Title: Provision of a holistic view and assessment of the impact of gas extinguishing systems on hard disk storage systems in datacentre environments

I. Contracting authority

1. Name, addresses and contact point of the contracting authority:
   European Central Bank, Attention: Karl-Hermann Diehl, Kaiserstraße 29, 60311 Frankfurt am Main, Germany.
   For queries please send an e-mail to Karl-Hermann.Diehl@ecb.europa.eu.

2. Business area: Directorate Administration

3. Division: Premises Division

4. Background information:
   Gas fire extinguishing systems emanate a high noise level, certain sound frequencies and pressure waves when they are triggered. These may occur in the pipe system, nozzles and alarm horns and may result in mechanical or logical data damage to hard disk drives.
   Some manufactures therefore offer "noise reduces" nozzles and signalling devices recently certified by VdS for their gas extinguishing systems.

II. Description of the successful tenderers' designated tasks:

   The tenderer who is successful in an upcoming procurement procedure will be asked to provide a holistic view and assessment of the impact of gas extinguishing systems on hard disk storage systems in datacentre environments.
   The successful tenderer will under his own direction and initiative and if necessary with the assistance of other experts, examine the following topics and evaluate and recommend specific action for mitigation:

   1. Are damages of hard disk storage systems (mechanical and logical data) caused by the noise generated through escaping fire extinguishing gas or alarm horns? What are the key factors and how can these be practically influenced?

      The results of an existing evaluation of a special storage disk expert have to be considered and possibly supplemented by additional investigations for example by hard drive manufacturers.

   2. Are the above mentioned VdS certified "noise reduced" technologies sufficient to protect the hard disk storage media in use now (theoretical and/or proven by real measurements involving the extinguishing system manufacturer)?
      a) In external data centre
b) In the other ECB owned data centres (6 rooms)
c) In the ECB New Premises data centre

3. Are the technical fire protection infrastructure systems, which are currently installed in ECB data centres and planned to be used in the new ECB datacentre, “State of the Art” and do the standards meet the objective of protection and the usage in the data centre?

4. Beside noise, which other impact of gas extinguishing systems would damage hard disk storage (mechanical or logical)

The results/findings shall be explained in a written report in German and/or English language and also be presented at the ECB in Frankfurt/Main.

The measurement program, the measurements and the evaluation scheme need to be agreed between the successful tenderer and the ECB.

The successful tenderer will be awarded a work contract. The services will need to be performed on the tenderers premises. Upon need or request the tenderer shall attend meetings/presentations at the ECB’s premises in Frankfurt am Main.

III. Procedure

1. General information

This document constitutes a voluntary contract notice in the run-up to an upcoming procurement procedure for the provision of a holistic view and assessment of the impact of extinguishing systems on hard disk storage systems in datacentre environments which shall be governed by Decision ECB/2007/5 of 3 July 2007 laying down the Rules on Procurement 1 and the supplementary rules attached as Annex 1. The procurement procedure will be carried out without publication of a notice in accordance with Article 29 of Decision ECB/2007/5.

2. Selection procedure:

In order to identify tenderers for the upcoming procurement, the ECB will evaluate the applications received against the criteria set under Section IV. below. The ECB will send a request for proposal to the candidates fulfilling the minimum capacity levels (Section IV.1). In such request for proposal, the candidates will be asked to submit an offer to the ECB for the provision of a holistic view and assessment of the impact of noise emissions by gas extinguishing systems on hard disk storage systems in datacentre environments.

Number of selected candidates: at least 5, where available.

3. Type of contract: Work contract. The contract shall be governed by and interpreted under German civil law.

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IV. Minimum capacity levels and selection criteria

1. Minimum capacity levels:
Candidates must have the following qualifications and experience, this can also be provided via subcontractors:

- expert knowledge in the field of gas fire extinguishing systems and their usage in data centres (to be verified against one reference for design, installation, testing);
- expert knowledge in the field of acoustics/sound analysis (to be verified against one reference for analysing areas with high noise levels);
- expert knowledge in the field of hard disk drive analysis (to be verified against one reference of analysing defective (electronically and/or mechanical) hard drives);
- experience in analysis of complex and multi-disciplinary topics (to be verified against three references in analysis of complex and multi-disciplinary topics).

Above mentioned references shall be provided with contact information and made available to be called by ECB. The ECB reserves the right to exclude applications should the references testify that the fields mentioned in the above criteria were not executed at a satisfactory level under contract performance.

V. How to apply:

1. Form and content of the application:

   - One Reference for design, installation and testing gas fire extinguishing systems.
   - One Reference for analysing areas with high noise levels.
   - One Reference of analysing defective hard drives; Contact information shall also be provided.
   - Three References of analysing complex multi-disciplinary topics.
   - Completed and signed Candidate’s Statement (Annex 2).

Each reference should be max. 1 A4-page, describing the project information like client, location, plant size, type of IT-systems (e.g. storage, processing, switches), IT-area size, weight of extinguishing gas stored, etc. Furthermore for each reference contact information shall be provided.

Incomplete applications, i.e. those with no supporting documentation, will not be considered. You may also submit any additional proofs of professional experience, letters of reference etc.

All documents should be single-sided and not stapled or bound.

2. Submission of the applications

Applications must be sent by post, quoting the above reference number, to the address stipulated under Section I. 1 above. Applications will not be returned and will remain the property of the ECB.

All applications must be received by the ECB by the closing date (Section VIII below). If candidates submit their applications by registered post or private courier services, the post office stamp or the date on the slip issued by the courier service shall constitute proof of compliance with the closing date for
submission. However, the ECB will not consider applications which reach the ECB five calendar days after expiry of the closing date.

Interested persons may not apply to participate in the procurement procedure and/or to be added to the list of tenderers at a later date by sending the information requested in this voluntary contract notice after the closing date.

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<th>3. Exclusion of applications</th>
<th>The ECB may exclude applications that: (i) do not meet the minimum capacity levels (Section IV.1); (ii) do not contain the information or supporting documents requested; (iii) are otherwise incomplete.</th>
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<th>VI. Additional information:</th>
<th>The ECB reserves the right to reuse candidates’ data for the identification of potential tenderers for future procurement procedures.</th>
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<th>VII. Date of dispatch of this voluntary contract notice:</th>
<th>3 July 2013</th>
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<th>VIII. Closing date for the submission of applications:</th>
<th>(Initial deadline: 16 July 2013) New extended deadline: 26 July 2013</th>
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