FREQUENTLY ASKED QUESTIONS

Invitation to tender ENER/C3/2014-819 for a contract regarding Pilot Project for Blueprint and Demonstration of Technical Control System to Increase the Total Efficiency of District Heating and Cooling Networks
contract notice in OJEU 2015/S 089-159370 of 08/05/2015
Last update: 18/06/2015

Question 1:

Page 10: *Blueprint and the technical study of the control systems and the design of the related technical specifications needed for a district heating system supplying low energy buildings from multiple renewable and low carbon supply sources and integrating energy storage.*

Does this mean that the technical study must include one the one hand the design of the control system for the district heating and cooling system and on the other hand also the design of the district heating and cooling network itself or is the tender only focused on the blueprint and the technical study of the control systems and all components needed for a proper demonstration of the control system?

Answer 1:

The aim of the technical study is to develop technical control systems that can manage supply and demand in a district heating network with multiple supply sources from renewable and waste heat sources and includes thermal storage units. It must demonstrate the developed control system in the environment of a real district heating system consisting of at least 60 buildings. The study must ensure that all components needed for the demonstration are developed.

Question 2:

Page 10: Demonstration of the blueprint and the functioning of the designed district heating system in a group of at least 60 buildings, which some of them are to be connected within the framework of the pilot project.

Is it possible that in a demonstration site the number of connected buildings to a network is eg. 15 buildings but that a future extension of the network is foreseen to other buildings reaching over 60 buildings? This could however be outside the timing of the project so beyond the 24 months duration period. Is this allowed?

Answer 2:

The 60 building threshold for the demonstration of the control algorithm must be in place already during the course of the study.

Question 3:

Page 11: Task 5: Conduct at least three test runs and the demonstration of the technical and system solutions on a site would cover of approximately 60 buildings, from which some of them are to be connected within the framework of the pilot project.

The test runs and demonstration of the control system is needed for one (1) selected demonstration site and not on the 3 demonstration sites?

Answer 3:

The test runs will have to be implemented in one (1) demonstration sites. However in the tender applications the tenderer must propose three possible sites one of which will be selected in agreement with the Commission.

Question 4:

The tender asks for well documented and reasoned proposals for at least 3 demonstration sites and that one of them will be selected for a real demonstration of the control system. Does this mean that for the consortium eg. We have to subcontract the roles of the different partners in the 3 demonstration sites because not all partners are the same in the 3 demonstration sites? Eg for demo site 1 we need partner X and for demo site 2 we need partner Y?

Answer 4:

The tenderer must convincingly prove that it can meet the tender specifications. The tenderer can structure the demonstration work to ensure delivery if need through partnering with other organizations and form consortium provided these ensure the delivery according to the tender specifications.

1. what temperature or temperature range is meant with “low temperature”?

Question 5:

What temperature or temperature range is meant with “low temperature”?

Answer 5:

Low temperature means a supply temperature below 80 ° Celsius and down to the consumer required level.

Question 6:

Is it required to create a completely new design of a low-temperature substation, or is it possible to use existing designs/ concepts?

Answer 6:

The design may build on the elements of existing designs and concepts; however it must be able to provide and be compatible with the functions and requirements of the district heating system as described in the tender specifications.

Question 7:

What is the difference between the system to be designed in Task 2 and the overall control system to be designed in in task 4?

Answer 7:

Task 2 focuses of the balancing of the generation sources and load, including thermal storage; controls the dispatching of units and includes load management functions. Task 2 is part of Task 4. Task 4 concerns the operation of the entire district heat system as a whole and covers all elements and functions, such as the control of network pipes and sub-stations.

Question 8:

What kind of documents are expected for the description of the control algorithm? Is it expected to have only the general working principle and parameters described or is it necessary to describe the full software code?

Answer 8:

The full software code is required with appropriate descriptions, instruction and explanations.

Question 9:

Is it required to have the 3 possible demo sites already described in the tender, or is it sufficient to describe them for the 1st progress report?

Answer 9:

The proposal for at least three demonstration sites is part of the 1st progress report. However the tender documentation must prove evidence that the contractor will be able to make a reasonable proposal for the three demonstration sites already in the tender documentation.

Question 10:

Is it required, to have the partner related to the demo side as part of the consortium or would it be sufficient, to reserve some subcontract for them?

Answer 10:

The tenderer must provide sound evidence of the capability to duly perform the test runs as required under the tender specifications. Evidences of the capability to eliminate, minimise and mitigate risk factors that can jeopardise the due performance of the tasks and deliverables will be evaluated as part of the award criteria.

Question 11:

what are the requirements for the demo sites?
What deviation from the given number of “approximately 60” is acceptable? E.g. is it possible to have demo sides with 6 or 600 buildings?

Answer 11:

The site of which the district heating system must cover must be comprised of at least 60 buildings.

Question 12:

what kind of (unpredictable) renewable heat sources and are expected to be included in the demo side? What should be their (minimum) share with respect to the overall energy supply to the network?

Answer 12:

The tender specification covers all renewable heat sources in conformity with the definition of Article 2(a) of the EU Renewable Energy Directive (2009/28/EC) and aims at the development of a district heating operation system that is able to manage and balance in an optimal way the fluctuations of supply and load. The share of renewable energy sources must be representative enough to convincingly demonstrate the capability of the solution to integrate and manage these generation sources in the system and ensure the required supply of the buildings.

Question13:

Is it required, to have a low temperature network in the demo site already implemented? Or would it be sufficient to have a “standard” temperature range, e.g. 70-100 °C?

Answer 13:

The tenderer must provide sound and convincing evidence of the capability to design and demonstrate the control system and the optimal operation of a district heating system supplying low-energy buildings, including their heating systems, such as substations, to fulfil the aim of minimising energy losses, increasing energy efficiency and achieve primary energy savings compared to current mainstream district heating systems. Evidence of the capability to provide design solutions for transiting the current mainstream district heating systems to the next generation system will be considered positively; however evidence should be provided that the demonstration will be duly completed within the tender's timeframe.

Question 14:

should the low temperature substation be installed in one or more buildings of the demo site?

Answer 14:

Some buildings may be connected during the duration of the contract.

Question 15:

Are the implementation costs for technical and system solutions (e.g. cost for equipment like controllers, smart meters or substations and its installation) to be included in the budget?

Answer 15:

No costs beyond the awarded budget of the contract will be covered.

Question 16:

what time span of a “test run” is expected? (e.g. measurements over a week, a month)? If a longer time span (e.g. season or year) is expected, how does it fit with the time span of the project?

Answer 16:

The test run must cover suitable timeframe to demonstrate the technical and operational viability of the control design with typical daily, weekly and seasonal supply and load variations. The tenderer must provide evidence of the capability, including operational plans to comply with the terms of reference. The kick-off meeting under the awarded contract is to agree on the specific timeframes.

Question 17:

How should privacy and safety issues and the security of supply of the occupants of the buildings in the demo site be addressed? Is it aimed, to include other buildings than residential buildings with private consumers in the demo site?

Answer 17:

The tender specification does not restrict the buildings' type to residential buildings. Evidences of the capability to eliminate, minimise and mitigate risk factors that can jeopardise the due performance of the tasks and deliverables will be evaluated as part of the award criteria.

Question 18:

For what kind of district heating networks the replicability is meant? Is it required, to show the replicability also for networks with other sizes, customer and producer structures, different climatic conditions, policy frameworks …?

Answer 18:

The tender aims to ensure the widest possible replicability. The tender offer must provide evidence of the capability to design and demonstrate a replicable solution for district heating systems supplying low energy buildings in the residential, service sector and public sector buildings, as one of the award criteria.

Question 19:

According to article II.12 in the Service Contract (ENER/3/2014-819/SI2.XXX) the contracting authority may impose liquidated damages for each and every calendar day of delay. It is customary practice to include a ceiling on the liquidated damages within consultancy agreements.

Can the contracting authority accept including a ceiling of 10 % on liquidated damages?

Answer 19:

The Commission services cannot modify the standard terms set in the General conditions for service contracts. Please refer to point 7 of the invitation to tender.

The possibility – the Commission's right to apply the liquidated damages – would only run in the case of possible breach of the terms of contract, timeline wise and / or quality wise, by the contractor. The liquidated damages can be estimated up to the date the contractor will deliver with the agreed quality.

Question 20:

"The consortium respectfully requests to approve an extension of 14 days to be able to present our finest Financial and Technical proposal which should meet European Commission's expectations"

Answer 20:

A prolongation of the deadline is not possible, due to the fact that there is one day left to the deadline or the submission of offers (the deadline is 19/06, today is 18/06). Prolongation of the deadline on these circumstances could lead to unequal treatment of (potential) tenderers, notably:

- At a stage so late an extension could create situation where, e.g. some tenderers have already dispatched their tenders, which would put them to unequal situation as compared to tenderers who can rely on the extension.

- On the other hand, there might be potentially interested tenderers who did not even start to prepare a tender, considering the deadline too short for them to enable to put together a tender of a good quality. If they would have known about the extension in advance, they would have also submitted a tender.