Tender Specifications
attached to the Invitation to tender

Invitation to tender N° EMSA/NEG/36/2016 for ICT Consultancy for Enterprise Architecture Assessment of SSN Ecosystem applications in the context of providing maritime data to FRONTEX.

List of abbreviations

Abbreviation	Definition
AIS	Automatic Identification System
CSN	CleanSeaNet
EMSA	European Maritime Safety Agency
EO DC	Earth observation Data Centre – a system in the SSN Ecosystem Architecture (an evolution of CSN)
EU	European Union
EU LRIT CDC	European Union LRIT Cooperative Data Centre – Another term identifying EU LRIT DC
FDT	Fixed Deliverables and Time
FRONTEX	EU Agency promoting, coordinating and developing European border management
GIS	Geographic Information System
ICT	Information and Communications Technology
IdM	Identity Manager (an Oracle application)
IMDatE	Integrated Maritime Data Environment – It will be upgraded in the future to what is to be known as "STAR"
IMDatE WUP	The web portal of the current IMDatE system
LRIT	Long Range Identification and Tracking.
LRIT DB	LRIT Database
LRIT IDE	LRIT International Data Exchange
LRIT SD	LRIT Ship Database
MAR-CIS	MARine Chemical Information sheets
MS	Member State
MSS	Maritime Support Services (of EMSA)
OGC	Open Geospatial Consortium
OLAF	EU anti-fraud office
OSB	Oracle Service Bus
SafeSeaNet	The EU system implementing the VTMIS Directive – an application operated and managed by EMSA
S-AIS	Satellite- AIS
SEG (SSN Ecosystem GUI)	The Graphical user interface that will provide in the near future the services currently provided by the SSN GI application in SSN, IMDatE WUP in IMDatE, LRIT web interface in EU LRIT CDC and CSN web interface.
SSN	SafeSeaNet
SSN (Ecosystem)	A "system of systems" includes, in addition to SSN EIS, STAR, EO DC and EU LRIT CDC
SSN AccIIS	SSN Accident/Incident Information System

Abbreviation	Definition
SSN GI	Central SSN Graphical Interface
SSN SI	SSN Streaming Interface
SSN TI	Central SSN Textual Interface
STAR	Ship Tracking, Awareness and Reporting data system, a system of the SSN Ecosystem
STIRES	SSN Tracking Information Relay and Exchange System – a component system of SSN that will be deprecated as soon as STAR will go into production.
STMID	Shore-based Traffic Monitoring Information Database
TOGAF	Acronym utilised for the Open Group Architecture Framework (http://www.opengroup.org/subjectareas/enterprise/togaf)
VDS	Vessel Detection System
VMS	Fishing Vessel Monitoring System
VTMIS	Vessel Traffic Management and Information System
VTMIS Directive	Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic information system and repealing Council Directive 93/75/EEC
VTS	Vessel Traffic Services
WFS	Web Feature Service

1. Introduction

The European Maritime Safety Agency (EMSA) was established under Regulation (EC) No 1406/2002 of the European Parliament and of the Council[1] for the purpose of ensuring a high, uniform and effective level of maritime safety.

Among its tasks, the Agency develops hosts, operates and monitors a number of applications (SafeSeaNet, LRIT CDC, STAR(IMDatE), EO DC – These applications are collectively to be understood as the SSN Ecosystem, described in high level in Appendix A) that provide operational services to a wide range of European Coastal States Administrations as well as other EU Institutions. Moreover these maritime applications continuously collect, process and fuse data that is provided to FRONTEX through customised technical interfaces.

The services provided to FRONTEX, from a business perspective, can be categorised currently as:
- Vessel Monitoring and Tracking Services
- Vessel Detection Services
- Anomaly Detection Services
- Activity Detection Services
- Vessel Reporting Services

From a technical perspective the services provided to FRONTEX can be classified as:

- Web Map Services: Based on Open Geospatial Consortium (OGC) standard WMS protocol aimed in for providing georeferenced map images over the Internet that are generated by a map server using data from a GIS database.
- Web Feature Services: Based on OGC standard WMS protocol the services provide an interface allowing requests for geographical features across the web using platform-independent calls.
- REST services: HTTP based services returning JSON documents.

Bidders should note that the EMSA applications providing position data for distribution to FRONTEX at present are able to process on average 20.000.000 messages per day at throughput rates between 100 to 250 messages per second (msg/sec). Changes in the architecture of STAR are under implementation to allow that the processing capacity to scale to ingestion rates of 3500 msg/sec. The messages originate from a variety of ship tracking systems, including Terrestrial and Satellite AIS, LRIT and VMS.

A high level diagram of FRONTEX components and their current interactions with other existing EMSA applications is provided in Appendix B. The diagram reflects the version 0.21 of FRONTEX module that entered into production in September 2016.

2. Objective, scope and description of the contract

2.1 Project Objective and expected outcome

This contract objective is the provision of ICT enterprise architecture assessment services.

In this respect, a thorough review shall be conducted, in light of the FRONTEX user/service requirements and the evolving technology landscape, of the on-going developments concerning the SSN ecosystem applications (SSN, STAR (IMDatE), SEG, EO DC, LRIT CDC) hosted and managed by EMSA in order to:

    a. Assess the overall existing architecture choices; and

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[1]   Regulation (EC) No 1406/2002 of the European Parliament and of the Council of 27 June 2002 establishing a European Maritime Safety Agency (OJ L 208, 5.8.2002, p. 1.).

b. Draw recommendations for improving / rationalising the architecture to optimise the availability/ scalability/ robustness and performance of the SSN Ecosystem providing services to FRONTEX.

The anticipated outcome of the architecture assessment services includes the following:

1. Documentation of the system architecture (charts, diagrams) according to enterprise architecture standards (e.g. TOGAF, or other equivalent standard/methodology):
   a. Analysis of the current system / module landscape (existing status).
   b. The "to-be" target enterprise architecture in light of state-of-the-art and industry best practices.
2. Provision of a detailed view of the "to-be" architecture of the FRONTEX services and recommendations for the "evolution" path (per software release) from current state at the time of contract signature to the proposed "to-be" state of the FRONTEX services.
3. Provision of recommendations for changes in the EMSA technologies (infrastructure/ middleware/ software development/ implementation tools).

2.2 General Conditions for the Provision of Services

Project team

The bidders may propose for the execution of the ICT enterprise architecture assessment services:

- Single-person team (enterprise architect) with proper qualifications (refer to 13.5.b)
- A team comprising a lead expert (the enterprise architect resuming the responsibility to execute the assignment) supported by contractor's additional technical resources. Such resources may support the enterprise architect to perform the activities under this contract and provide detailed understanding of the relevant technologies identified in landscape of EMSA (refer to .Appendix C and/ or the advantageous points in section 13.5.b)

Bidders may choose to propose, in the bid, at minimum one or up to 3 candidates for the position of the enterprise architect.

In the event that the contract is awarded to a company that shall propose more than one potential candidate for resuming the role of the enterprise architect, EMSA shall select, based on the information included in the bid and following assessment of the selection and award criteria as described in the following sections 13.5 and 14, the candidate most suitable and fitted for the performance of the contract. The successful contractor shall appoint this candidate as the enterprise architect responsible for performing and delivering the services under this contract.

The bidder should be aware that the Service Contract (see draft contract) includes provisions for:

a. At EMSA's demand, the contractor must be able to replace the enterprise architect originally selected, if it is proven incapable of carrying out the delivery of the services as described in the contract. In order to select the new person, EMSA can go back to the initial proposed pool of candidates and select another one of those originally proposed.
b. EMSA's right to cancel the contract. In accordance with the General Conditions for Service Contracts

Language

The working language of EMSA is English. The English language shall be used throughout the duration of any activities associated with this 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.

Used products and infrastructure

The methodology/ tools to be eventually used for preparing the deliverables (e.g. TOGAF) shall be chosen by the bidder and identified/ briefly described in the bid. The enterprise architect(s) to be assigned to the execution of the assessment services should have proven experience in mastering the tools to be utilised during the course of this project.

Third party licences for products used in the architecture assessment services

The offer shall cover the costs of any licenced special software product required to perform the assessment of enterprise architecture and/ or document its results.

Place of performance and access to EMSA environments

The place of performance of the assessment services shall be the EMSA premises (for a minimum of 40% of the working time of the enterprise architect assigned to the execution of the assessment services) and 60% maximum at contractor premises. The enterprise architect to be assigned to the architecture assessment services (or the lead enterprise architect in case of a team assigned to the architecture assessment services), during his presence to EMSA, shall be provided with office space and internet access facilities as well as, if to be requested, access to EMSA infrastructure and the test environments of the applications involved in the architecture assessment.

For the period working at EMSA the enterprise architect should use his (her) own laptop equipped with own tools with the understanding that this computer will not be connected to EMSA's internal network.

Work time

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 8.30 a.m. to 6 p.m. on normal working days.

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

3. Contract management responsible body.

EMSA – Unit C.4, in charge of Digitalisation and Applications Development will be responsible for managing the contract.

4. Project Planning

4.1 Main project deliverables

The outcome of the architecture assessment services shall be documented in a concise report (single volume or multi-volume comprising a number of booklets– detailed structure to be defined by the bidders) that shall comprise the following elements identified here-below as the main deliverables of the contract.

- **Deliverable A:** Chapter or booklet on the current SSN Ecosystem system architecture including relevant diagrams mapping the different views (e.g. Logical/ process/ development / physical).
- **Deliverable B:** Chapter or booklet providing a detailed assessment of the existing components / architecture of FRONTEX module.
- **Deliverable C:** Chapter or booklet on the proposed "to-be" SSN Ecosystem system architecture including relevant diagrams mapping the views (logical/ process/ development / physical) and scenarios.
- **Deliverable D:** Chapter or booklet presenting the detailed "to be" architecture of FRONTEX module including relevant diagrams mapping the views and scenarios.
- **Deliverable E:** Chapter or booklet on gap analysis. The deliverable will also include recommendations on the evolution path from the current (A and B) to the proposed "to-be" architecture (C and D).
- **Deliverable F:** An Executive Summary (distinct booklet or executive summary chapter) (accompanied by a PowerPoint presentation intended to present the findings of the assessment and the recommendations made to the management.

4.2 Other deliverables/ reports associated with the execution of the enterprise architecture assessment services:

The contractor should deliver the following additional reports:

a. At project kick-off:
   i. Updated Project plan:

   It must include at least project management approach/ methodology, scope, deliverables and milestones. The project plan is to be maintained / updated in agreement with EMSA during the whole duration of the contract.

b. Weekly reporting

   The contractor shall provide a simple "flash" report identifying, as a minimum, the status of on-going activities, progress status and issues foreseen.

c. "Formal" Meeting agenda and report

   The contractor shall be responsible to prepare the agendas and minutes of meetings where the participant list includes representatives of EMSA management.

5. Timetable

The estimated date for signature of the contract is end of November 2016.
The duration envisioned for the performance of the services is minimum 2.5 and maximum 6 months. The proposed duration of the architecture assessment shall be identified in the project plan to be included in the offer. The contract duration to be defined in the contract shall be based on the timeline included in the successful bid.
The dates of delivery of the deliverables shall be defined in the contract.

6. Estimated Value of the Contract

The maximum budget available for this contract is **EUR 60,000** excluding VAT.

7. Terms of payment

Payments will be made in accordance with the provisions of the draft contract available in the Procurement Section under the call to tender EMSA/NEG/36/2016 on EMSA's website (www.emsa.europa.eu).

8. Terms of contract (purchase order)

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

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

9. Subcontracting

If the tenderer intends to either subcontract 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. It should be noted that the 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[2]. 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. However, as the main working language of the Agency is English, bids should preferably be submitted in English and should in particular include an English version of the documents requested under points 13.5 and 14 of the present tender specifications. The tenderer must comply with the minimum requirements provided for in these tender specifications. This includes compliance with applicable obligations under environmental, social and labour law established by Union law,

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[2] To rely on the capacities of a subcontractor means that the subcontractor will perform the works or services for which these capacities are required.

national law and collective agreements or by the international environmental, social and labour law provisions listed in Annex X to Directive 2014/24/EU of the European Parliament and of the Council.[3]

The tenderer shall complete the Tenderer's checklist.

If the tenderer intends to either subcontract part of the work or realise the work in co-operation with other partners (Join Offers) he shall indicate it in his offer by completing the form "Information regarding joint offers and subcontracting".

The tender must be presented as follows and must include:

a) **A signed cover letter** indicating the name and position of the person authorised to sign the contract/purchase order and the bank account on which payments are to be made.

b) **The Financial Form** completed, signed and stamped. This document is available on the Procurement Section (Financial Form) of EMSA's website (www.emsa.europa.eu).

c) **The Legal Entity Form** completed, signed and stamped along with the requested accompanying documentation. This document is available on the Procurement Section (Legal Entity Form) of EMSA's website (www.emsa.europa.eu)

Tenderers are exempt from submitting the Legal Entity Form and Financial Form requested if such a form has already previously been completed and sent either to EMSA or any EU Institution. In this case 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 9, 12, and 13.2 of these specifications (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

A fixed price must be quoted for the provision of the services described in the section 2.1. The quotation shall be made on an "all inclusive" basis meaning that all the costs associated to the execution of the services (e.g. accommodation/ lodging cost of the enterprise architect in Lisbon, licences of tools used for the execution of the services, etc.) are included in the price offered.

Bidders should note:

a. Prices must be fixed amounts and non-revisable.
b. Prices must be quoted in euro.

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[3] Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65).

c. Under Article 3 and 4 of the Protocol on the privileges and immunities of the European Communities, the latter is exempt from all duties, taxes and other charges, including VAT. This applies to EMSA pursuant to the Regulation 1406/2002/EC. Therefore price and 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, technical and professional 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** available on the Procurement Section of EMSA's website (www.emsa.europa.eu).

13.2 Grounds for exclusion – Exclusion criteria

To be eligible to participate in this contract award procedure, a tenderer must not be in any of the following exclusion situations**:**

a) it is bankrupt, subject to insolvency or winding up procedures, its assets are being administered by a liquidator or by a court, it is in an arrangement with creditors its business activities are suspended or it is in any analogous situation arising from a similar procedure provided for under national legislation or regulations;

b) it is subject to a final judgement or a final administrative decision establishing that it is in breach of its obligations relating to the payment of taxes or social security contributions in accordance with the law of the country in which it is established, with those of the country in which the contracting authority is located or those of the country of the performance of the contract ;

c) it is subject to a final judgement or a final administrative decision establishing that it is guilty of grave professional misconduct by having violated applicable laws or regulations or ethical standards of the profession to which the person belongs, or by having engaged in any wrongful conduct which has an impact on its professional credibility where such conduct denotes wrongful intent or gross negligence, including, in particular, any of the following:

    i. fraudulently or negligently misrepresenting information required for the verification of the absence of grounds for exclusion or the fulfilment of selection criteria or in the performance of a contract;

    ii. entering into agreement with other persons with the aim of distorting competition;

    iii. violating intellectual property rights;

    iv. attempting to influence the decision-making process of the contracting authority during the award procedure;

     v.   attempting to obtain confidential information that may confer upon it undue advantages in the award procedure;

d) it is subject to a final judgement establishing that the person is guilty of any of the following:
   i. fraud
   ii. corruption
   iii. participation in a criminal organisation
   iv. money laundering or terrorist financing
   v. terrorist-related offences or offences linked to terrorist activities
   vi. child labour or other forms of trafficking in human beings as defined in Article 2 of Directive 2011/36/EU of the European Parliament and of the Council

e) the person has shown significant deficiencies in complying with the main obligations in the performance of a contract financed by the Union's budget, which has led to its early termination or to the application of liquidated damages or other contractual penalties, or which has been discovered following checks, audits or investigations by an Authorising Officer, OLAF or the Court of Auditors;

f) it is subject to a final judgement or a final administrative decision establishing that the person has committed an irregularity within the meaning of Article 1(2) of Council Regulation (EC, Euratom) No 2988/95

g) for the situations of grave professional misconduct, fraud, corruption, other criminal offences, significant deficiencies in the performance of the contract or irregularity, the applicant is subject to:
   i. facts established in the context of audits or investigations carried out by the Court of Auditors, OLAF or internal audit, or any other check, audit or control performed under the responsibility of an authorising officer of an EU institution, of a European office or of an EU agency or body;
   ii. non-final administrative decisions which may include disciplinary measures taken by the competent supervisory body responsible for the verification of the application of standards of professional ethics;
   iii. decisions of the ECB, the EIB, the European Investment Fund or international organisations;
   iv. decisions of the Commission relating to the infringement of the Union's competition rules or of a national competent authority relating to the infringement of Union or national competition law; or
   v. decisions of exclusion by an authorising officer of an EU institution, of a European office or of an EU agency or body.

13.3 Legal and regulatory capacity – Selection criteria

Not applicable for this tender.

13.4 Economic and financial capacity – Selection criteria

13.4.1 Requirements:
The tenderer must be in stable financial position and must have the economic and financial capacity to perform the contract.

13.4.2 Evidence:
Financial statements or their extracts for the last three years for which accounts have been closed.
Statement of the overall turnover and, where appropriate, 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, it 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 at any moment during the procedure any other document enabling it to verify the tenderer's economic and financial capacity.

13.5 Technical and professional capacity – Selection criteria

a) The suitability of the tenderer's organisational structure to perform the services covered by the contract.
The evidence to be provided should include:

i. An overview of the company departments mentioning the currently allocated number of staff and levels

ii. Proof that the tenderer (and/ or the subcontractor (s) the bidder will propose) has experience in similar ICT enterprise architecture assessments/ studies. References to projects need to be provided including:
- information of the role that the enterprise architect(s) to be proposed for the assignment have played in the project,
- scope and duration of the overall project
- dimension of the overall <u>development</u> phase (in person-days)
- How long the enterprise architect was assigned to the project for.

b) The tenderer has to have the appropriate professional capacity to perform the services covered by the contract.
The evidence to be provided should include:

A minimum of one / maximum of three CVs of proposed candidates expected to resume the role of enterprise architect responsible for the execution of the assessment services and the delivery of the results. His/her qualifications should meet the following requirements.

Education

- University degree(s) in the IT or Engineering field.
- Excellent English verbal and writing skills.

Professional experience (__minimum requirements for selection__)

- More than 10 years of ICT design and development experience including at least 5 years in an enterprise architect role. The CV shall include detailed and concrete references for the 10 years of experience.
- Proven experience in enterprise architecture, applications and distributed systems exchanging data at high rates (some EMSA systems need to process 3700 msg/ s) using similar protocols/ standards as those currently utilised by EMSA (e.g. TCP sockets, Json, WMS/ WFS/ SOAP/ REST, Websockets). At least one project reference should be included where the enterprise architect proposed had a leading role.

Advantageous points (__shall be considered for the award – refer to Quality criterion 1 and 3 in section 14. (1)__)

- Certifications directly relevant with the assignment (e.g. related to the tools and methodologies used during the assignment – e.g. TOGAF).

- Proven knowledge of the technologies / tools currently used in EMSA applications (Java EE, Oracle/ WebLogic products (Oracle 11.g/12g, OSB, etc.).
- Experience in open source products (e.g. Apache Spark/Storrm, Cassandra, Solr, Mongo DB) and new technologies already used for big data and streaming analytics, cloud computing (e.g., AWS, Azure, etc.) and geospatial services.
- Experience in vessel/ fleet tracking transport applications.
- Experience in applying complex data access/authorisation models.
- Communication and presentation skills.
- Analysis and problem solving skills.

13.6 Declaration of Honour

For this purpose, the Declaration of Honour available in the Procurement Section of EMSA's website (www.emsa.europa.eu) shall be completed and signed.

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 ($W_1 = 30$ %)**

   Quality compliance with the advantageous requirements identified in section 13.5. (b)**)**

2. **Quality criterion 2 ($W_2 = 30$ %)**

   Proposed methodology for executing the assessment taking into account the methodology's description in the bid. The description should make reference to the following:

   a. Description of the means, tools that the bidder shall use to conduct the architecture assessment.
   b. (in the case that the bidder will appoint a team for the execution of the enterprise architecture assessment services) Description of the qualifications of the staff that will support the lead enterprise architect performing the study and any specific tasks assigned to them (if bidder would propose a support team in the bid).
   c. Detailed list of deliverables, their respective content and including where possible samples/examples.
   d. Quality / completeness of the project plan and adequacy of timeline proposed.

3. **Quality criterion 3 ($W_3 = 20$ %)**

   Quality of the proposed approach for gathering information and addressing the challenges of the assignment

   The assessment shall be made on the basis of a short video that is to be included in a DVD attached to the offer (of minimum **5** minutes and max **8** minutes duration) where

the proposed candidate (s) as enterprise architect (s) shall explain with own words and presentation tools/ methods:

   a. the key challenges he (she) envisages that are to be faced during the execution of the enterprise architecture assessment; and

   b. the overall analysis approach to be followed for addressing such challenges. In this respect particular reference should be made to:

      i. The meaningful assumptions about the support expected to be provided by EMSA (in terms of meetings with applications' business and technical managers and/ or documentation); risks associated with non-fulfilment of these assumptions as well as risk mitigation techniques.

      ii. The working techniques for interacting with EMSA staff members and for identifying existing gaps.

And the price criterion and associated weighting:

4. **Price of the bid ($W_{Price} = 20\%$).**

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

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

The overall weighted quality is

$$Q = \sum_i Q_i * W_i$$

The score for quality is

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

The score for price is

$$PP = \sum_i \frac{lowest\ Price_i\ of\ all\ bids}{Price_i} * 100 * W_{Price_i}$$

Only bids that have reached a minimum of 60 % for Q_1, a minimum of 60 % for Q_2 and a minimum of 60 % for Q_3, will be taken into consideration when calculating the score for quality SQ, score for price SP and score S.

Only bids that have reached a minimum of 70% for the score S will be taken into consideration for awarding the contract.

15. Rejection from the procedure

Contracts will not be awarded to tenderers who, during the procurement procedure, are in one of the following situations:

a)   are in an exclusion situation;

b)   have misrepresented the information required as a condition for participating in the procedure or have failed to supply that information;

c)   were previously involved in the preparation of procurement documents where this entails a distortion of competition that cannot be remedied otherwise.

16. 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 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.

17. Appendices

Indicated below is the list of all Appendices relevant to this open tender procedure.

The bidder should note that Appendices A, B, C of the tender specifications only provide an overview of the detailed technical information related to SSN Ecosystem applications (such details are included in the relevant technical documents of each application). Should the bidder require additional information on EMSA applications, they can be made available upon written request to the dedicated email box NEG362016@emsa.europa.eu. This documentation will be provided directly to the bidder and not published on the EMSA website."

Appendix A	SSN Ecosystem - Guiding principles for system architecture
Appendix B	Component diagram FRONTEX module
Appendix C	EMSA Technical landscape