



Framework service contract for the provision of IT consultancy services related to integration of Sensor Observation Service for near real time data

Reference: Open call for tenders EEA/SES/11/001

Closing date: 10/06/2011

1. Introduction to EEA

The European Environment Agency (EEA) is a European Union public body governed by Regulation (EC) No 401/2009 of the European Parliament and of the Council of 23 April 2009¹. The EEA role is to support the European Union in the development and implementation of environmental policy by providing relevant, reliable, targeted and timely information on the state of the environment and future prospects. The EEA also provides the necessary independent scientific knowledge and technical support to enable the Union and the member countries to take appropriate measures to protect and improve the environment as laid down in the Treaty and by successive Community action programmes on the environment and sustainable development. Currently, the EEA has 32 member countries.

There are approximately 200 staff members working at the EEA. These staff members come from a wide range of national, professional and cultural backgrounds. Their functions at the EEA vary from environment-related research and data-analysis to administrative or managerial tasks.

The European Environment Agency (EEA) is collecting near real time data (Ozone, PM10, NOx, Noise etc) from the European countries on a voluntary basis. The existing system for this purpose is build on proprietary data formats and using Microsoft Biztalk and Microsoft SqlServer for collecting and processing the data. The interest for near real time data is growing and the EEA wants to provide a better service both in the collecting process, in access to and sharing the data but also on how to build and design a sensor network. Because of this the EEA wants to move towards a platform which is based upon Sensor Web Enablement (SWE) from the Open GIS Consortium (OGC) closely integrated with ArcGIS Server from ESRI. The standard of interest is the Sensor Observation Service (SOS) which is suitable for collecting and sharing near real time observations. With this call for tenders the EEA seeks to purchase professional knowledge and consultancy in enabling SOS for near real time data.

Further information about the work of EEA can be obtained on its website: <http://www.eea.europa.eu>.

¹ OJEU L 126 of 21.5.2009, p. 13.

2. Presentation of the tender

Tenders shall be submitted in accordance with the **double envelopes system**:

The outer envelope or parcel should be sealed with adhesive tape and signed across the seal and carry the following information:

- The call for tenders reference No **EEA/SES/11/001**
- The contract title ***“Provision of IT consultancy services related to integration of Sensor Observation Service for near real time data”***
- The name of the tenderer
- The indication ***“Tender – Not to be opened by the internal mail services”***
- The address for submission of tender (as specified in the letter of invitation to tender)
- The date of submission shall be legible on the outer envelope or parcel

The outer envelope or parcel must contain three inner envelopes, i.e. Envelope No 1, 2 and 3, corresponding to the following three sections: administrative section, technical offer and financial offer.

(a) Envelope No 1 – Administrative section shall include the following:

- The Tender submission form drawn up in accordance with the template in annex 1
- The declaration on exclusion criteria as required under section 11.1.2 drawn up in accordance with the template in annex 2
- The legal entity form as required under section 11.2.1 drawn up in accordance with the template in annex 3
- The financial identification form drawn up in accordance with the template in annex 4
- The evidence and documentation demonstrating the fulfilment of the selection criteria as required under sections 11.2.2 (economic and financial capacity) and 11.2.3 (technical and professional capacity)

(b) Envelope No 2 – Technical offer shall include the following:

The technical offer providing all information requested under sections 7 and 11.3.1 including information relevant to subcontracting as requested under section 4.3.

(c) Envelope No 3 – Financial offer shall include the following:

The financial offer providing all information requested under sections 10 and 11.3.2, drawn up in accordance with the template in annex 5.

Tenders shall be drafted in one of the official languages of the European Union, **preferably in English** (supporting evidence does not need to be translated) and submitted **in triplicate** (one signed original unbound and two copies).

It is important that tenders are presented in the correct format and include all documents necessary to enable the evaluation committee to assess them. Failure to respect these requirements will constitute a formal error and may result in the rejection of the tender.

Tenderers shall observe precisely the indications in points 2, 3, 4 and 6 of the letter of invitation to tender to ensure their tender are admissible. Late delivery will lead to the non-admissibility of the tender and its rejection from the award procedure for this contract. Offers sent by e-mail or by fax will also be non admissible and discarded. Envelopes found opened at the opening session will also lead to non admissibility of the tender. Consequently, tenderers must ensure that their tenders are packed in such a way as to prevent any accidental opening during its mailing.

3. Confidentiality and protection of personal data

For the processing of this tendering procedure, the EEA observes the rules set in Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by Community institutions and bodies and on the free movement of such data (OJEU L 8 of 12.1.2001, p. 1).

For further detailed information please refer to the privacy statement attached as annex 8 to these tender specifications.

4. Participation in the tendering procedure

Submission of a tender implies acceptance of the terms and conditions set out in the invitation to tender, in these tender specifications and in the draft framework contract attached to the latter (see annex 6) and, where appropriate, waiver of the tenderer's own general or specific terms and conditions. It is binding on the tenderer to whom the contract is awarded for the duration of the contract.

4.1. Eligibility

This call for tenders is open on equal terms to all natural and legal persons from one of the 32 EEA member countries and to all natural and legal persons established in a third country which has a special agreement with the European Union in the field of procurement on the conditions laid down in that agreement.

As proof of eligibility tenderers must indicate in which state they have their headquarters, registered office or residence, and provide the necessary supporting documents in accordance with their national law. If the tender is a natural person, he/she must provide a copy of identity card/passport or driving license and proof that he/she is covered by a social security scheme as a self-employed person.

4.2. Application

All eligible and natural person (as per above) or groupings of such persons (consortia) may apply.

A consortium may be a permanent, legally established grouping or a grouping, which has been constituted informally for a specific tender procedure. If awarded the contract, the members of the consortium (i.e. the leader and all the other partners) will have an equal standing towards the EEA in executing the framework service contract and they will be jointly and severally liable to the EEA.

The participation of ineligible natural or legal person will result in the automatic exclusion of that person. In particular, if that ineligible person belongs to a consortium, the whole consortium will be excluded.

The EEA will not request consortia to have a given legal form in order to be allowed to submit a tender, but reserves the right to require a consortium to adopt a given legal form before the contract is signed if this change is necessary for proper performance of the contract. This can take the form of an entity with or without legal personality but offering sufficient protection to the EEA contractual interests (depending on the member countries concerned, this may be for instance, incorporation or partnership or a temporary association). Consortia must identify one of their members as coordinator who will interface with the EEA.

Each member of a consortium or group of service providers must fulfil the conditions for participation mentioned in sections 4.1 above and 4.2 and provide the required documents listed in these tender specifications under sections 11.1 and 11.2 below. Therefore, each member of a consortium or group of service providers shall specify his role, qualifications and experience.

4.3. Sub-contracting

A contractor may subcontract part of the services.

Tenderers must state what part of the work, if any, they intend to subcontract, and to what extent (for instance % of the total contract value), specifying the names, addresses and legal status of the subcontractors.

Legal persons must provide a document containing a list of the professional qualifications of the subcontractors. If awarded the contract, contractors may not choose subcontractors other than those mentioned in the bids unless they obtain the prior written authorisation of the EEA. The overall responsibility of the work remains with the contractor.

Contractors must ensure that Article II.17 of the draft framework contract (see annex 6 to these tender specifications) can be applied to subcontractors. Once the contract has been signed, Article II.13 of the above-mentioned draft framework contract shall govern subcontracting.

5. Contractual terms

In drawing up their bid tenderers should bear in mind the provisions of the standard framework contract attached to these tender specifications (annex 6).

It should also be noted that all software components developed as part of the contracts belong to EEA including the source code(s), unless the development has been done as open source.

6. Subject of contract

The purpose of this call for tender is to establish a framework contract with a company that can provide high level expertise to the EEA in setting up, developing and maintaining a near real time SOS platform closely integrated with our GIS server platform (ESRI based), by providing senior consultancy in the following areas:

- Sensor Web Enablement (SWE from OGC);
- Sensor Observation Service (SOS from OGC);
- ArcGIS Server 10 (or newer version) integration with SOS;
- ArcGIS Server development (Server Extension Objects);
- Python development;
- Software, installation and integration requiring thorough experience with sensor technology;
- Connection to relevant OGC working groups to ensure consistency within the SWE standards

The implementation should be integrated into EEA existing geo-spatial infrastructure which is based on the following components.

- Microsoft SqlServer 2008 R2 (or newer version)
- Microsoft Biztalk 2010 (or newer version)
- ArcGIS Server 10 (or newer version)
- Microsoft server environment.
- Microsoft .NET and Python

7. General obligations of the tenderer / mandatory requirements

The list of tasks below covers the main tasks but is **not** exhaustive. The tasks will be specified in each specific contract. The task will mainly focus on:

- Setup/test SOS for production environment integrated to existing Biztalk solution.
- Integrating the existing system (near real time data) based on Biztalk and SqlServer 2008 R2 towards SOS.
- Integrate EEA dataflows into ArcGIS Server as a SOS service.

- Connection to relevant OGC working groups to ensure consistency within the SWE standards.
- Provide support on setting up physical sensor network within the EEA for demonstration purpose.
- Advising member states in implementing SOS.
- Write documentation and best practice of the SOS implementation inside EEA.

8. Place of delivery of the services

Work will be carried out at the contractor's premises (extra-mural) or at the EEA in Copenhagen (intra-mural) depending on the requirements of the specific contract. Travel to other locations *may* be required on an ad-hoc basis in which case travel and subsistence costs will be reimbursed according to the EEA standard rules and rates attached as annex 7 to these tender specifications. The same applies for shorter visits to EEA for consultants otherwise working extra-mural.

9. Type and volume of contract

The successful tenderer(s) will be awarded a framework contract for a period of 48 months, starting from the date of signature. The services will be implemented through specific contracts depending on the EEA's demand. Based on the EEA's current level of activities the value of the contract is estimated at EUR 240 000 (approximately 60 000 per year) over a maximum period of 48 months covering all services.

10. Price

Tenderers are required to quote prices as follows:

- Prices must be quoted per category as described under section 11.3.2 (Price) below;
- Prices quoted must be **all-inclusive** (inter alia of administrative and travel costs with the exception specified in section 8 above) and expressed in **euro**, including for countries that are not part of the euro zone. For tenderers in countries that do not belong to the euro zone, the price quoted may not be revised in line with exchange rate movements. It is for the tenderers to select an exchange rate and assume the risks or the benefits deriving from any variation;
- Tenderers shall quote average **daily** rates for :
 - (P₁) senior consultant working intra-mural at the EEA for an extended period of time;
 - (P₂) senior consultant working extra-mural at their premises or elsewhere;
- No additional expenses incurred in the performance of the services will be reimbursed separately by EEA.
- The price quoted must be fixed and not subject to revision during the first year of duration of the contract.

From the beginning of the second year of duration of the contract, prices may be revised upwards or downwards each year, where such revision is requested by one of the contracting parties by registered letter no later than three months before the anniversary of the date on which it was signed.

The EEA shall purchase on the basis of the price in force on the date on which specific contracts are signed. Such prices shall not be subject to revision.

The revision shall be determined by the trend in the harmonised consumer price index published by the European Commission on Eurostat web page (Theme 2 – Economy and Finance; Price. HICP – Harmonised Indices of Consumer Prices; HMIDX – Monthly data (index); GEO – Eurozone; COICOP – cp00).

Revision shall be calculated in accordance with the following formula:

$$Pr = Po \times (0,2 + (0,8 \times Ir/Io))$$

Where:

Pr = revised price;

Po = price in the original tender;

Io = index for the month in which the validity of the tender expires;

Ir = index for the month corresponding to the date of receipt of the letter requesting a revision of prices.

Under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities and the Headquarters Agreement between the Agency and the Government of Denmark of 17 August 1995, the Agency is exempt from all charges, taxes and dues, including value added tax; such charges may not therefore be included in the calculation of the price quoted; the VAT amount must be indicated separately.

The costs incurred in preparing and submitting tenders are borne by the tenderers and cannot be reimbursed.

11. Criteria

11.1. Exclusion criteria

11.1.1. Tenderers shall be excluded from **participation** in the procurement procedure if:

- (a) they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- (b) they have been convicted of an offence concerning their professional conduct by a judgment which has the force of *res judicata*;
- (c) they have been guilty of grave professional misconduct proven by any means which the EEA can justify;
- (d) they have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the EEA or those of the country where the contract is to be performed;
- (e) they have been the subject of a judgment which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities' financial interests;
- (f) following another procurement procedure or grant award procedure financed by the Community budget, they have been declared to be in serious breach of contract for failure to comply with their contractual obligations.

The cases referred to in paragraph 11.1.1 (e) above shall be the following:

- (a) cases of fraud as referred to in Article 1 of the Convention on the protection of the European Communities' financial interests established by the Council Act of 26 July 1995 (OJ/C 316 of 27.11.1995, p. 48);
- (b) cases of corruption as referred to in Article 3 of the Convention on the fight against corruption involving officials of the European Communities or officials of Member States of the European Union, established by Council Act of 26 May 1997 (OJ/C 195 of 25.6.1997, p. 1);
- (c) cases of involvement in a criminal organisation, as defined in Article 2(1) of joint Action 98/733/JHA of the Council (OJ/L 315 of 29.12.1998, p. 1);

- (d) cases of money laundering as defined in Article 1 of Council Directive 91/308/EEC (OJ/L 166 of 28.6.1991, p. 77).

Exclusion from awarding:

In addition, contracts may not be awarded to tenderers who, during the procurement procedure:

- (a) are subject to a conflict of interest;

Tenderers must declare:

- that they do not have any 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 affinities, family or emotional ties, or any other relevant connection or shared interest;
- that they will inform the EEA, without delay, of any situation constituting a conflict of interest or which could give rise to a conflict of interest;
- that they have not made and will not make any offer of any type whatsoever from which an advantage can be derived under the contract;
- that they have not granted and will not grant, have not sought and will not seek, have not attempted and will not attempt to obtain, and have not accepted and will not accept, any advantage, financial or in kind, to or from any party whatsoever, constituting an illegal practice or involving corruption, either directly or indirectly, as an incentive or reward relating to the award of the contract.

The EEA reserves the right to verify the above information.

- (b) are guilty of misrepresentation in supplying the information required by the EEA as a condition of participation in the contract procedure or fail to supply this information;
- (c) find themselves in one of the situations of exclusion, referred to in paragraph 11.1.1 above, for this procurement procedure.

11.1.2. Evidence to be provided by the tenderers

When submitting their bids, each tenderer (including subcontractor(s) or any member of a consortium or grouping) must provide a declaration on their honour, duly signed and dated, stating that they are not in any of the situations mentioned under paragraph 11.1.1 above. For that purpose, they shall complete and sign the form attached as annex 2 to these tender specifications.

The tenderer to whom the contract is to be awarded shall provide within 15 calendar days following receipt of the letter informing him of the proposed award of the contract and preceding the signature of the contract, the evidence specified in the last but one paragraph of the form attached as annex 2 to these tender specifications confirming the declaration aforementioned.

11.2. Selection criteria

11.2.1. Legal capacity

Any tenderer is required to prove that he is authorised to perform the contract under national law, as evidenced by inclusion in a trade or professional register, or a sworn declaration or certificate, membership of a specific organisation, express authorisation, or entry in the VAT register. To that effect, each service provider (including subcontractor(s) or any member of a consortium or a group of service providers) is required to submit a legal entity form (see annex 3) duly filled out and signed, accompanied by a copy of inscription in trade register and/or a copy of inscription in VAT register, where applicable. However the subcontractor(s) shall not be required to fill in or provide those documents when the services represent less than 20 % of the contract.

11.2.2. Economic and financial capacity

Evidence of economic and financial capacity shall be furnished by **(one or more of)** the following documents:

- o appropriate statements from banks or evidence of professional risk indemnity insurance;
- o the presentation of balance sheets or extracts from balance sheets for at least the last two years for which account have been closed, where publication of the balance sheet is required under the company law of the country in which the economic operator is established;
- o a statement of overall turnover and turnover concerning the services covered by the contract during the last two financial years.

If, for some exceptional reason, which the EEA considers justified, a tenderer is unable to provide the references requested above, he may prove his economic and financial capacity by any other means which the EEA considers appropriate.

An economic operator may, where appropriate and for a particular contract, 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 EEA 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.

11.2.3. Technical and professional capacity

Tenderers should show their degree of technical and professional capacity to carry out the requested tasks by providing information on the criteria described below. If several service providers or subcontractors are involved in the tender, the selection criteria for the technical and professional capacity will be assessed in relation to the combined capacities of the service providers and subcontractors, as a whole, to the extent that service providers or subcontractors put their resources at the disposal of the tenderer for performance of the contract.

o **Human resources:**

Evidence of technical and professional capacity should be specified for each of the activities listed in section 6 above and be furnished on the basis of the following documents:

- CVs detailing the educational and professional qualifications of the firm's managerial staff as well as those of the persons designated to provide the services, preferably using the European CV template available at <http://europass.cedefop.europa.eu/>, indicating the required professional experience as follows:
 - Managerial staff: minimum 1 CV, documenting a minimum of 5 years' professional experience;
 - Persons responsible for providing the services: minimum 3 CVs of senior consultants, documenting at least 3 years' professional experience and the language skills
- CV matrix clearly showing which areas in section 6 each consultant covers.

o **Past experience and expertise:**

Tenderers shall provide the following documents:

- List of similar services provided in the past three years, indicating the value, dates and recipients of the services (public or private);
- Proven track record of involvement inside the standardisation process of OGC SWE;

- Proven track record of involvement in developing similar SWE implementation in a production or semi-production environment;
- Proven track record of development experience on ArcGis Server 10, Microsoft SQL-server 2008 and development environments such as .NET and Python;
- Evidence of close collaboration with major industry software companies in the SWE field (e.g. being advisory board member, close development, test partner, third party provider, etc ...);

o **Subcontracting:**

Tenderers shall give an indication of the proportion of the contract which they may intend to subcontract with a description of the services to be subcontracted and their scope. If subcontracting is **not** envisaged, tenderers shall clearly state so in the tender submission form (see annex 1).

If subcontracting is envisaged as part of this contract, tenderers shall provide a statement of their policy on the use of subcontractors, and of the means of ensuring quality and confidentiality when subcontractors are used.

NB: Tenderers must acknowledge that the EEA reserves the right to request at later stage tenderers to provide documentation in relation to exclusion and selection criteria for any proposed subcontractor (see section 4.3 above).

o **Environmental policy:**

Tenderers shall provide a description of their environmental policy, specifying the status of implementation. In the event of a joint offer submitted by a consortium or a grouping of service providers, each member of the consortium or the grouping shall provide the requested description.

11.3. Award criteria

The assessment method that will be used to determine the choice of the tender will be based on the criteria below, on the basis of the economically most advantageous tender (quality/price ratio):

- Quality of the tender (Technical merit - TM)
- Financial value of the tender (Price - P)

11.3.1 Technical merit (TM) (max. 60, min. 42 points)

Tenders will be evaluated following the award criteria and weights outlined below, producing a total potential score of 60 points.

| No | Award criteria | Maximum points (60) | Minimum points (42) |
|----|--|---------------------|---------------------|
| 1 | <p><i>Understanding of the scope and the complexity of the work to be carried out:</i></p> <p>Tenders will be evaluated in terms of their appreciation and understanding of the aims and context of the work to be undertaken and their overall quality, completeness and presentation.</p> | 15 | 10 |

| | | | | |
|----------|--|---|-----------|-----------|
| 2 | <i>Proposed approach for the development, maintenance and improvement of the near real time SOS platform.</i> | | 25 | 18 |
| | Tenders will be evaluated in terms of: | | | |
| | 2.1 | <i>the proposed strategy for the development, technical management and operation of the SOS platform</i> | 12 | 9 |
| | 2.2 | <i>The approach for continuous improvements to the functionalities of the SOS platform</i> | 8 | 6 |
| | 2.3 | <i>The methodology for handling enquiries and customer feedback</i> | 5 | 3 |
| 3 | Proposed management approach | | 20 | 14 |
| | Tenders will be evaluated in terms of: | | | |
| | 3.1 | <i>the proposed strategy for contract management, coordinating and managing the team, reporting, meeting deadlines, ensuring responsiveness and interaction with EEA;</i> | 12 | 8 |
| | 3.2 | <i>The methodology for quality assurance and control.</i> | 8 | 6 |

Only tenders which obtain the indicated minimum number of points, both for each award criterion and in total, will be considered for the next stage, which involves determining the financial value of the tender (price index) and for the final assessment.

11.3.2 Price (P) (max. 40 points)

Tenderers are requested to submit a financial offer giving the **all-inclusive** average **daily** rate in EUR for the following categories:

- P₁: senior consultant working intra-mural at the EEA for an extended period of time;
- P₂: senior consultant working extra-mural at their premises or elsewhere.

The total calculated average of which will be taken into account for the price evaluation as follows:

$$\text{Total (average) } P_{AVG} = (P_1 + P_2) / 2.$$

For that purpose, tenders shall complete the price quotation attached as annex 5 to these tender specifications. Tenderers shall bear in mind that all fields are compulsory and non-compliance will lead to exclusion of the tender from the award process.

For each category above, tenders meeting all mandatory requirements including the minima for technical merit will score points in function of the following formula $P = (P_{min} / P_0) \times 40$, where

P = total calculated price;

P_{min} = the lowest price offered among the received tenders;

P₀ = the price of the tender being considered

11.3.3 Final Assessment

A framework contract will be awarded to the tenderer whose tender achieves the highest total score for technical merit and price (TM + P). Should tenders obtain the same final score and tie for first place, the winning tender will be decided on the basis of the highest score achieved for price.

12. Performance

Once a framework contract has been signed the service provider must be able to offer consultants with the required skills and experience to carry out the work in question within ten calendar days after offering the contractor a specific contract.

EEA maintains the right to refuse any person if performance is not satisfactory.

Competence in both selection and award criteria must be maintained throughout the framework contract. Should the contractor fail to do this during the validity of the framework contract, another vender from the tenders may be chosen.

13. Environmental Considerations

The EEA runs a certified environmental management system (EMAS) and aims to minimise the environmental impact of all its activities, including those carried out under contract. The future contractor will, therefore, be requested to consider the EEA environmental management guidelines in the implementation of the contract, in particular, those relating to business travel/electronic means of communication, paper and energy consumption. Further information on the EMAS system can be found on the EEA homepage: <http://www.eea.europa.eu/documents/emas>.

Moreover, it is strongly recommended that tenders are submitted in an environmentally friendly way, e.g., by choosing a simple and clear structure (list of contents and consecutive page numbering), double-sided printing, limiting attachments to what is required in the technical specifications (no additional material) and avoiding plastic folders or binders.

14. Annexes

Annex 1: Tender submission form

Annex 2: Declaration on exclusion criteria

Annex 3: Legal entity form

Annex 4: Financial identification form

Annex 5: Price quotation

Annex 6: Draft framework contract and specific contract

Annex 7: Reimbursement of travel expenses

Annex 8: Privacy statement

