



## CALL FOR TENDER

Cost Benefit Analysis Modelling within the project *“TSO 2020: Electric “Transmission and Storage Options” along TEN-E and TEN T corridor for 2020”* – Framework of the Connecting Europe Facility 2017–2020 – Synergy Call for proposal 2016–1

# TENDER SPECIFICATIONS

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## 1. Information on tendering

### 1.1. Participation

Participation in this procurement procedure is open on equal terms to all natural and legal persons based in one of the EU Member States.

### 1.2. Contractual conditions

The tenderer should bear in mind that the contract that will be signed will follow the rules agreed in the Grant Agreement of “TSO 2020: Electric “Transmission and Storage Options” along TEN-E and TEN T corridor for 2020” project, that will be signed between the beneficiaries and the European Commission. This contract will specify the rights and obligations of the contractor, particularly those on payments, performance of the contract, confidentiality, and checks and audits.

### 1.3. Compliance with applicable law

The tender must comply with applicable environmental, social and labour law obligations established by Union law, national legislation, collective agreements or the international environmental, social and labour conventions listed in Annex X to Directive 2014/24/EU2.

### 1.4. Joint tenders

A joint tender is a situation where a tender is submitted by a group of economic operators (natural or legal persons). In case of joint tender, all members of the group assume joint and several liability towards the European Association for storage of energy – EASE (hereinafter “the contracting association”) for the performance of the contract as a whole, i.e. both financial and operational liability. Nevertheless, tenderers must designate one of the economic operators as a single point of contact (the leader) for the contracting association for administrative and financial aspects as well as operational management of the contract.

After the award, the contracting association will sign the contract either with all members of the group, or with the leader on behalf of all members of the group, authorised by the other members via powers of attorney.

### 1.5. Structure and content of the tender

The tenders must be presented as follows:

**Part A:** Identification of the tenderer (see section 1.7)

**Part B:** Non-exclusion (see section 4.1)

**Part C:** Selection (see section 4.2)

**Part D:** Technical offer

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

#### **Part E: Financial offer**

The maximum contract price is EUR 450.500. Tenders with prices higher than the maximum will be considered unacceptable.

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 bear the risks or the benefits deriving from any variation.

The amount of VAT may be shown separately. The quoted price must be a fixed amount which includes all charges (including travel and subsistence). Travel and subsistence expenses are not refundable separately.

#### **Part F: Power of attorney (for consortia only)**

### **1.6. Identification of the tenderer**

The tender must include a **cover letter** signed by an authorised representative presenting the name of the tenderer (including all entities in case of joint tender), and the name of the single contact point (leader) in relation to this procedure.

In case of joint tender, the cover letter must be signed either by an authorised representative for each member, or by the leader authorised by the other members with powers of attorney. The signed powers of attorney must be included in the tender as well.

The tenderer (including each member of the group in case of joint tender) must provide the following information in its tender:

- 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 applicable to the legal person requires such publication. Any delegation of this authorisation to another representative not indicated in the official appointment must be evidenced.
- For natural persons, if required under applicable law, proof of registration in a professional or trade register or any other official document showing the registration number.

## 2. Technical specifications

### 2.1 General background and Introduction

The TSO 2020: Electric “Transmission and Storage Options” along TEN-E and TEN T corridors for 2020 project combines the energy PCI Denmark – Netherlands interconnection between Endrup (DK) and Eemshaven (NL) [currently known as “COBRACable”] and the Comprehensive network for multimodal transport mode / traffic management system.

The project aims to create promising synergies between energy and transport infrastructure development. The action seeks to adopt, enhance and validate the currently used different technology alternatives. A cost benefit analysis (CBA) model will be developed in order to compare. In particular, it will include “external” benefits e.g. income from fuel production or emission reduction. It is intended to validate such a model based on planned pilots to propose a proven and applicable concept. This will then be applied to scaled-up clean-power-to-clean-wheel concepts, developed by the action, to gain an overall understanding of the concept.

The COBRA cable is a direct-current cable that interconnects the high-voltage (HV) electricity grids Denmark and the Netherlands. There is a need to manage the energy in both countries to avoid destabilisation and production curtailment. The TSO 2020 concept is to connect the COBRA cable to a hydrogen gas pipeline network, which will connect all current and future production and large scale industrial demand locations in the Groningen coastal area. Here the Gasunie locations like Zuidwending, where hydrogen storage in local salt caverns is envisaged, are specifically targeted in TSO2020. Hydrogen will also be exported beyond the pipeline grid system, using traditional and novel storage/transportation mechanisms to vehicles and other applications. This is done by linking with the TEN T Comprehensive and CORE Network. Models will be developed to connect distributed battery storage – both stationary and mobile – and to investigate how it can be commercially aggregated to provide grid services. The engagement of the relevant TSO (TenneT NL) in the project is to verify the potential impact of this innovative grid management and storage system. Tennet will facilitate the introduction of new business models in both horizontal (TSO-TSO projects) and vertical dimensions (integration between TSO, DSO and other grid operators).

### 2.2 The purpose of the contract

The tenderers have to show their ability to produce a Cost Benefit Analysis Modelling. The overall objective of this activity is to assess the costs and benefits

of the P2G pilots both from the perspective of the entire power system and from the perspective of the project itself.

### 3 Content, Structure and graphic requirements of the deliverables

The contractor must deliver the Cost Benefit Analysis modelling as indicated below.

#### 3.1 Content

The required Cost Benefit Analysis has two goals:

1. Analysing the total value of the pilots to the society

The value to society of the P2G pilot projects have to be evaluated according to **ENTSO-E's Cost Benefit Analysis methodology**. This methodology uses various societal and cost-related indicators that are quantified either in monetary or physical units in order to assess storage and transmission projects for the Ten-Year Network Development Plan (TYNDP). The ENTSO-E methodology has to be used, but not the proprietary ENTSO-E models, as they cannot be used without their consent.

2. Assessing the project's business case in the market environment.

To assess the business case of the pilot projects themselves, the economic differences between two ways of optimisation of the P2G facilities have to be studied:

- Market-based optimisation: fully-market based optimisation which will allow to calculate the economic profits of the project
- Grid-based optimisation : this optimisation will be used to evaluate the added value to TenneT on contributions that do not have a market based product

The economic differences between these optimisers have to be quantified with the purpose to assess the most cost-effective P2G operational scheme. In order to do so, two main activities will be performed (and consider that the grid is congested):

- For a set of predefined scenarios, a **power flow analysis** will be conducted to assess the expected flows in the Dutch grid and the ability of the network to take on renewable generation
- To calculate a fair price for the redispatch services of the P2G facility, a **comparison of costs and benefits with alternative technologies** that offer the same functionality, capacity and resulting potential for grid services (and market revenues) need to be made. In this comparison, the added value of hydrogen to sectors such as (sustainable) transport will be incorporated into the calculations for the P2G facility.

### 3.2 Milestones and deliverable

The tenderers must be able to show their experience for deliver the following main deliverable required by this tender and meeting the milestones identified below.

**The deliverable** is a new Cost Benefit Analysis modelling

The milestones are:

- A report on the project's value to society, comprising the results based on ENTSO-E's CBA methodology;
- Description of the optimisation facility/contribution local grid stability;
- Report on the project's business model including a description of the operational performance.

## 4 Evaluation and award

The evaluation is based solely on the information provided in the submitted tender. It involves the following:

- Verification of non-exclusion of tenderers on the basis of the exclusion criteria
- Selection of tenderers on the basis of selection criteria
- Verification of compliance with the minimum requirements set out in these tender specifications
- Evaluation of tenders on the basis of the award criteria The contracting association authority may reject abnormally low tenders, in particular if it established that the tenderer or a subcontractor does not comply with applicable obligations in the fields of environmental, social and labour law.

The tenders will be assessed in the order indicated above. Only tenders meeting the requirements of one step will pass on to the next step.

### 4.1. Verification of non-exclusion

All tenderers must provide a declaration on honour (see Annex 1), signed and dated by an authorised representative, stating that they are not in one of the situations of exclusion listed in that declaration on honour.

In case of joint tender, each member of the group must provide a declaration on honour signed by an authorised representative.

The successful tenderer must provide the documents mentioned as supporting evidence in the declaration on honour before signature of the contract and within a deadline given by the contracting association. This requirement applies to each member of the group in case of joint tender.

## 4.2. Selection criteria

Tenderers must prove their legal, regulatory, economic, financial, technical and professional capacity to carry out the work subject to this procurement procedure. The tenderer may rely on the capacities of other entities, regardless of the legal nature of the links which it has with them.

### 4.2.1. Declaration and evidence

The tenderers (and each member of the group in case of joint tender) whose capacity is necessary to fulfil the selection criteria must provide the declaration on honour (see Annex 1), signed and dated by an authorised representative, stating that they fulfil the selection criteria applicable to them. In case of joint tender, the criteria applicable to the tenderer as a whole will be verified by combining the various declarations for a consolidated assessment.

This declaration is part of the declaration used for exclusion criteria (see section 4.1) so only one declaration covering both aspects should be provided by each concerned entity.

The Contracting association will evaluate selection criteria on the basis of the evidence to be submitted with the tenders.

### 4.2.2. Regulatory capacity

Tenderers must prove that they are allowed to pursue the professional activity necessary to carry out the work subject to this call for tenders.

### 4.2.3. Economic and financial capacity criteria

The tenderer must have the necessary economic and financial capacity to perform this contract until its end. In order to prove their capacity, the tenderer must comply with the following selection criteria.

– Criterion FI: Annual turnover of the last two financial years above EUR 4.000.000. This criterion applies to the tenderer as a whole, i.e. the combined capacity of all members of a group in case of a joint tender.

### 4.2.4. Technical and professional capacity criteria and evidence

#### a. Criteria relating to tenderers

Tenderers (in case of a joint tender the combined capacity of all members of the group) competing in the tender must have the necessary knowledge, the technical support and personnel to run the tender. In particular they must meet the following requirements:

- **Criterion A1:** Experience (proven by means of reference) in similar projects
- **Criterion A2:** Experience in both market and technical optimisation of storage assets, including P2G facility



- **Criterion A3:** Experience with the use of ENTSO-E Cost Benefit Analysis Methodology
- **Criterion A4:** Experience with EASE and important stakeholders in the local industry
- **Criterion A5:** Experience with the CBA modelling on gas as well as on electricity

**b. Criteria relating to the team delivering the service:**

The team delivering the service should include, as a minimum, the following profiles. Evidence will consist in CVs of the team responsible to deliver the service. Each tenderer should indicate the intended function in the delivery of the service.

- **Project Manager:** At least 10 years' experience in project management, including overseeing project delivery, quality control of delivered service, and conflict resolution experience in project of a similar size, with experience in management of team of at least 5 people.

Evidence: CV

- **Language quality check:** at least 2 members of the team should have at least CI level in English.

Evidence: Past relevant experience.

### 4.3. Award criteria

The contract will be awarded based on the most economically advantageous tender, according to the 'best price-quality ratio' award method. The quality of the tender will be evaluated based on the following criteria. The maximum total quality score is 100 points.

#### Criteria Weighting

1 Knowledge and understanding of the topic of the call 20

2 Quality of the proposed methodology 40

3 Organisation of the work and resources 20

4 Quality control measures 20

**Total number of points 100**

- **Knowledge and understanding of the topic of the call** (40 points – minimum threshold 60%)
- **Quality of the proposed methodology** (30 points – minimum score 60%)
- **Organisation of the work and resources** (15 points – minimum threshold 60%)
- **Quality control measures** (15 points – minimum score 60%)

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

**The tender ranked first after applying the formula will be awarded the contract.**