

(1) Verification of non-exclusion of tenderers on the basis of the exclusion criteria

(2) Selection of tenderers on the basis of selection criteria

(3) Evaluation of tenders on the basis of the award criteria (technical and financial evaluation)

Only tenders meeting the requirements of one step will pass on to the next step.

2.2.Exclusion criteria

All tenderers shall provide a declaration on their honour (see Annex 2), duly signed and dated by an authorised representative, stating that they are not in one of the situations of exclusion listed in the Annex 2.

The declaration on honour is also required for identified subcontractors whose intended share of the contract is above 20%.

The successful tenderer shall provide the documents mentioned as supporting evidence in Annex 2 before signature of the contract and within a deadline given by the contracting authority. This requirement applies to all members of the consortium in case of joint tender In case of doubt on this declaration on the honour, the contracting authority may also request the evidence for subcontractors whose intended share of the contract is above 20%.

2.3.Selection criteria

Tenderers must prove their economic, financial, technical and professional capacity to carry out the work subject to this call for tender.

The tenderer may rely on the capacities of other entities, regardless of the legal nature of the links which it has with them. It must in that case prove to the Contracting Authority that it will have at its disposal the resources necessary for performance of the contract, for example by producing an undertaking on the part of those entities to place those resources at its disposal.

2.3.1. Economic and financial capacity criteria and evidence

In order to prove their economic and financial capacity, the tenderer (in case of a joint tender the combined capacity of all tenderers and identified subcontractors) must comply with the following criteria:

- The annual turnover of the last 2 financial years above € 1.500.000

The following evidence should be provided:

Tenderers must provide proof of their financial and economic capacity by means of the following documents: the balance sheets or extracts from balance sheets for the last 2 financial years, and a statement of overall turnover and turnover relating to the relevant services for the last 2 financial years

If, for some exceptional reason which the Contracting Authority considers justified, a tenderer is unable to provide one or other of the above documents, he or she may prove his or her economic and financial capacity by any other document which the Contracting Authority considers appropriate. In any case, the Contracting Authority must at least be notified of the exceptional reason and its justification in the tender. The Commission reserves the right to request any other document enabling it to verify the tenderer's economic and financial capacity.

2.3.2. <u>Technical and professional capacity criteria and evidence</u>

a. Criteria relating to tenderers

Tenderers (in case of a joint tender the combined capacity of all tenderers and identified subcontractors) must comply with the following criteria:

- The tenderer must prove experience in the field of Research & Development roadmaps and project monitoring for smart grids and/or energy storage with at least 1 project delivered in this field in the last three years with a minimum value for each project of \in 100.000 \in .

- The tenderer must prove capacity to draft reports in English.

- The tenderer must prove experience in survey techniques, data collection, statistical analyses, socio-economic cost & benefit analysis, use of modelling and scenario's organisation and coordination of sectorial working groups/workshops and drafting reports and recommendations.

- The tenderer must prove experience in working with stakeholders and experts in the energy sector, in particular smart-grids and energy storage.

- The tenderer must prove experience in incentivizing energy stakeholders to contribute to activities and reports.

b. Criteria relating to the team delivering the service:

The team delivering the service should include, as a minimum, the following profiles:

Project Manager: At least 12 years of experience in project management, including overseeing project delivery, quality control of delivered service, client orientation and conflict resolution experience in project of a similar size (at least \in 1.500.000) covering at least half (by population) of the 28 EU Member States countries to be covered by the and in the subject area of this tender, with experience in management of team of at least 20 people.

Experts: with relevant higher education degree and / or 10 years' professional experience in the fields of: smart-grids or energy storage, electrochemistry and batteries, materials technology, energy technologies and management, European wide data collection and project monitoring, statistical analysis, scenario building, consolidation of stakeholder views, business models, market analysis and forecasting, socio-economic cost and benefit analysis. A team of minimum 5 experts with the before mentioned profiles should be presented

Languages:

At least 2 members of the team shall have native-level language skills or equivalent in English, as guaranteed by a certificate or past relevant experience. All members of the team shall already have worked in English, including oral and written communication

c. Evidence:

Evidence of the capacity to fulfil the above requirements shall be provided on the basis of the following documents:

- A list and description of related activities carried during the past three years.
- A list detailing the position and tasks for each member of the international team
- A detailed curriculum vitae (CV) for each member of the international team (including his or her educational background, degrees and diplomas, professional experience (including research work, publications and linguistic skills). The CVs shall be presented, preferably, in accordance to the Commission Recommendation on a common European format for curricula vitae, published in OJ L79 of 22 March 2002, p. 66.
- A list briefly summarising the activities similar to the ones requested by the tender specifications, delivered by the tenderer during the last 4 years, with indications of corresponding budgets, recipients and timing (i.e. year or years in which these activities were performed as well as duration of performing of each of these activities). Samples (such as produced communication materials and websites) resulting from such activities may be enclosed.

If several service providers/subcontractors are involved in the bid, each of them must have and show that they have the professional and technical capacity to perform the tasks assigned to them.

2.4.Award criteria

The tender will be awarded according to the best-value-for -money procedure. The quality of the tender will be evaluated based on the following criteria. The maximum total quality score is 100 points.

• **Quality of the proposed methodology** (60 points - – minimum threshold 60%)

Sub-criterion 1.1 Quality of the overall proposed methodology (20 points):

Sub-criterion 1.2 Methodology for the collection, management and processing of information (20 points)

Sub-criterion 1.3 Approach for stakeholder involvement and consultation (20 points):

This criterion will assess how the tenderer plans to address the specifications and services requested by the Commission and whether the proposed methodology is sound and reliable in terms of delivering the expected results

• **Organisation of the work** (20 points – minimum threshold 60%)

This criterion will assess how the roles and responsibilities of the proposed team and of the economic operators (in case of joint tenders, including subcontractors if applicable) are distributed for each task. It also assesses the global allocation of time and resources to the project and to each task or deliverable, and whether this allocation is adequate for the work. The tender should provide details on the allocation of time and resources and the rationale behind the choice of this allocation.

• **Quality control measures** (20 points – minimum threshold 60%)

This criterion will assess the quality control system applied to the service foreseen in this tender specification concerning the quality of the deliverables, the language quality check, and continuity of the service in case of absence of the member of the team. The quality system should be detailed in the tender and specific to the tasks at hand; a generic quality system will result in a low score.

Tenders must score above 60% for each criterion and above 70% in total. Tenders that do not reach the minimum quality thresholds will be rejected and will not be ranked.

After evaluation of the quality of the tender, the not rejected tenders are ranked using the formula below to determine the tender offering best value for money. A weight of 70/30 is given to quality and price (of the ranked tenders)

Score for tender $x = \frac{total \ quality \ score \ for \ award \ criteria \ for \ tender \ x}{100} * 70 + \frac{cheapest \ price}{price \ of \ tender \ x} * 30$

2.5.Technical offer

The technical offer must cover all aspects and tasks required in the technical specification and provide all the information needed to apply the award criteria. Offers deviating from the requirements or not covering all requirements may be excluded on the basis of nonconformity with the tender specifications and will not be evaluated.

This section is of great importance in the assessment of the bids, the award of the contract and the future execution of any resulting contract.

Attention is also drawn to the award criteria, which define those parts of the technical proposal to which the tenderers should pay particular attention. The technical proposal should address all matters laid down in the specifications and should include examples and technical solutions to problems raised in the specifications. The level of detail of the tender will be extremely important for the evaluation of the tender. Tenderers must present in their bids a proposal on the methodology and the organisation of the work to carry out in the framework of this tender.

Tenderers should do an effort to present the technical proposal in a concise way. It is strongly recommended that the technical part of the tender is maximum 50 pages with a minimum font size for the text of 12 points. All margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers).

2.6.Financial offer

The price for the tender must be quoted in euro. Tenderers from countries outside the euro zone have to quote their prices in euro. The price quoted may not be revised in line with exchange rate movements. It is for the tenderer to assume the risks or the benefits deriving from any variation.

Prices must be quoted free of all duties, taxes and other charges, including VAT, as the European Union is exempt from such charges under Articles 3 and 4 of the Protocol on the privileges and immunities of the European Union. The amount of VAT may be shown separately.

The quoted price must be a fixed amount which includes all charges (including meeting facilities, travel and subsistence). Travel and subsistence expenses are not refundable separately.

The maximum total price: EUR 1.500.000

3. TECHNICAL SPECIFICATIONS

3.1 General background and Introduction

The European Energy Union aims to ensure secure, affordable, competitive and climatefriendly energy for citizens and businesses. For this it will a key priority to achieve a wellfunctioning internal energy market, together with diversification of energy sources, routes and providers. The Energy Union provides a route for developing EU technological leadership in low carbon technologies that will reduce energy consumption, empower consumers, create huge industrial opportunities and boost growth and jobs.

The SET plan², the Energy 2050 roadmap and the communication on energy technologies provide a comprehensive framework to address the technology related challenges at EU level.

Efficiently reaching the goals of the 2030 framework will be a key step to address the energy security challenges of the EU. There is currently a great need for a secure and predictable framework for investments in renewables, and other dimension of the energy system such as efficiency and storage which boost the performance of renewable for end-users.

With the integrated energy system approach as addressed in the Communication on Energy Technologies, the needs for further flexibility and balancing services to the electricity grids became evident. However, to realize the opportunities that in particular battery energy storage offers, the technologies has to become more performing, cost effective and environmentally friendly. At the same time European industrial capacity must be strengthened to ensure the relevant competence base and further develop manufacturing base. Europe's industries have to position themselves well in the value chain for battery energy storage systems to create growth and jobs.

The SET Plan European Electricity Grid Initiative (EEGI) which was adopted in 2010 have gathered grid stakeholders, technology suppliers and member states in a consensus oriented setting. This initiative greatly facilitated the development of strategic roadmaps, implementation plans and knowledge sharing arrangements for the technology and innovation related aspects in the electricity grids. A key facilitator in this work was the FP7 coordination and support action, GRID+ and the service contract grid+storage (http://www.gridplusstorage.eu/)

The "EEGI Team"³ is governing the EEGI and it is composed of representatives from public authorities, from industry and from regulators, according to the SET Plan governance scheme. The governance structure for the SET Plan is currently being revamped in the context of work of the Integrated Roadmap and the development of a Joint Action Plan with Member States. The aim is to revise, simplify and make the SET-Plan

² Strategic Energy Technology plan: <u>http://ec.europa.eu/energy/en/topics/technology-and-innovation/strategic-energy-technology-plan</u>

³ Current composition of the EEGI team: <u>http://www.gridplus.eu/eegi/eiiteam</u>

structures more efficient. The work of this tender should be sufficiently flexible to accommodate requirements of both the present and the upcoming governance structures

This tender will focus on battery storage technologies and the associated needs for supporting the future progress of the EEGI.

3.2 General purpose of the contract and scope

The tender general aims include:

- Provide the EEGI team and the Commission with consolidated stakeholder views for the research and technology development needs and market uptake measures for energy storage⁴ systems based on batteries.
- Monitor and review projects, programmes and developments in the sector in EU and worldwide as well as organising networking activities to foster knowledge sharing.
- Contribute to the development of an energy system with more active consumer participation, including prosumers i.e. producers that consume part or total of the self-generated energy.
- Contribute to the improved industrial capacity in Europe and develop outline and give recommendations on measures to stimulate the market for batteries

The scope includes all types of stationary rechargeable batteries with energy content larger than 5 kWh, including the necessary systems for battery management, interfaces for grid connection, safety and final disposal/recycling. The battery should be the primary energy storage component in the system⁵.

Work will be performed under the supervision of the European Commission and according to the general terms outlined herein.

3.3 Specific objectives

The contractor shall:

- set up and organize the process for the collection of Research Technology Development & Demonstration (RTD&D) needs with 10 year perspective (roadmap) and 3 year perspective (implementation plan)
- Support the process for the stakeholders prioritisation RTD&D needs and estimation of necessary financial resources specifying and taking into account

⁴ Energy storage as specified in Horizon 2020 Energy work programme 2014-15 p 59.

⁵ In general, other energy storage technologies than batteries are dealt with in the service contract ENER C2 2014-642, Grid+storage

realistic commitments from industry member states and transnational RTD programs

- Provide input for the European Electricity Grid Initiative (EEGI) or any other body designated through SET Plan governance structures.
- Support knowledge sharing by exchange of information, experience and identification of best practices and support information gathering for replication and upscaling of successful pilot and demonstration projects
- Structured monitoring of progress of research, demonstration, and market uptake measures performed on an annual basis and compared against implementation plans
- Provide an improved knowledge base for policy making in relation to battery based energy storage
- Develop and implement measures for improved European industrial capacity and battery systems cost reductions

Information should be gathered through the activities under this tender to help development of policies and improve the end to end supply chain for energy. Furthermore, the contractor (and if applicable the associated subcontractors) should enable effective interaction of participating projects with related RTD&D undertaken across the EU.

The support provided should increase networking and facilitate a wide range of interactions between energy system stakeholders. In particular the contractor will be responsible for providing highly specialized services relating to information and communication functions.

3.4 Main Activities of the contractor (tasks)

The Contractor shall provide services to the Commission and the EEGI Team for 2 years.

The main activities of the contractor consist of the following technical and executive tasks:

1. Collection of information including stakeholder consultation and involvement

The contractor shall collect relevant information from projects, researchers, electricity system operators (DSO & TSO), end-users and operators of energy storage, authorities and industries including equipment manufacturers; opportunities for new players in this area should also be considered. The contractors should be able to get access to relevant information and data. They should describe a detailed methodology for this including measures that would incentivize relevant key persons and organisations outside the consortium and possible subcontractors to devote time and resources to the work. This would include processes to balance interests and needs of various stakeholders. Particular attention should be given to the processes for prioritization e.g. of technology developments in the implementation plan and the processes for stakeholder endorsement (incl. the EEGI team) to maximize credibility and impact. It should as well be ensured that RTD&D needs at technical or regulatory interfaces are taken into account e.g. DSO-TSO or energy storage interaction with electricity grid. The contractor should take into

consideration the ongoing developments within the Smartgrid Task Force ⁶ and its Expert Groups. The contractors may use existing networks and structures in the area such as the Smart grids ETP (European Technology Platform), EERA (European Energy Research Alliance) and relevant associations. The processes should be described in a deliverable contributing to the implementation plan and another deliverable contributing to the 10 year roadmap. The process for preparing each of them should involve at least one workshop in Brussels i.e. a minimum of 3 workshops.

2. Consolidation of information and drafting of reports

The contractors shall set up a process to consolidate the data and the information collected. This will result in 2 main lines of deliverables: 3 year Implementation Plan (IP) and the 10 year –R&I roadmap (RIR). In each of the cases they should be based on the existing structure used for the EEGI documents^{7 8} and in particular the updated structure for the IP proposed by Grid+Storage⁹. It must be adapted to the scope of this tender i.e. complementing on all the particular issues for battery based energy storage. The structure can be further adapted during the course of the contract if duly justified in the recommendations in the SET Plan Integrated roadmap or decisions of the EEGI team.

The deliverables linked to measures for improved European industrial capacity and stimulation of the battery market by developing a web platform can be provided in the structure that the tenderers consider suits the objective best.

3. Analysing programmes, projects, technologies and monitoring implementation of research, development, demonstration and market uptake activities for battery based energy storage.

To support the work on the IP, the RIR, the knowledge-sharing activities and the measures under activity 5, the contractors should analyse ongoing research, technology development, demonstration and market uptake activities for battery based energy storage. As a minimum the analysis should be based on public co-financed projects, but to the extent possible the analysis should include non-public funded projects. The focus is Europe (EU and EFTA Member States) but contractors may propose additional countries that could be covered.

⁶ <u>https://ec.europa.eu/energy/en/topics/markets-and-consumers/smart-grids-and-meters/smart-grids-task-force</u>

⁷ EEGI IMPLEMENTATION PLAN 2015-2017 <u>http://www.gridplus.eu/Documents/EEGI%20Implementation%20Plan%202015-2017.pdf</u>

⁸ EEGI RESEARCH AND INNOVATION ROADMAP 2013 – 2022 <u>http://www.gridplus.eu/Documents/Deliverables/GRID+_D6.1_r0.pdf</u>

⁹ <u>http://www.gridplusstorage.eu/deliverables</u>

The starting point for the analysis is the currently existing mapping activities such as Grid+ Energy storage¹⁰, the US DoE Global energy storage base¹¹, the SETIS Energy Research Knowledge Centre¹² and their continued developments. Mapping exercises of grid, storage integration and non-battery based energy storage projects should be taken into account to ensure appropriate mapping of hybrid storage systems and projects where stationary batteries are only partially included in the scope. Examples of such complementary mapping exercises is e.g. in the Grid+Storage project¹³ and the JRC smart grid inventory¹⁴. Due account should as well be taken of mapping and planning activities on grid and storage infrastructure under the Connecting Europe Facility (CEF). Specific effort should made to identify gaps and potential upcoming needs.

To the extent necessary, outcomes of projects on e.g. automotive batteries, battery recycling or new materials for batteries should be taken into account.

The findings should be presented in 2 deliverables "Technical analysis of ongoing projects" as specified in the list of main deliverables. It should include an annex with main characteristics and links to the projects that has been taken into account in the analysis.

As a separate deliverable an analysis should be provided for the socio-economic cost and benefits in various future deployment scenarios of battery systems (in homes, in substations, with generator facilities etc). The analysis should take into account the countries different energy system preconditions and present a consolidated view for Europe. It should include projections and forecasts on business models, technology costs, amount of batteries installed considering other competing technologies (e.g. demandresponse, pumped hydropower, grid-extension) etc. It should present a balanced and independent view on the technology options without favouring the battery based solutions. The work should take into account recent reports such as¹⁵ and ¹⁶ from IRENA and Insight-e. The deliverable should be presented at a public workshop in Bruxelles.

4. Identification of best practice and support of knowledge transfer

The contractors should extract best practices from pilots and demonstration activities that have the potential to be upscaled or replicated in Europe. The work of the contractor should go beyond management of information flows and should include active

¹⁰ <u>http://www.gridplus.eu/Documents/events/energy%20storage/Energy%20Storage%20report.pdf</u>

¹¹ <u>http://www.energystorageexchange.org/projects.html</u>

¹² <u>http://setis.ec.europa.eu/energy-research/</u>

¹³ <u>http://www.gridplusstorage.eu/</u>

¹⁴ <u>http://ses.jrc.ec.europa.eu/project-maps</u>

¹⁵ <u>http://www.irena.org/DocumentDownloads/Publications/IRENA_Battery_Storage_report_2015.pdf</u>

¹⁶ http://www.insightenergy.org/system/publications/files/000/000/005/original/PR1.pdf?1426175619

involvement in the identification and sharing of best practices. This includes exchange of information and experience between projects and energy system stakeholders. It should be presented in at least 4 knowledge sharing workshops throughout the duration of this contract. In each case it should be focused on a specific field such as batteries for provision of ancillary services or safety considerations in relation to home storage batteries.

The work should include a selection of best practice battery storage solutions on the market in a tabular format. The solutions should be categorised according to their location, their position in the energy supply chain (e.g. consumer, DSO, TSO), technical characteristics (power, energy content, battery type etc), relevant information on cost & performance etc. The contractor may also suggest alternative approaches they deem more comprehensive and appropriate. It should be presented as web tool designed in a way that is the most practically informative for policy makers, utilities and citizens.

To support the activities the contractors may develop or adapt IT tools (e.g. databases, web services). If the contractors decide to develop such tools provisions should be provided that will allow update and maintenance.

5. Develop and implement measures to improve European industrial capacity, reduce battery systems cost and stimulate the battery market

The contractors should develop and implement a range of measures that could improve European industrial capacity, reduce battery systems cost and stimulate the battery market. They should address relevant applications of battery based energy storage systems such as residential/home battery storage systems or utility scale battery storage systems.

As an example easy gains may be accomplished by standardisation of battery storage units. In the absence of standards, each manufacturer or technology provider has their own battery management system, storage control system, grid interface system etc. Similarly, common specifications are not publicly available for HVAC or fire protection related specifically to storage systems and the battery technology. The measures could also address pre-normative work and specifications for the container or housings of the battery energy storage system. Relevant stakeholders must be involved to maximise impact of these measure.

To the extent that there are synergies between the battery systems defined in the scope of this tender and e.g. automotive batteries the contractors may propose measures under these activities that cover a wider range of batteries. This would also include secondary use of automotive batteries and recycling. The focus should however remain with the larger than 5kWh stationary systems.

6. Information and communication activities

The contractor will be responsible for developing and implementing an information and communication strategy and plan of work supporting the overall objectives of this tender and focusing on the dissemination of the results of the activities. The strategy should as well contribute to the overall awareness of the activities and a better understanding by Member States, policy-makers and other energy-system stakeholders on how they can use

the produced deliverables in their strategic decision-making and planning. Ultimately it should lead to an increased impact of the produced deliverables.

Information and communication activities should comprise the maintenance of a dedicated website and of a shared knowledge-base. Electronic communication and document handling is to be done by the contractor. To facilitate referencing of the activities under this service contract the tenderer should propose an acronym and a title for the tender.

Processing and providing related information to the European Commission, stakeholders and national authorities is a key task.

List of main deliverables and their timing :

| | Delivery | | Dissemination |
|--|----------|---------|---------------|
| Specification/title | month | Format | level |
| 1.1 Description of the process for stakeholder involvement and consultation for implementation plan | 1 | report | R |
| 1.2 Description of the process for stakeholder involvement and consultation for 10 year R&I roadmap | 7 | report | R |
| 2.1 Initial implementation plan 2016-18 (IP) | 4 | report | Р |
| 2.2 Final implementation plan 2016-18 (IP) | 6 | report | Р |
| 2.3 Initial implementation plan 2017-19 | 20, | report | Р |
| 2.4 Final implementation plan 2017-19 (IP) | 24, | report | Р |
| 2.5 Initial 10 year R&I roadmap covering 2016-25 | 10 | report | Р |
| 2.6 10 year R&I roadmap covering 2016-25, final (RIR) | 13 | report | Р |
| 3.1 Technical analysis of ongoing projects | 3 | report | Р |
| 3.2 Technical analysis of ongoing projects | 19 | report | Р |
| 3.3 Costs and benefits for deployment scenarios of battery systems | 5 | report | Р |
| 4.1 At least 4 knowledge sharing and interaction workshops. | t.b.d. | meeting | Р |
| 4.2 Web tool for best practice battery storage solutions | 20 | web | Р |
| 5. Developing and implementing measures to improve industrial capacity, reduce battery system costs and stimulate the battery market.Deliverables to be defined by the contractor | t.b.d | t.b.d | P, R or C |
| 6.1 Kick off meeting | 1 | meeting | R |
| 6.2 Information and communication strategy and plan of work | 2 | report | R |
| 6.3 Website | 2 | Website | Р |
| 6.4 Final presentation of results | 24 | meeting | Р |

P = Public, R = Restricted to a group specified by the contractor (including the Commission Services), C = Confidential, only for members of the consortium (including the Commission Services)

All deliverables should be presented in electronic form. In addition the 2 IP and the RIR should be printed on paper in good graphical quality and in at least 300 copies. Contractors may choose to produce printed copies of all or some of the deliverables presented under 5.

3.5 Interaction of the Contractor with the Commission and stakeholders

The Contractor is expected to work closely with the Commission services. It is required to design and maintain a reporting mechanism that will allow the Commission to evaluate the services performed, the progress of individual tasks and the developments and further

prospects of the overall exercise. It should organise 2 meetings a year to review this. The Commission may invite experts and others they consider relevant to attend these meetings.

Every year the contractor and the Commission will discuss possible technical amendments to the work plan in order to address changing needs and new developments. None of these changes will have financial implications.

The activities under this contract should be co-ordinated with GRID+Storage to avoid duplication of work and to ensure appropriate coverage at the interfaces between grids and storage.

It will be requested to regularly exchange information on their ongoing works and whenever appropriate harmonise approaches

3.6 Other considerations

The Commission will fully finance the contracted services.

Representatives of smart grid and energy storage projects and electricity and energy storage stakeholders have to finance their own participation and travel costs when contributing to the deliverables of this contract.

All costs for meetings, including catering, shall be covered by the tender; no costs shall occur to the Commission. The cost for meetings should be minimised, e.g. through the use of the contractor's/consortium's own facilities or through smart grid or energy storage stakeholders agreeing to host meetings free of charge. All risks and responsibility for such arrangements lies entirely with the contractors and they must not affect the impartiality of the contractors or influence the content of the deliverables.

To the extent that e.g. web tools or databases are developed, source code and relevant provisions for extension, maintenance and update should be made available to Commission services or any 3^{rd} party the Commission designates. The tenderer should explicitly highlight any ownership, extendibility or maintenance related issues.

3.7 Reports and documents to produce – Timetable to observe

Execution of the tasks begins after the date on which the Contract enters into force.

In principle, the deadlines set out below cannot be extended. The Contractor is deemed solely responsible for delays occasioned by subcontractors or other third parties (except for rare cases of force majeure). Adequate resources and appropriate organisation of the work including management of potential delays should be put in place in order to observe the timetable below.

• A kick-off meeting

The kick-off meeting will take place in Brussels, at the latest one month following the signature of the contract, in order to settle all the details of the work plan to be undertaken.

• Interim progress reports

The interim progress report should be delivered at month 6 and 18 and give a short overview in max 10 pages. It shall be submitted to the Commission and presented and discussed at a meeting. The Commission shall have 15 days from receipt to approve or reject the report. Within 15 days of receiving the Commission's observations, the contractor will submit additional information or another report.

• Annual progress reports

The contractor will submit an annual progress report at the latest in month 12. A final progress report shall be delivered at the latest in month 24. The progress reports shall give a comprehensive overview of the activities implemented and propose adjustment to the work plan if applicable. They shall be submitted to the Commission and presented and discussed at a meeting.

The Commission shall have 30 days from receipt to approve or reject the report, and the Contractor shall have 30 days in which to submit additional information or a new report.

Progress report format and publication

The reports shall be supplied in paper form and one copy in electronic form, either in MS Word or in .PDF format.

The Commission may publish the public deliverables elaborated under this contract. For this purpose, the contractor must ensure that the deliverables are not subject to any restrictions deriving from intellectual property rights of third parties. Should the contractor intend to use data in the deliverables, which cannot be published, this must be explicitly mentioned as confidential.

Payments

Payments will be executed following approval of the annual progress reports.

3.8 Duration of the tasks

The duration of the tasks shall be 26 months. This period is calculated in calendar days.

3.9 Place of performance and estimate of the budget involved

The tasks will be performed on the Contractor's premises. However, meetings between the contractor and the Commission may be held on Commission premises in Brussels.

Execution of the tasks begins after the date on which the Contract enters into force.

In principle, the deadlines set out below cannot be extended. The Contractor is deemed solely responsible for delays occasioned by subcontractors or other third parties (except for rare cases of *force majeure*). Adequate resources and appropriate organisation of the work including management of potential delays should be put in place in order to observe the timetable below.

4. CONTENT, STRUCTURE AND GRAPHIC REQUIREMENTS OF THE FINAL DELIVERABLES

All studies produced for the European Commission and Executive Agencies shall conform to the corporate visual identity of the European Commission by applying the graphic rules set out in the European Commission's Visual Identity Manual, including its logo¹⁷.

The Commission is committed to making online information as accessible as possible to the largest possible number of users including those with visual, auditory, cognitive or physical disabilities, and those not having the latest technologies. The Commission supports the <u>Web Content Accessibility Guidelines 2.0</u> of the W3C.

For full details on Commission policy on accessibility for information providers, see: http://ec.europa.eu/ipg/standards/accessibility/index_en.htm

Pdf versions of studies destined for online publication should respect W3C guidelines for accessible pdf documents. See: <u>http://www.w3.org/WAI/</u>

4.1. Content

4.1.1. Final deliverables

All the public final deliverables shall include:

- an abstract of no more than 200 words and an executive summary of maximum 6 pages in English;
- the following standard disclaimer:

"The information and views set out in this [report/study/article/publication...] are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein."

- specific identifiers which shall be incorporated on the cover page provided by the Contracting Authority.

4.1.2. Publishable executive summary

The publishable executive summary shall be provided in English and shall include:

- the following standard disclaimer:

¹⁷ The Visual Identity Manual of the European Commission is available upon request. Requests should be made to the following e-mail address: <u>comm-visual-identity@ec.europa.eu</u>

"The information and views set out in this [report/study/article/publication...] are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein."

- specific identifiers which shall be incorporated on the cover page provided by the Contracting Authority.

4.3. Graphic requirements

Standard WORD template

For graphic requirements please refer to the template provided in the annex 4. The cover page shall be filled in by the contractor in accordance with the instructions provided in the template. For further details you may also contact <u>comm-visual-identity@ec.europa.eu</u>.

5. ANNEXES

- 1. Tenderer 's Identification Form
- 2. Declaration related to the exclusion criteria and absence of conflict of interest
- 3. Power of Attorney (mandate in case of joint tender)
- 4. Standard Word template for studies
- 5. Draft Contract

ANNEX 1

IDENTIFICATION OF THE TENDERER

(Each service provider , including any member of a consortium or grouping and subcontractor(s) whose share of the work is more than 20% of the contract must complete and sign this identification form)

Call for tender ENER C2/2015-410

| Identity | | | | | |
|--|--|--|--|--|--|
| Name of the tenderer | | | | | |
| Legal status of the tenderer | | | | | |
| Date of registration | | | | | |
| Country of registration | | | | | |
| Registration number | | | | | |
| VAT number | | | | | |
| Description of statutory social security cover (at the level of the Member State of origin) and non-statutory cover (supplementary professional indemnity insurance) ¹⁸ | | | | | |
| Address | | | | | |
| Address of registered office of tenderer | | | | | |
| Where appropriate, administrative address of tenderer for the purposes of this invitation to tender | | | | | |
| Contact Person | | | | | |
| Surname: First name: Title (e.g. Dr, Mr, Ms) : Position (e.g. manager): Telephone number: | | | | | |

¹⁸ For natural persons

| Fax number: | | | | |
|---|------------|--|--|--|
| E-mail address: | | | | |
| Legal Representatives | | | | |
| Names and function of legal representatives and of other representatives of the tenderer who are authorised to sign contracts with third parties | | | | |
| Declaration by an authorised representative of the organisation ¹⁹ | | | | |
| I, the undersigned, certify that the information given in this tender is correct and that the tender is valid. | | | | |
| Surname: | Signature: | | | |
| First name: | | | | |

¹⁹ This person must be included in the list of legal representatives; otherwise the signature on the tender will be invalidated.

ANNEX 2

Declaration of honour on exclusion criteria and absence of conflict of interest

(Complete or delete the parts in grey italics in parenthese) [Choose options for parts in grey between square brackets]

The undersigned (insert name of the signatory of this form):

- in [his][her] own name (for a natural person) or
- representing the following legal person: (only if the economic operator is a legal person)
 full official name:
 official legal form:
 full official address:
 VAT registration number:
- declares that [the above-mentioned legal person][he][she] is not in one of the following situations:
- a) is bankrupt or being wound up, is having its affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, is the subject of proceedings concerning those matters, or is in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- b) has been convicted of an offence concerning professional conduct by a judgment of a competent authority of a Member State which has the force of *res judicata*;
- c) has been guilty of grave professional misconduct proven by any means which the contracting authorities can justify including by decisions of the European Investment Bank and international organisations;
- d) is not in compliance with all its obligations relating to the payment of social security contributions and the payment of taxes in accordance with the legal provisions of the country in which it is established, with those of the country of the contracting authority and those of the country where the contract is to be performed;
- e) has been the subject of a judgement which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation, money laundering or any other illegal activity, where such activity is detrimental to the Union's financial interests;
- f) is a subject of an administrative penalty for being guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in a procurement procedure or failing to supply this information, or having been declared to be in serious breach of its obligations under contracts covered by the Union's budget.
 - (Only for legal persons other than Member States and local authorities, otherwise <u>delete</u>) declares that the natural persons with power of representation, decision-

making or control²⁰ over the above-mentioned legal entity are not in the situations referred to in b) and e) above;

- declares that [the above-mentioned legal person][he][she]:
- g) has no conflict of interest in connection with the contract; a conflict of interest could arise in particular as a result of economic interests, political or national affinity, family, emotional life or any other shared interest;
- h) will inform the contracting authority, without delay, of any situation considered a conflict of interest or which could give rise to a conflict of interest;
- i) has not granted and will not grant, has not sought and will not seek, has not attempted and will not attempt to obtain, and has not accepted and will not accept any advantage, financial or in kind, to or from any party whatsoever, where such advantage constitutes an illegal practice or involves corruption, either directly or indirectly, inasmuch as it is an incentive or reward relating to award of the contract;
- j) provided accurate, sincere and complete information to the contracting authority within the context of this procurement procedure ;
 - acknowledges that [the above-mentioned legal person][he][she] may be subject to administrative and financial penalties²¹ if any of the declarations or information provided prove to be false.

In case of award of contract, the following evidence shall be provided upon request and within the time limit set by the contracting authority:

For situations described in (a), (b) and (e), production of a recent extract from the judicial record is required or, failing that, a recent equivalent document issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied. Where the tenderer is a legal person and the national legislation of the country in which the tenderer is established does not allow the provision of such documents for legal persons, the documents should be provided for natural persons, such as the company directors or any person with powers of representation, decision making or control in relation to the tenderer.

For the situation described in point (d) above, recent certificates or letters issued by the competent authorities of the State concerned are required. These documents must provide evidence covering all taxes and social security contributions for which the tenderer is liable, including for example, VAT, income tax (natural persons only), company tax (legal persons only) and social security contributions.

For any of the situations (a), (b), (d) or (e), where any document described in two paragraphs above is not issued in the country concerned, it may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

If the tenderer is a legal person, information on the natural persons with power of representation, decision making or control over the legal person shall be provided only upon request by the contracting authority.

Full name

Date

Signature

²⁰ This covers the company directors, members of the management or supervisory bodies, and cases where one natural person holds a majority of shares.

²¹ As provided for in Article 109 of the Financial Regulation (EU, Euratom) 966/2012 and Article 145 of the Rules of Application of the Financial Regulation

ANNEX 3

POWER OF ATTORNEY

mandating one of the partners in a joint tender as lead partner and lead contractor²²

The undersigned:

- Signatory (Name, Function, Company, Registered address, VAT Number)

having the legal capacity required to act on behalf of his/her company,

HEREBY AGREES TO THE FOLLOWING:

- 1) To submit a tender as a partner in the group of partners constituted by Company 1, Company 2, Company N, and led by Company X, in accordance with the conditions specified in the tender specifications and the terms specified in the tender to which this power of attorney is attached.
- 2) If the European Commission awards the Contract to the group of partners constituted by Company 1, Company 2, Company N, and led by Company X on the basis of the joint tender to which this power of attorney is attached, all the partners shall be co-signatories of the Contract in accordance with the following conditions:
 - (a) All partners shall be jointly and severally liable towards the European Commission for the performance of the Contract.
 - (b) All partners shall comply with the terms and conditions of the Contract and ensure the proper delivery of their respective share of the services and/or supplies subject to the Contract.
- 1) Payments by the European Commission related to the services and/or supplies subject to the Contract shall be made through the lead partner's bank account: [Provide details on bank, address, account number].
- 2) The partners grant to the lead partner all the necessary powers to act on their behalf in the submission of the tender and conclusion of the Contract, including:
 - (a) The lead partner shall submit the tender on behalf of the group of partners.
 - (b) The lead partner shall sign any contractual documents including the Contract, and Amendments thereto — and issue any invoices related to the Services on behalf of the group of partners.
 - (c) The lead partner shall act as a single contact point with the European Commission in the delivery of the services and/or supplies subject to the Contract. It shall co-ordinate the delivery of the services and/or supplies by the group of partners to the European Commission, and shall see to a proper administration of the Contract.

Any modification to the present power of attorney shall be subject to the European Commission's express approval. This power of attorney shall expire when all the contractual obligations of the group of partners towards the European Commission for the delivery of the services and/or supplies subject to the Contract have ceased to exist. The parties cannot terminate it before that date without the Commission's consent.

Signed in on [dd/mm/yyyy]

Place and date:

Name (in capital letters), function, company and signature:

²² To be filled in and signed by each of the partners in a joint tender, except the lead partner;

ANNEX 4

Standard Word template for studies

Add document title 1

Add title 2

Table of Contents

| HOW TO USE THIS DOCUMENT TEMPLATE | 29 |
|-----------------------------------|----|
| Cover page | 29 |
| Page set up | |
| Headings and subheadings | |
| Body text | 29 |
| Header | 29 |
| Footer | |
| Bulleted list | |
| Hyperlinks | |
| Table of Contents | |

How to Use This Document Template

Cover page

Add the title of the document which should be center aligned. Add any other relevant information if necessary which should be left aligned on the left vertical axe of the EC logo.

The font colour of the title should be **White**.

Page set up

- Top margin: 3.5
- Bottom margin: 2.5
- Left margin: 3
- Right margin: 2.5

Headings and subheadings

The following styles should be used for headings and subheadings.

- Heading 1
 Font type: Verdana
 Font Size: 14
 Colour: R:38, G:54, B:115
- Heading 2 Font type: Verdana Font Size: 11 Colour: R:38, G:54, B:115
- Heading 3
 Font type: Verdana
 Font Size: 10
 Colour: R:38, G:54, B:115

Do not use capital letters for the headings/subheadings, the format should always be "sentence case", except for abbreviations.

Body text

Font style: Verdana Font size: 10 Font colour: Gray 80%

Header

The header should include the EU flag and the reference text:

European Commission

- The title of the document
- Font type: Verdana Italic
- Font size: 8

Footer

Add the relevant name of the month and year in the footer which should appear to the left below the line.

- Font type: Verdana Italic
- Font size: 8.
- The page numbers will appear automatically.

Bulleted list

The bullet should be square and the colour should be Black. For reference please see list under <u>"Headings and subheadings</u>". To apply the style of the list, select "List Bullet 2" from the "Style" drop down menu.

Hyperlinks

By default the hyperlinks will appear in blue (colour coder: R:26, G:63, B:124), no underline.

Table of Contents

This template is complete with Styles for a Table of Contents. From the **Insert menu**, choose **Reference**, then **Index and Tables**. Click on the tab **"Table of Contents"**. In the "Format" box, select "From template".

ANNEX 5

DRAFT CONTRACT