

**Tender specifications**  
**Attached to the Invitation to tender**

**Invitation to tender N° EMSA /OP/26/2015 for ICT services related to:  
corrective maintenance, operational support and evolutive maintenance of  
the Satellite AIS Data Processing Centre Block 2**

## Abbreviations

The following table includes a list of abbreviations commonly used in these tender specifications.

Abbreviation	Definition
AIS	Automatic Identification System
API	Application Programming Interface
BCF	Business Continuity Facility
COTS	Commercial Off The Shelf
CTM	Criticality/Time Matrix
CSNDC	CleanSeaNet Data Centre
DPC	Satellite AIS DPC Block 2
EC	European Commission
EMSA	European Maritime Safety Agency
ESA	European Space Agency
EO DC	Earth Observation Data Centre
EU	European Union
FTP	File Transfer Protocol
FWC	Framework Contract
GUI	Graphic User Interface
ICD	Interface Control Document
ICM	Installation and Configuration Manual
ICT	Information and Communications Technology
IHP	Incident Handling Procedures
IMDatE	Integrated Maritime Data Environment
IT	Information Technology
IPR	Intellectual Property Rights
MSS	Maritime Support Services
MSs	Member State(s)
NCA	National Competent Authority
NRT	Near Real Time
OUM	Operational User Manual
S2S	System to System
SOA	Service Oriented Architecture

Abbreviation	Definition
SRS	Software Requirements Specifications
SSN	SafeSeaNet
SRS	Software Requirements Specification
STP	Software Test Plan
TS	Technical Specifications
XML	Extensible Markup Language

## Glossary

### Terms specific to Maritime domain

The following table includes a glossary of the relevant terms commonly used in this document and specific to Maritime domain.

Term	Definition
AIS	The Automatic Identification System (AIS) is an automatic tracking system used on ships and by vessel traffic services (VTS) for identifying and locating vessels by electronically exchanging data with other nearby ships, AIS base stations, and satellites.
EMSA	EMSA provides technical assistance and support to the European Commission and Member States in the development and implementation of EU legislation on maritime safety, pollution by ships and maritime security. To do this, one of EMSA's most important supporting tasks is to improve cooperation with, and between, MSs in all key areas. In addition, the Agency has also been given operational tasks in the field of oil pollution response, vessel monitoring and in long range identification and tracking of vessels. As a body of the EU, the Agency sits at the heart of the EU maritime safety network and collaborates with many industry stakeholders and public bodies, in close cooperation with the EC. More info at: <a href="http://www.emsa.europa.eu">www.emsa.europa.eu</a>

## Terms specific ICT or Project Management domain

The following table includes a glossary of the relevant terms commonly used in this document and specific to ICT or Project Management domain.

Term	Definition
API	In computer programming, an application programming interface (API) is a set of routines, protocols, and tools for building software applications. An API expresses a software component in terms of its operations, inputs, outputs, and underlying types
Application	An application is a software component designed to help the user perform specific tasks.
Building Block	A Building Block comprises a set of subsystem that can be configured to fit an application purpose.
Client	A client is a piece of computer hardware or software that accesses a service made available by a server.
Data Centre	A Data Centre is a facility used to house computer systems and associated components, such as telecommunications and storage systems.
Interface	An interface is a shared boundary across which two separate components of system exchange information.
Interoperability	The ability of systems to exchange information and accept services from other systems, in order to enable them to operate effectively together.
Process	A process is a software component that transforms data, provides services, or extracts information.
Server	A server is a running instance of an application (software) capable of accepting requests from a client and giving responses accordingly. Servers can run on any computer including dedicated computers, which individually are also often referred to as "the server"
Service	Service "Means of delivering value to the customer by facilitating the outcomes customer want to achieve, without the ownership of specific costs and risks" (ITIL definition).
System	A system is a set of interacting or interdependent building blocks forming an integrated whole.
System to System	System to system is a type of interaction between two systems governed by specified interfaces.
Solution	The solution is the system implemented by the contractor
Standard	A standard is an established norm or requirement in regard to technical systems. It is usually a formal document that establishes uniform engineering or technical criteria, methods, processes and practices.
Subsystem	A subsystem is a self-contained software component that provides a set of functionalities.
Web service	A web service a subsystem designed to support interoperable machine-to-machine interaction over internet.

Workflow	A workflow consists of an orchestrated and repeatable pattern of processes.
XML	XML is a markup language that defines a set of rules for encoding documents in a format which is both human-readable and machine-readable. It is defined by the W3C's XML 1.0 specifications and by several other related specifications, all of which are free open standards.

### Terms specific to this FWC

Term	Definition
DPC	Satellite AIS Data Processing Centre, Block 2.
Operational support or Helpdesk	Remote support to EMSA for the analysis and diagnosis of identified problems in the software application or hotfixes that are delivered under Module 1.
Incident management and corrective maintenance	<p>Within the scope of activities to be covered by a specific contract on IT helpdesk activities are the functional, non-functional and security related issues affecting DPC to be identified in the contract. Issues can be detected either by EMSA staff or an EMSA contractor and/ or MS users. A functional issue may relate to:</p> <ul style="list-style-type: none"> <li>a. A “bug” (deviation of the system from the agreed specifications; and/ or</li> <li>b. Changes of minor scale in the system behaviour</li> </ul>

# Requirements

## 1. Introduction

The European Maritime Safety Agency (hereafter called EMSA or the Agency) was established under Regulation 1406/2002/EC, as amended, for the purpose of ensuring a high, uniform and effective level of maritime safety. One of the Agency's main objectives is to provide technical and scientific assistance to the European Commission and Member States in the proper development and implementation of EU legislation on maritime safety, pollution by ships and security on board ships. To accomplish this, one of EMSA's most important supporting tasks is to improve cooperation with, and between, Member States through the development of EU maritime information systems.

Through the last 10 years EMSA has developed four main maritime information systems (applications), namely: the SafeSeaNet (SSN), the CleanSeaNet (CSN), the EU Long Range Identification and Tracking of ships Data Centre (EU LRIT DC) and the Integrated Maritime Data Environment (IMDatE). A brief description of each system is provided in the following paragraphs whilst relevant details are included in Appendix 10.

Each of the above mentioned systems have been developed as a stand-alone system addressing specific requirements, functionalities and user communities. In 2010, EMSA initiated the implementation of an Integrated Maritime Data Environment (IMDatE) aiming to create the technical ICT capability to combine, fuse and correlate data and services from SSN, CSN, LRIT, as well as new data sources such as Satellite AIS, to be combined together and tailored to the needs of different user communities relying on maritime services.

Since that same time, EMSA has been working very closely with the European Space Agency (ESA) on Satellite AIS matters through an activity known as the ESA-EMSA SAT-AIS initiative. ESA has developed the Satellite AIS Data Processing Centre Block 2 and EMSA has developed DPC Block 3 (as part of IMDatE) which, when integrated, will maximise the provision of services related to Satellite AIS. In 2015 EMSA will start to host and operate the Satellite AIS Data Processing Centre Block 2 (hereon referred to as DPC) providing enhanced Satellite AIS services to European Coastal States. The Satellite AIS DPC Block 2 provides value added services on Satellite AIS data such as Validity Check, Missing AIS reports alert, Enhanced AIS messages (Doppler validation), Predicted AIS message provision.

## 2. Objective, scope and description of the contract

The objective of this procurement procedure is to establish a Framework Service Contract for the provision of ICT services for corrective maintenance and operational support, and evolutive maintenance of the Satellite AIS Data Processing Centre Block 2. The Framework Service Contract shall have a maximum duration of three years.

The framework contract comprises two modules, Module 1 for corrective maintenance and operational support (helpdesk), and Module 2 for evolutive maintenance. Both Module 1 and Module 2 shall be

implemented by specific contracts. For Module 1 each specific contract shall have a fixed yearly price. Module 2 will be implemented based on technical specifications which define the scope of each specific contract.

## **2.2. Scope**

The following types of services shall be contracted under the FWC:

1. The helpdesk and corrective maintenance services for the software implemented within the context of the Satellite AIS Data Processing Centre Block 2 application (DPC) and its further changes.
2. The scope of this service is to design and implement enhancements of the DPC allowing new and improved functionalities to be offered.

The design of the DPC and its interfaces are described in the Appendices 2 and 3 of these tender specifications.

Basic information on the EMSA maritime applications and the SafeSeaNet Ecosystem architecture is provided in Appendix 10. Furthermore, in order to have a full picture of the technologies adopted in EMSA, the bidders shall also take into account the EMSA System and Application Technical Landscape (see Appendix 6).

### **2.1 Module 1**

Appendix 11 of these tender specifications provides the relevant DPC corrective maintenance and operational support requirements. The contractor will, *inter-alia*, carry out the following tasks:

- a. Control the processing of incidents, reported by EMSA support team and Maritime Support Services, and keep EMSA informed on the status of issues;
- b. Analyse incidents causing unforeseen service interruption and provide feedback to help the required interventions for repair or maintenance by EMSA or its contractors;
- c. Perform changes to the application code to correct errors;
- d. Support the back-up and recovery in case of failure;
- e. Analyse performance bottle-necks;
- f. Support the definition of specific probes for monitoring the DPC in the production environment.

These tasks will be performed respecting at least the minimal procedures and minimum service levels prescribed in Appendices 7, 8, and 11.

### **2.2 Module 2**

The contractor will, *inter-alia*, carry out the following tasks for enhancements and new developments:

- a. Analysis of user requirements;

- b. Document the technical solution
- c. Prototyping (if necessary);
- d. Development/Coding;
- e. Factory acceptance tests (FAT);
- f. Packaging and software delivery;
- g. Support to Site acceptance tests (SAT);
- h. Deliver automated test scripts and code;
- i. Full system documentation, including, inter-alia, design documentation, installation instructions, system security guidelines, internal interface definitions, test plans and user manual.

Examples of possible enhancements for the improvement in performance of the processing time of S-AIS messages, and the addition of new satellite AIS data providers and their associated assets (ground stations and satellites).

## **2.3 Team structure**

The tenderer shall propose a team consisting as a minimum of the following members:

- Project manager.
- Software architect.
- Senior and junior application developer.
- Database administrator.
- Release manager.
- Test manager.
- Problem and Incident manager.

## **2.4 General Conditions for the Provision of Services**

### Language

The working language of EMSA is English. The English language shall be used throughout the duration of any activities associated with this Framework Contract for all communication, reports and other documentation.

Since the contractor will need to work exclusively in English, as stated above in these tender specifications, the technical documents part of this tender dossier are provided in English language only. Should the tenderers wish to read the outline of this tender in other languages, they may consult the Contract Notice available under: <http://ted.europa.eu/TED/misc/chooseLanguage.do>

### Used products and infrastructure

The technologies and tools to be used for the provision of services are listed in the Appendices to these tender specifications. The personnel providing the service will use only the standard software utilised at the Agency (see Appendix 6), and no other software may be installed or used without the prior written authorisation of EMSA.



### Third party licences for products used in the software implementation

The offers for service and associated specific contracts should, unless explicitly agreed otherwise, cover the costs of any licence or product required to perform the service.

### Place of work and access to EMSA environments

The place of work for the tasks shall be the contractor's premises. Occasionally EMSA can request to do the tasks described within this Framework Contract in the EMSA premises (see Appendix 11). VPN access could be provided to the EMSA infrastructure for the CSNDC test environments, on the basis of the signature of conditions of use regarding security.

For Module 1 the contractor shall participate at a bi-annual meetings (twice a year), one meeting every six months since the signature of the contract. Bi-annual meetings shall take place at EMSA premises. If requested by the contractor, and accepted by EMSA, the meeting can be held by a phone, video conference, or at contractor premises.

### Working time

Except for the helpdesk task and corrective maintenance, the work shall be carried out within the normal working hours/days of EMSA (a calendar will be provided to the contractor when available, usually three months before the end of the previous year). Office hours are from 9.30 a.m. to 5.30 p.m. on normal working days.

Under exceptional circumstances and with the previous agreement between EMSA and the contractor, work might be performed outside of normal working hours/days.

### Tests and audits

As a European body, EMSA itself or its external contractors might perform any kind of test or audit on the services provided by the contractor awarded the framework contract following this tender procedure. Checks and audits could in particular be performed in accordance with article II.18 of the General Conditions to the draft Framework contract.

### Project team

EMSA reserves the right to evaluate any change or new nomination of members to the contractor's project team. CVs and appropriate documentation of each person foreseen to take up duties shall be presented to EMSA for approval with respect to Specific Requests for Services but in any case at least 15 days before the schedule start date of a specific contract.

### Minutes of the meetings

The contractor shall draw up the minutes of the meetings (for example the bi-annual meetings). The minutes shall be delivered within seven working days since the date of the meeting for the EMSA approval. If the minutes are rejected by EMSA, the contractor shall have seven working days to revise the minutes according to the comments provided.

## **2.5 The nature of the contracts**

### *2.5.1 Framework contract*

The contract deriving from this procurement procedure is a framework service contract following the template published with these tender specifications. It should be stressed that Framework Contracts involve no direct commitment and, in particular, do not constitute orders per se. Instead, they lay down the legal, financial, technical and administrative provisions governing the relationship between EMSA and the Contractor during their period of validity. The draft Framework Contract specifies the basic conditions applicable to any assignment placed under its terms.

#### *2.5.2. Specific contracts*

Actual orders will be placed after the Framework Contract is signed and in force, through “Specific Contracts” concluded in performance of the Framework Contract.

### **3. Contract management responsible body**

The European Maritime Safety Agency – Unit C.3, in charge of Information Services Technical Management will be responsible for managing the contract.

### **4. Project Planning**

The deliverables under Module 1 are described in Appendix 11 to these tender specifications. The deliverables of Module 2 will be specified within Module 2 specific contracts.

### **5. Timetable**

The estimated date for signature of the contract is December 2015.

The kick-off Meeting is the first meeting between EMSA and the contractor, the scope of this meeting is to clarify mainly objectives, timetable, and expected results of the contract.

The kick-off meeting is foreseen to take place within 2 weeks from the signature of the contract at the EMSA premises. The kick-off meeting has to be considered as an additional meeting, on top of the bi-annual meeting.

### **6. Estimated Value of the Contract**

The maximum budget available for this contract is of EUR 420.000 excluding VAT.

The maximum price of the services relating to each specific contract of Module 1 should not be more than EUR 40.000 excluding VAT per year. The maximum budget allocated for Module 2 is EUR 300.000 for the entire duration of the contract, excluding VAT.

### **7. Terms of payment**

Payments shall be issued in accordance with the provisions of the **draft Framework contract** available on the Procurement Section under the call to tender EMSA/OP/26/2015 on the EMSA website at the following address: [www.emsa.europa.eu](http://www.emsa.europa.eu)

### **8. Terms of contract**

In drawing up a bid, the tenderer should bear in mind the terms of the draft Framework contract.

EMSA may, before the contract is signed, either abandon the procurement or cancel the award procedure without the tenderers being entitled to claim any compensation.

## **9. Sub-contracting**

If the tenderer intends to either sub contract part of the work or realise the work in co-operation with other partners he shall indicate in his offer which part will be subcontracted, as well as the name and qualifications of the subcontractor or partner. (NB: overall responsibility for the work remains with the tenderer).

The tenderer must provide required evidence for the exclusion and selection criteria on its own behalf and when applicable on behalf of its subcontractors. The evidence for the selection criteria on behalf of subcontractors must be provided where the tenderer relies on the capacities of subcontractors to fulfil selection criteria<sup>1</sup>. The exclusion criteria will be assessed in relation to each economic operator individually. Concerning the selection criteria, the evidence provided will be checked to ensure that the tenderer and its subcontractors as a whole fulfil the criteria.

## **10. Requirements as to the tender**

Bids can be submitted in any of the official languages of the EU. The working language of the Agency is English. Bids must include an English version of the documents requested under points 13.5 & 14 of the present tender specifications.

The tenderer shall complete Tenderer's checklist.

If the tenderer intends to either sub contract part of the work or realise the work in co-operation with other partners (Joint Offers) he shall indicate in his offer by completion of the form – Information regarding joint offers and subcontracting.

The tender must be presented as follows and must include:

Signed cover letter indicating the name and position of the person authorised to sign the contract and the bank account on which payments are to be made.

Financial Form completed, signed and stamped; available on the Procurement Section (Financial Form) on the EMSA Website at the following address: [www.emsa.europa.eu](http://www.emsa.europa.eu)

**Legal Entity Form** completed, signed and stamped and requested accompanying documentation, available on the Procurement Section (Legal Entity Form) on the EMSA Website at the following address: [www.emsa.europa.eu](http://www.emsa.europa.eu)

Tenderers are exempt from submitting the Legal Entity Form and Financial Form requested if such a form has already been completed and sent either to EMSA or any EU Institution previously. In this case

---

<sup>1</sup> To rely on the capacities of a subcontractor means that the subcontractor will perform the works or services for which these capacities are required.

the tenderer should simply indicate on the cover letter the bank account number to be used for any payment in case of award.

**Part A:** all the information and documents required by the contracting authority for the appraisal of tenders on the basis of the points **12, 13.2-13.3** of these specifications (part of the Exclusion criteria)

**Part B:** all the information and documents required by the contracting authority for the appraisal of tenders on the basis of the **Economic and Financial capacity** (part of the Selection criteria) set out under point **13.4** of these specifications;

**Part C:** all the information and documents required by the contracting authority for the appraisal of tenders on the basis of the **Technical and professional capacity** (part of the Selection Criteria) set out under point **13.5** of these specifications.

**Part D:** all the information and documents required by the contracting authority for the appraisal of tenders on the basis of the **Award Criteria** set out under point **14** of these specifications;

**Part E:** setting out **prices** in accordance with **point 11** of these specifications.

## 11. Price

1. All inclusive fixed prices **for Module 1** must be quoted for one year for the DPC Corrective Maintenance and Operational Support, and shall be expressed based on services described in Appendix 11. Corrective Maintenance and Operational support may be renewed by EMSA on yearly basis, for the duration of the framework contract.
2. **For Module 2**, a fixed price per day for each of the following profiles of the contract shall be provided:
  - i. Project manager (pm);
  - ii. Software architect (sa);
  - iii. Senior and Junior application developer (sad and jad);
  - iv. Data base administrator (dba);
  - v. Release manager (rm);
  - vi. Test manager (tm);
  - vii. Problem and Incident manager.

A price for travel and accommodation should also be quoted for one person for a one day meeting in Lisbon. Moreover, in the event of an extra day of meeting, the tenderer should provide the price for daily subsistence. These prices will not be taken into consideration for the evaluation of the bid, but will become part of the price of the relevant Specific Contracts.

- Prices must be quoted in Euro.
- Prices must be fixed amounts, non-revisable and remain valid for the duration of the contract.
- Under Article 3 and 4 of the Protocol on the privileges and immunities of the European Union, EMSA is exempt from all duties, taxes and other charges, including VAT. This applies to EMSA pursuant to the Regulation 1406/2002/EC. These duties, taxes and other charges can therefore not enter into the calculation included in the bid. The amount of VAT must be shown separately.

## **12. Joint Offer**

Groupings, irrespective of their legal form, may submit bids. Tenderers may, after forming a grouping, submit a joint bid on condition that it complies with the rules of competition. Such groupings (or consortia) must specify the company or person heading the project and must also submit a copy of the document authorising this company or person to submit a bid.

Each member of the consortium must provide the required evidence for the exclusion and selection criteria. The exclusion criteria will be assessed in relation to each economic operator individually. Concerning the selection criteria the evidence provided by each member of the consortium will be checked to ensure that the consortium as a whole fulfils the criteria.

If awarded, the contract will be signed by the person authorised by all members of the consortium. Tenders from consortiums of firms or groups of service providers, contractors or suppliers must specify the role, qualifications and experience of each member or group.

## **13. Information concerning the personal situation of the service provider and information and formalities necessary for the evaluation of the minimum economic, financial and technical capacity required**

### **13.1 Legal position – means of proof required**

When submitting their bid, tenderers are requested to complete and enclose the **Legal Entity Form** and requested accompanying documentation, available on the Procurement Section (Legal Entity Form) on the EMSA Website at the following address: [www.emsa.europa.eu](http://www.emsa.europa.eu)

### **13.2 Grounds for exclusion - Exclusion criteria**

To be eligible for participating in this contract award procedure, tenderers must not be in any of the following exclusion grounds:

- 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 judgement which has the force of res judicata;
- c) they have been guilty of grave professional misconduct proven by any means which the contracting authority 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 contracting authority or those of the country where the contract is to be performed;
- e) they have been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Union financial interests;

- f) they have been the subject of the administrative penalty for being guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the procurement procedure or failing to supply information, or being declared to be in serious breach of his obligation under contract covered by the budget.

### **13.3 Evidence to be provided by the tenderers**

For this purpose the Declaration on Honour available on the Procurement Section on the EMSA Website ([www.emsa.europa.eu](http://www.emsa.europa.eu)) shall be completed and signed.

Please note that the tenderer to whom the contract is to be awarded shall provide additional proof evidencing eligibility.

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.

When the tenderer to be awarded the contract has already submitted relevant evidence to EMSA, it remains valid for 1 year from its date of submission. In such a case, the reference of the relevant project(s) should be mentioned and the Contractor is required to submit a statement of confirmation that their situation has not changed.

### **13.4 Economic and financial capacity – Selection criteria**

Requirements:

- The tenderer must be in stable financial position and the economic and financial capacity to perform the contract

Evidence:

- Financial statements for the last three years for which accounts have been closed.
- Statement of overall turnover and turnover relating to the relevant services for the last three financial years.
- Tenderers are exempt from submitting the documentary evidence if such evidence has already been completed and sent to EMSA for the purpose of another procurement procedure and still complies with the requirements. In this case the tenderer should simply indicate on the cover letter the procurement procedure where the evidence has been provided.
- If, for some exceptional reason which EMSA considers justified, a tenderer is unable to provide one or other of the above documents, he may prove his economic and financial capacity by any other document which EMSA considers appropriate. In any case, EMSA must at least be notified of the exceptional reason and its justification in the tender. EMSA reserves the right to request any other document enabling it to verify the tenderer's economic and financial capacity.

### **13.5 Technical and professional capacity – Selection criteria**

Requirements:

- a) The members of the proposed team by the tenderer as mentioned in chapter 11 above must have the following minimum required experience:
- Project manager: 10 years of working experience, at least 7 years in the area related with this tender; the project manager shall speak and write excellent English;
  - Software architect: 7 years of working experience, at least 5 years in the area related with this tender;
  - Senior and Junior application developer, where the Senior application developer should have 5 years and the Junior application developer 3 years of working experience, at least 3 years for senior and 1 year for junior in the area related with this tender;
  - Data base administrator: 7 years of working experience;
  - Release manager: 5 years of working experience;
  - Test manager: 5 years of working experience, at least 3 years in the area related with this tender;
  - Problem and Incident manager: 5 years of working experience, at least 3 years in the area related to this tender;

Evidence:

- The tenderer must provide Curriculum Vitae of all members of the proposed team.
  - The tenderer must provide the aforementioned information filling in the template in Appendix 1 section "Quality of the Team".
- b) The tenderer shall provide documentary evidence of its expertise, and knowledge, in the following areas with a list of projects, of at least EUR 100.000 each, of comparable and relevant systems in which he has participated in the last five years. Projects areas:
- Vessel tracking systems, and in particular systems dealing with the processing of high rate AIS data

- Satellite based earth observation systems
- Vessel fleet simulation
- Satellite constellation simulation
- Software tools: WebLogic Server, Tomcat, Oracle Database, Enterprise Service Bus, PostgreSQL, JMS, J2EE.
- Software language: Java and JavaScript;
- Information systems and products based on Web technologies: architecture, development, operation and maintenance;
- Technical assessment of information systems based on Service Oriented Architecture;

Evidence:

- The tenderer must provide the aforementioned information filling in Appendix 1 section "Project".

#### **14. Award criteria**

Only the tenders meeting the requirements of the exclusion and selection criteria will be evaluated in terms of quality and price.

The contract will be awarded to the tenderer who submits the most economically advantageous bid (the one with highest score) based on the following quality criteria and their associated weightings:

1. **Quality criterion 1** ( $W_1 = 40\%$ ), Quality of the Services: For the services requested in Appendix 11 of these tender specifications, the tenderer shall describe how he plans to assure the quality of its services.
  - a. for Module 1 services the bidder shall describe the processes and team that will be put in place to ensure that the aforementioned services comply with the required service
  - b. for Module 2 service, the bidder shall describe for each of the scenarios below, the outlined plan to execute the project.
    - i. Scenario 1: increase in DPC system capacity, in order to allow it to process twice the nominal data volume (from 15 Million messages to 30 Million messages per day, while complying with the performance and availability requirements specified in Appendix 11.
    - ii. Scenario 2: System configuration when data provider adds a new satellite and a new ground station to its constellation.
2. **Quality criterion 2** ( $W_2 = 20\%$ ), Quality of the Project Management. For the services requested in Appendix 11 of this tender, the tenderer shall describe how he plans to assure the quality of Project Management. The tenderer shall at least address the following points:
  - a. A detailed description for the methodology to be used during the whole lifecycle of the framework contract (including further breakdown and description of the tasks).



- b. Description of the means, tools that the bidder shall use to conduct the activities, including procedures and tools to be used for unit test during tests.
- c. Provision of a proposal on the table of contents for the key deliverables (referring to the minimum deliverables and reports).
- d. Concrete reference to standards applicable for each type of task.

and based on the price criterion taking into account the following weighting:

3. **Price of the bid** ( $W_{Price} = 40\%$ ), The price of the bid shall be calculated as the sum of the following two prices:
- a. Module 1 – fixed price per year of the DPC’s corrective maintenance and operational support
  - b. Module 2 – the Price of the following standard scenario for services ( $P_{Scenario}$ ) that shall be calculated by multiplying the price per person day for each profile by a “coefficient” reflecting the relative use of each profile for the tasks foreseen in this framework contract (for Module 2):

	Price offered / Day / Profile in the bid A	Person days for the price evaluation B	Total A x B
Project Manager	pm	4	
Software Architect	sa	4	
Senior Application developer	sad	21	
Junior Application Developer	jad	56	
Database Administrator	dba	15	
Total for scenario		100	$P_{Scenario}$ $= \sum(A \times B)$

The price of the bid constitutes the sum of the prices for points 3a), and 3b) as identified above.

For all bids evaluators will give marks between 0-10 (half points are possible) for each quality criterion.

The score is calculated as

$$S = SQ + SP$$

where:

The average quality for quality criterion  $i$  is

$$Q_i = \frac{1}{\text{number of evaluators}} * \sum_{\text{evaluator}} \text{mark of the evaluator for quality criterion } i$$

The overall weighted quality is

$$Q = \sum_i Q_i * W_i$$

The score for quality is

$$SQ = \frac{Q}{Q \text{ of the bid with highest } Q} * 100 * \sum_i W_i$$

The score for price is

$$SP = \sum_i \frac{\text{lowest Price}_i \text{ of all bids}}{\text{Price}_i} * 100 * W_{\text{Price}_i}$$

Only bid that has reached a minimum of 60 % for  $Q_1$ , and minimum of 60 % for  $Q_2$  will be taken into consideration when calculating the score the score S.

Only if the bid reaches a minimum of 60 % for the score S, it will be taken into consideration for awarding the contract.

#### **15. Contracts will not be awarded to tenderers who, during the procurement procedure:**

- a) are subject to a conflict of interest
- b) are guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the contract procedure or fail to supply this information.

#### **16. False declarations**

Without prejudice to the application of penalties laid down in the contract, tenderers and contractors who have been guilty of making false declarations concerning situations referred to in points 13 and 14 above or have been found to have seriously failed to meet their contractual obligations in an earlier procurement or grant shall be subject to administrative and financial penalties set out in Article 145 of Commission Delegated Regulation of 29.10.2012 on the rules of application of Regulation (EU) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union.

#### **17. Intellectual Property Right (IPR)**

Please consult the contract for IPR related clauses.

If the results are not fully created for the purpose of the contract this should be clearly pointed out by the tenderer in the tender. Information should be provided about the scope of pre-existing rights, their source and when and how the rights to these rights have been or will be acquired.

In the tender all quotations or information originating from other sources and to which third parties may claim rights have to be clearly marked (source publication including date and place, creator, number, full title etc.) in a way allowing easy identification.

## **18. List of Appendices**

1. Template for bidder.
2. Software Requirements Specification (SRD).
3. Interface Control Document (ICD).
4. Operations User Manual (OUM).
5. Installation Manual (IM).
6. System and Application Technical Landscape.
7. EMSA Project Delivery.
8. EMSA Working Procedures.
9. Initial Quality Gate.
10. SafeSeaNet Ecosystem.
11. Corrective Maintenance and Operation Support Technical Specifications.