

Tender specifications

Attached to the Invitation to tender

Invitation to tender No. EMSA/OP/16/2017 for Earth Observation Data Centre (EODC) ORCHESTRA

Table of Contents

1	Introduction.....	2
1.1	Background.....	2
1.2	ORCHESTRA project	3
2	Objective, scope and description of the contract	5
2.1	Modules	5
2.2	Requirements specific to each type of service	6
3	Contract management responsible body	6
4	Project Planning	7
5	Timetable and deliverables	7
5.1.1	Module 1	7
5.1.2	Module 2	9
5.1.3	Module 3	9
6	Estimated Value of the Contract	10
7	Terms of payment	10
8	Terms of contract	10
9	Financial guarantees	10
10	Subcontracting	10
11	Requirements as to the tender	11
12	Price	12
13	Joint Offer	13
14	Information concerning the personal situation of the tenderer and information and formalities necessary for the evaluation of the minimum economic, financial and technical capacity required	13
14.1	Legal position – means of proof required	13
14.2	Grounds for exclusion - exclusion criteria.....	13
14.3	Economic and financial capacity – Selection criteria.....	14
14.3.1	Requirements:	14
14.3.2	Evidence:	15
14.4	Technical and professional capacity – Selection criteria.....	15
14.4.1	Requirements:	15
14.4.2	Evidence:	17

14.5	Declaration of Honour.....	17
15	Award criteria.....	18
16	Rejection from the procedure.....	21
17	Intellectual Property Right (IPR).....	22
18	Special negotiated procedure under Article 134(1)(e) RAP.....	22
19	List of Appendices.....	22

1 Introduction

The European Maritime Safety Agency (EMSA) was established under Regulation (EC) No 1406/2002 of the European Parliament and of the Council¹ for the purpose of ensuring a high, uniform and effective level of maritime safety. Among its tasks, the Agency supports Member States activities in the field of monitoring marine oil spills. Specifically European Directive 2005/35/EC requires the Agency to "work with the Member States in developing technical solutions and providing technical assistance in relation to the implementation of this Directive, in actions such as tracing discharges by satellite monitoring and surveillance". Consequently, the CleanSeaNet (CSN) service was set-up in 2007 and the Earth Observation Data Centre (EODC) started operations in 2011. It has been upgraded regularly since then.

More recently, Earth Observation (EO) products acquired by EMSA from different service providers and processed within the EODC have been distributed in the framework of other EMSA services (i.e. Integrated Maritime Services for FRONTEX fusion services, and COPERNICUS Maritime Surveillance). In parallel, EMSA needs to address the increasing demand for the integration of more satellite sensors and data sources (e.g. optical satellite imagery and specific data provided by users). Accordingly, the EODC must be able to handle a wide range of EO products, from multiple satellites, and providers and deliver value derived from EO data to a wide range of user communities. Additionally the EODC shall also enable the production of a wide set of statistics linked with service delivery (per type of service, per provider, per project, etc.). The Agency therefore intends to improve the current EODC so it can manage the high volume and variety of EO information that is a core component for EMSA's Integrated Maritime Services.

1.1 Background

In September 2014 EMSA agreed on a Roadmap for enhancement for EODC for 2014-2015. Following this roadmap, EMSA/OP/25/2015² was published and part of it, Lot 1 (EODC Processing), was awarded in 2016 and the new components - interfacing with current EODC components - are expected to become operational during 2017. This is illustrated in the following diagram:

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.). <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:208:0001:0009:EN:PDF>

² <http://ted.europa.eu/udl?uri=TED:NOTICE:224595-2016:TEXT:EN:HTML>

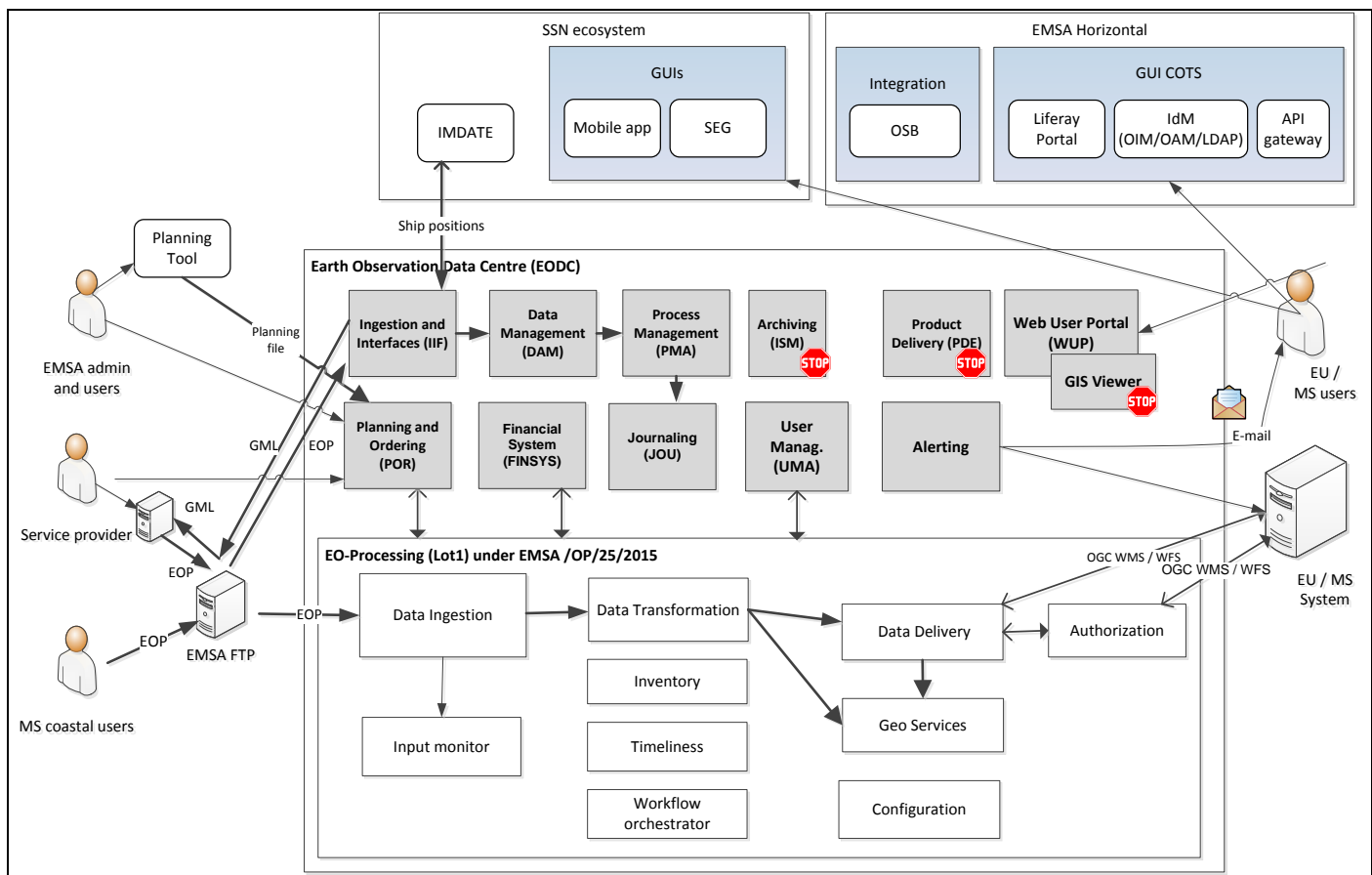


Figure 1 - EODC current architecture (with Lot1)

The current integration with Lot1 foresees a double ingestion of EO packages by both old Ingestion and Interfaces (IIF) module and new Lot1 Data Ingestion component.

ORCHESTRA project will finalize the upgrade of the initial EODC, re-implementing all the necessary modules to support the EO services provision to EMSA users.

1.2 ORCHESTRA project

ORCHESTRA aims to implement a platform to support the provision of all EMSA's Earth Observations services including CleanSeaNet and services to various communities of users (e.g. European Border and Coastguard Agency; Copernicus Maritime Surveillance). ORCHESTRA will replace all EO Services Provision modules and respective interfaces, currently being covered by the existing EODC indicated in Figure 1. ORCHESTRA is expected to enable additional resource efficiencies, enhancing stakeholder's service quality and align the EMSA's EODC system with the current business requirements.

ORCHESTRA will be composed of the following modules:

- Service Acquisition;
- Validation and Reporting;
- Configuration;

- Alerting;
- Access Rights Management.
- Horizontal components which include Graphical User Interface (GUI) and Import/Export functionalities.

The following elements/components of the current EODC are not foreseen to be included in the definition and implementation of ORCHESTRA:

- EO data processing: this module is currently under the Earth Observation Processing (Lot1) contract already awarded (EMSA/OP/25/2015).
- User authentication: will be implemented by EMSA's Identity Manager (IdM) (v2)

The diagram in Figure 2 presents a high level depiction of the interactions between ORCHESTRA and the other relevant EMSA components (both internal and external to the EODC application). Interfaces exposing information of the ORCHESTRA modules to other SSN ecosystem modules, are in scope of the development activities of this project.

Figure 2 also shows some of the expected interactions between ORCHESTRA and EO Processing (Lot1), some of them (such as getPackageInfo and getOrderDetails) already exist between current EODC and Lot1 and are described in the Lot1 Integration Interface Control Document (ICD) – Appendix E.

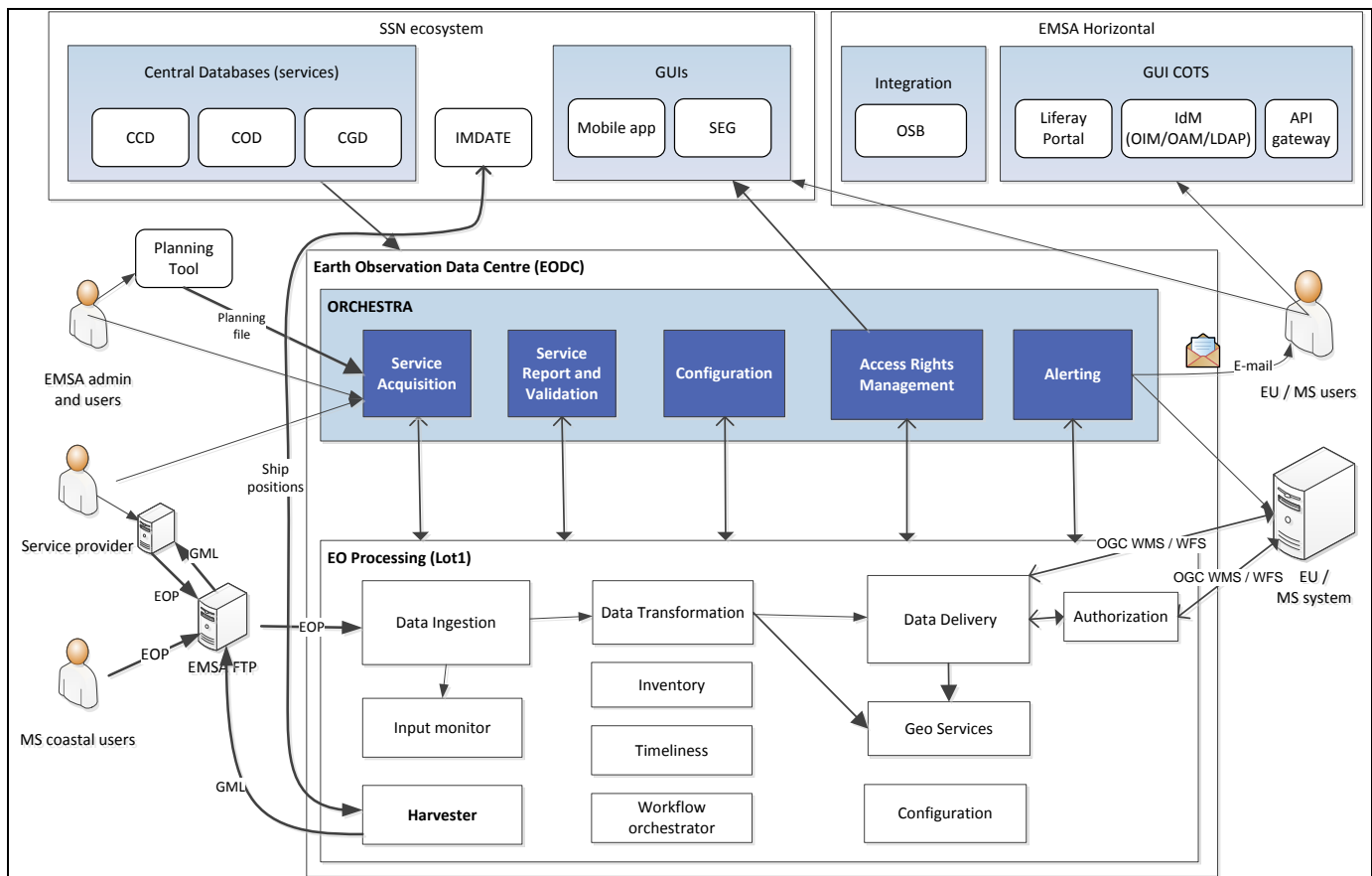


Figure 2 - EODC future architecture (with ORCHESTRA)

2 Objective, scope and description of the contract

The objective of this procurement procedure is to establish a framework contract to design, implement, maintain and improve all the above-mentioned ORCHESTRA components of EODC.

References in this document like “Chapter”, “Section” or “Paragraph” are referring to this document unless other reference documents are identified explicitly.

References in this document like “Bidder” or “Tenderer” are to be meant as an economic operator who submits a tender in response to this call for tender. The “contractor” is the company or consortium to which the contract will be awarded.

2.1 Modules

The framework contract covers the following tasks:

- Module 1** Design, development and implementation of the ORCHESTRA components as defined in Appendix A to these tender specifications;
- Module 2** Corrective maintenance and operational support. Deliverables include:
 - a. Provision of the services required taking into account technical requirements, existing procedures and associated service levels.
 - b. Results of analysis of each incident in TeamForge (the tool used by the Agency for Application Lifecycle Management – EMSA will provide the contractor with one account to access the EMSA TeamForge repository).
 - c. Monthly reports of the services provided.Requirements and procedures in Appendices F, G, H and Q shall be specifically followed as part of Module 2 activities.
- Module 3** Enhancements and new developments, to be identified during the course of this Framework Contract. Requirements and procedures included in Appendices I, P and R shall be specifically followed as part of Module 3 activities

For the purpose of this procurement procedure refer to the definitions of Helpdesk, Incident management and corrective maintenance, upgrading and development of a system in the glossary at the end of this document, in the section “Terms specific to this FWC”.

High level information on the SafeSeaNet Ecosystem architecture is provided in Appendix B. Additionally tenderers shall take into account in the design of their solutions the *EMSA System and Application Technical Landscape (Appendix I)* document, which provides information on the technical solutions and technologies used by the Agency.

2.2 Requirements specific to each type of service

The requirements hereunder apply, per type of task, to any request for services under the framework contract. More specific requirements will be introduced within the context of each specific contract.

The contractor will, *inter alia*, carry out the following tasks within the context of the foreseen modules.

Module 1 and Module 3 services (design, development, implementation, configuration, migration and deployment):

- a. Analysis of requirements;
- b. Review service interfaces;
- c. Prototyping;
- d. Development/Coding;
- e. Factory acceptance tests (FAT);
- f. Packaging and software delivery;
- g. Support to Site acceptance tests (SAT);
- h. Delivery of automated test scripts and code;
- i. Correction and bug fixing of delivered software releases;
- j. Support the deployment of the components into the EMSA infrastructure;
- k. Fine-tuning the services in order to meet the requested Quality of Service (performance, availability and capacity);
- l. Full system documentation, including, *inter-alia*, design documentation, installation instructions, system security guidelines, test plans and user manual.

Module 2 services (corrective maintenance and operational support):

- a. Control the processing of incidents, reported by EMSA support team and Maritime Support Services (MSS), 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. Fine-tuning the services in order to meet the requested Quality of Service (performance, availability and capacity);
- g. Support the definition of specific probes for monitoring the EODC in the production environment.

3 Contract management responsible body

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

4 Project Planning

The project lifecycle and deliverables are described in Appendix P: Project Delivery (these are relevant for Module 1 and 3).

On a quarterly basis, if requested by EMSA, the contractor shall organize a one day technical coordination meeting at EMSA premises, or via videoconference, followed by a detailed meeting report.

5 Timetable and deliverables

The estimated date for signature of the contract is in November 2017.

5.1.1 Module 1

All the requirements described in the Appendix A shall be implemented in a maximum four releases (release 1.0 to 4.0). While the scope of each release shall be agreed in the “Software development plan” and reviewed at the beginning of each design phase, the indicative plan is:

Table 1 - ORCHESTRA timetable

Release	Task Name	Duration	Start	Finish
N/A	Kick off meeting	1 day	04/12/17	04/12/17
Release 1	Design	3 wks	05/12/17	25/12/17
	Design review	2 wks	02/01/18	15/01/18
	Implementation	10 wks	16/01/18	26/03/18
	Factory acceptance test	1 wk	27/03/18	02/04/18
	Delivery and install	3 days	03/04/18	05/04/18
	Testing Release Candidates (RCs)	6 wks	06/04/18	17/05/18
	Rollout	3 wks	18/05/18	07/06/18
	Data Migration	1 wk	01/06/18	07/06/18
	Go-live	2 days	06/06/18	07/06/18
Release 2	Design	3 wks	06/04/18	26/04/18
	Design review	1 wk	27/04/18	03/05/18
	Implementation	8 wks	04/05/18	28/06/18
	Factory acceptance test	1 wk	29/06/18	05/07/18
	Delivery and install	2 days	06/07/18	09/07/18
	Testing (RCs)	4 wks	10/07/18	06/08/18
	Rollout	3 wks	07/08/18	27/08/18
	Data Migration	1 wk	21/08/18	27/08/18
	Go-live	1 day	27/08/18	27/08/18
Release 3	Design	3 wks	10/07/18	30/07/18
	Design review	1 wk	31/07/18	06/08/18
	Implementation	8 wks	07/08/18	01/10/18

Release	Task Name	Duration	Start	Finish
	Factory acceptance test	1 wk	02/10/18	08/10/18
	Delivery and install	2 days	09/10/18	10/10/18
	Testing (RCs)	4 wks	11/10/18	07/11/18
	Rollout	3 wks	08/11/18	28/11/18
	Data Migration	1 wk	22/11/18	28/11/18
	Go-live	1 day	28/11/18	28/11/18
Release 4	Design	3 wks	11/10/18	31/10/18
	Design review	1 wk	01/11/18	07/11/18
	Implementation	8 wks	08/11/18	02/01/19
	Factory acceptance test	1 wk	03/01/19	09/01/19
	Delivery and install	2 days	10/01/19	11/01/19
	Testing (RCs)	4 wks	14/01/19	08/02/19
	Rollout	3 wks	11/02/19	01/03/19
	Data Migration	1 wk	25/02/19	01/03/19
	Go-live	1 day	01/03/19	01/03/19
	IdM Role clean-up	1 day	04/03/19	04/03/19

EMSA proposes the following indicative distribution of work packages (WP) per release (this shall be considered non-binding and could be adjusted during the development phase):

- Release 1.0:
 - WP3 – Configuration;
 - WP5 – Access Rights Management;
- Release 2.0:
 - WP1.2 – Service Acquisition – Service request module;
 - WP1.4 – Service Acquisition – Approval workflow module;
 - WP2 – Service Report and Validation;
- Release 3.0:
 - WP4 - Alerting;
- Release 4.0:
 - WP1.1 – Service Acquisition – User request module;
 - WP1.3 – Service Acquisition – User validation module;

Project Management: Every quarter the contractor shall provide the status of project, including, if required proposals on updating project plan and risk registry. Every month the contractor shall provide the status of on-going tasks, resource usage, progress status and issues foreseen.

Design phase: During the Design phase the following documents needs to be provided by the contractor:

- Project Plan;
- Creation of Risk Registry and other project documents;
- Risk Management Plan;

- Draft Software Development Plan (SDP);
- Test Plan (TPL);
- Interface Control Document (ICD);
- Technical Design Document (TDD).

The Design phase is concluded with the approval of the documents by EMSA. The contractor shall consider that EMSA takes as minimum 2 weeks to review the documentation

Implementation phase: The implementation phase is concluded with the delivery in the EMSA's testing environment of the release (SAT). Before the delivery into the EMSA environments, the contractor shall call a meeting on its premises in order to review the releases (FAT).

Testing: Per release the contractor shall deliver two releases candidates (RC1 and RC2). When the RC1 is installed in testing environment 3 weeks of tests are foreseen. If there any issues or bugs are found, the contractor has a maximum of 2 weeks to deliver a new release (RC2) that shall address all the issues. Then EMSA can spend 1 week to run the final test and validate the release.

Delivery in Production: If the tests are successfully passed the release can be installed in EMSA's production environment. Only when the release is installed in production is it considered approved by EMSA.

Closure: Within 4 weeks since a release is delivered in production the contractor shall review the documents provided during the design phase and perform the necessary editions and updates to: Operational Maintenance manual (OMM) and the Incident Handling Procedures (IHP).

5.1.2 Module 2

Table 2 - List of deliverables for Module 2

Tentative Date	Deliverables	Comments	Event
N/A	Specific Contract: release 1.0 into production	Start when first release moved to production.	Signature of Specific Contract Annual meeting at EMSA
Every month from Go-Live of Release 1	Monthly reports	Evaluation of the quality of the service	Monthly conference calls
Yearly - End of Specific Contract (SC)	Final Report	Summarising the tasks performed, the software deliveries made, dates and references of the deliverables mentioned above and any recommendations not covered by these.	

5.1.3 Module 3

Table 3 - List of deliverables for Module 3

Tentative Date	Deliverables	Comments	Event
N/A	Request for quotation Request for services Specific Contract signed	As and when needed for specific developments Implementation plan and timetable discussed SC presented and signed during Kick-off meeting	Kick-off meeting SC signed

Go-Live date	Requested development delivered and fully tested		Deployment into production
End of SC	Final Report	The final report shall summarize: <ul style="list-style-type: none"> - the tasks performed; - the software deliveries made; - dates and references of the deliverables; - any recommendations or lessons learned from the development. 	

6 Estimated Value of the Contract

The maximum budget available for this contract is EUR 2,000,000 Euro excluding VAT, divided as follows:

- Module 1: up to EUR 1,200,000 (based on a fixed amount);
- Module 2: up to EUR 200,000 (based on a fixed amount);
- Module 3: up to EUR 600,000 (ad hoc based on specific requests – optional);

7 Terms of payment

Payments shall be issued in accordance with the provisions of the **draft IT framework service contract** available in the Procurement Section under the call to tender EMSA/OP/16/2017 on EMSA's website (<http://www.emsa.europa.eu>).

8 Terms of contract

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

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

9 Financial guarantees

A financial guarantee following the model and conditions in annex to the draft IT Framework Service Contract published within this tender will be applied for any specific contract involving an advance payment exceeding EUR 150,000. In such a case, the amount of the guarantee will be equivalent to the amount of any advanced payment.

10 Subcontracting

If the tenderer intends to either subcontract 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. 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 criteria³. 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.

11 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 14.4 and 15 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, 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.⁴

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 (Joint 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 letter** indicating the name and position of the person authorised to sign the contract and the bank account to 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 (<http://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 (<http://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 **10, 13, 14.2 and 14.5** of these specifications (part of the exclusion criteria).

³ To rely on the capacities of a subcontractor means that the subcontractor will perform the works or services for which these capacities are required.

⁴ 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).

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 **14.3** 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 **14.4** 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 **15** of these specifications.

Part E: Setting out **prices** in accordance with point 12 of these specifications.

12 Price

- a) Prices for EODC ORCHESTRA shall include:
1. A fixed price for Module 1 for the design, development and implementation of the business and technical requirements as defined in Appendix A. Estimated travel and daily subsistence allowance expenses (assuming two persons per meeting for the milestones indicated in the table in Section 5) must be included in this price. Price for Work Packages 1 to 5 is to be discriminated in the price table of Appendix T.
 2. A fixed price per year of corrective maintenance (Module 2 - Helpdesk and corrections). Estimated travel and daily subsistence allowance expenses (assuming one person attending one meeting of one day duration at Lisbon, per year) must be included in this price.
 3. For Module 3 a fixed price per person day for each of the following profiles of the contract:
 - i. Project Manager (PM);
 - ii. Senior Analyst (PA);
 - iii. User Experience Expert (PUX);
 - iv. Multimedia Designer (PMULTI);
 - v. Senior Programmer (PSP);
 - vi. Programmer (PP);
 - vii. Quality Assurance Officer (PQ);
 - viii. Tester (PT).

A price for travel and accommodation should 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. However, the tenderer should bear in mind that the prices for travel, accommodation and daily subsistence may not be higher than those mentioned in Annex VIII to the draft Framework Contract.

- b) Prices must be quoted in Euro (€).
- c) Prices must be fixed amounts, non-revisable and remain valid for the duration of the contract. Estimated travel and daily subsistence allowance expenses must be indicated separately. This estimate should be based on Articles I.3 and II.16 of the draft contract. This estimate will comprise all foreseen travels and will constitute the maximum amount of travel and daily subsistence allowance expenses to be paid for all tasks.
- d) 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 (EC) No 1406/2002. 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.

13 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.

14 Information concerning the personal situation of the tenderer and information and formalities necessary for the evaluation of the minimum economic, financial and technical capacity required

14.1 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 in the Procurement Section (Legal Entity Form) of EMSA's website (<http://www.emsa.europa.eu>).

14.2 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.

14.3 Economic and financial capacity – Selection criteria

14.3.1 Requirements:

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

14.3.2 Evidence:

- a) Financial statements or their extracts for the last three years for which accounts have been closed.
- b) Statement of the overall turnover and, where appropriate, turnover relating to the relevant services for the last three financial years available.
- c) 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 the provided documents are up-to-date. In this case the tenderer should simply indicate on the cover letter the procurement procedure where the evidence has been provided.
- d) 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 its 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.

14.4 Technical and professional capacity – Selection criteria

The tenderer's technical capacity will be evaluated on the basis of the following criteria that will be applied to the legal entity submitting the offer and not to any mother company or company of the same group. To prove their technical and professional capacity the tenderers shall provide proof of the following mandatory criteria with their application:

14.4.1 Requirements:

- a) The suitability of the tenderer's organisational structure to supply the services covered by the framework contract. This description should include:
 - i. An overview of the company departments mentioning the currently allocated number of staff and levels;
 - ii. Description of the relationship of this company and those of the group if relevant;
 - iii. Description of the quality assurance procedures.
- b) The tenderer's experience in design and implementation of complex information systems. The tenderer shall provide the description of at least 1 relevant design and implementation project within the last 5 years in each of the following categories:
 - (1) GIS based GUI;
 - (2) Workflow based GUI;
 - (3) Reporting, financial or billing GUI.

The tenderer shall provide this information on a per project basis, using the template provided in Appendix T. This information includes:

- Description of the project;
- Budget of the project (indicating company budget);
- Customers (if available);
- Role of the company in the project;

- Details of technical capabilities required for the project.

c) The suitability of the tenderer's key technical and management persons who will be delivering the service under the contract. The description should include detailed curriculum vitae, where the relevant professional experience of the proposed team for execution of the framework contract is mentioned.

Curriculum Vitae (CVs) for the following profiles are required: Project Manager (PM), Senior Analyst (PA), User Experience Expert (PUX), Multimedia Designer (PMULTI), Senior Programmer (PSP), Programmer (PP), Quality Assurance Officer (PQ) and Tester (PT). The minimum requirements per profile are:

Table 4 - Requested Education and Professional experience for each Profile

Profile	Education (Mandatory selection criteria)	Professional experience (Mandatory selection criteria)
Project Manager (PM)	<ul style="list-style-type: none"> - University degree(s) in the IT or Engineering field. - Excellent English verbal and writing skills. 	<ul style="list-style-type: none"> - More than 5 years of experience as a project manager of ICT projects (proven experience, not attendance of seminars) - Experience in projects involving different countries related to the production of systems and coordination with beneficiaries' personnel. - Experience in operational systems running on a 24/7 basis.
Senior Analyst (PA)	<ul style="list-style-type: none"> - University degree(s) in the IT field. - Excellent English verbal and writing skills. 	<ul style="list-style-type: none"> - At least 5 years of experience in projects involving GUI / presentation layer implementation for operational systems - At least 5 years of experience in analysing user requirements and translating them into functional, technical, and testing specifications. - More than 3 years of experience in system design activities - Experience in at least two GIS based web system projects, , demonstrated by the description of the performed projects;
User Experience Expert (PUX)	<ul style="list-style-type: none"> - University degree in multimedia, web design, or IT fields. - Excellent English verbal and writing skills. 	<ul style="list-style-type: none"> - Minimum 5 years' experience with graphical interface design and user experience in terms of desktop or mobile web interfaces, demonstrated by the description of the performed projects.
Multimedia Designer Expert (PMULTI)	<ul style="list-style-type: none"> - Degree (minimum 2 years post-secondary), or equivalent background knowledge in multimedia, web design, or IT fields. - Excellent English verbal and 	<ul style="list-style-type: none"> - Minimum 5 years previous experience in multimedia design projects, demonstrated by the description of the performed projects;

Profile	Education (Mandatory selection criteria)	Professional experience (Mandatory selection criteria)
	writing skills. -	
Senior Programmer (PSP) (minimum 2 CVs)	<ul style="list-style-type: none"> - University degree(s) in the IT field or Engineering field. - Excellent English verbal and writing skills. 	<ul style="list-style-type: none"> - At least 5 years' experience in the implementation of GUI / presentation layers for operational systems - At least 5 years of experience in the following technologies: Javascript, Java, HTML. - Experience in at least two GIS based web system projects
Programmer (PP) (minimum 2 CVs)	<ul style="list-style-type: none"> - University degree(s) in the IT field or Engineering field. - Good knowledge of English language; - 	<ul style="list-style-type: none"> - At least 3 years' experience in projects involving GUI / presentation layer implementation for operational systems - More than 2 years of experience in the following technologies: Javascript, Java and HTML.
Quality Assurance Officer (PQ)	<ul style="list-style-type: none"> - University degree(s) in the IT field or Engineering field. - Good knowledge of English language; 	<ul style="list-style-type: none"> - More than 5 years of working experience including at least 3 years in the IT sector; - 5 projects in relevant technologies (see in appendices the technologies used in EMSA applications); - 5 projects in the profile role
Tester (PT) (minimum 2 CVs)	<ul style="list-style-type: none"> - Upper secondary education (ISCED 3) - Good knowledge of English language 	<ul style="list-style-type: none"> - 2 years of relevant IT professional experience; - 2 projects using relevant technologies and tools, namely: SoapUI, ReadyAPI, Selenium or Robot Framework and JMeter; - 2 projects in the profile role

14.4.2 Evidence:

The detailed CVs of the team members who will be delivering the service under the contract should be provided by using the template in Appendix T to the tender specifications and the CVs in EuroPass format (Appendix U).

Names of the individual team elements assigned to the abovementioned positions are to be filled in in Appendix T to these tender specifications.

Bids that do not comply with each of the selection criteria under points 14.3 and 14.4 will not be taken into consideration for the award of the contract nor be evaluated against the award criteria.

14.5 Declaration of Honour

For this purpose the Declaration of Honour available on the Procurement Section of EMSA's website (<http://www.emsa.europa.eu>) shall be completed and signed.

Please note that **only upon request** and within the time limit set by EMSA the tenderer shall provide information on the persons that are members of the administrative, management or supervisory body, as well

as the following evidence concerning the tenderer or the natural or legal persons which assume unlimited liability for the debt of the tenderer:

For exclusion situations described in (a), (c), (d) or (f) of point 14.2 above, production of a recent extract from the judicial record is required or, failing that, an equivalent document recently issued by a judicial or administrative authority in the country of establishment of the tenderer showing that those requirements are satisfied.

For the exclusion situation described in (a) or (b) of point 14.2 above, production of recent certificates issued by the competent authorities of the State concerned is 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. Where any document described above is not issued in the country concerned, it may be replaced by a sworn statement made before a judicial authority or notary or, failing that, a solemn statement made before an administrative authority or a qualified professional body in its country of establishment.

If the tenderer already submitted such evidence for the purpose of another procedure, its issuing date does not exceed one year and it is still valid, the person shall declare on its honour that the documentary evidence has already been provided and confirm that no changes have occurred in its situation.

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 tenderer is required to submit a statement confirming that its situation has not changed.

15 Award criteria

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. Q1 - Quality criterion 1 ($W_1 = 15\%$): Quality of the proposed project management

The criterion will be assessed based on the following documentation, including:

- i. Project plan for the implementation of the requirements described in Appendix A;
- ii. Work breakdown structure;
- iii. Team composition and organization;
- iv. Detailed work plan and Gantt chart for all work packages;
- v. Clear allocation of tasks to team members, including person-day effort per work package;
- vi. Duration of the project (total and per work package) within the timelines described in "Point 5 Timetable";
- vii. Assessment of risks and specific mitigation measures. This assessment should include:
 - Description of the risk, associating it specifically with a WP (or within a WP to the specific development, if possible);
 - Probability and impact;
- viii. Description of the quality assurance plan for the project.

2. Q2 - Quality criterion 2 ($W_2 = 45\%$): Quality of the technical proposal for Module 1

The criterion will be assessed based on the technical proposal responding to the functional and technical requirements as provided in Appendix A. The proposal shall address as a minimum the following:

- i. Technical solution for implementing the ORCHESTRA's Module 1 requirements. The bidder shall review the ORCHESTRA Module 1 Technical Specification (Appendix A) and propose a solution considering the requirements presented in Appendix A. The bidder shall clearly highlight how the solution proposed fulfils the requirements of the mentioned appendix and the proposed solution should at least include:
 - How the business and technical requirements presented will be fulfilled;
 - How the solution proposed handles the different information types and workflows;
 - What technologies are proposed as part of the solution;
 - A clear list of dependencies. Should the implementation of a specific requirement depend on actions to be undertaken on EMSA's side, concerning existing applications or middleware, the interdependencies should be clearly highlighted in the offer;
 - Technical information and details included in the offer and the associated impact of implementing the proposed approach within EMSA existing systems/applications/ICT landscape.
- ii. 'Look and Feel' of the GUI, including at least:
 - Description of the look and feel of the GUI and how it would address functional and non-functional requirements, including flexibility, customization (by user and application administrator) and performance;
 - Mock-ups of the most representative layouts being proposed for the GUI.
- iii. Integration approach and plan
The bidder shall review and define the approach and plan for the integration of the Module 1's components. The integration approach and plan shall take into account the needs to integrate the subsystems into both the other EODC building blocks, and the other SSN Ecosystems components.
- iv. System Requirements and Integration
The bidder shall design, develop and deploy a solution that implements the following system requirements: availability, interoperability, scalability, maintainability, modularity, portability, recoverability, reliability, robustness, fault tolerance, in compliance with the requirements presented in Appendix A. If the bidder intends to address other system attributes, these will be considered as an advantage. Within the context of this tender, the bidder shall describe how it intends to: (i) implement, (ii) regularly measure (based on SMART criteria), and (iii) assess the quality of its proposal for the abovementioned system requirements.

3. Q3 - Quality criterion 3 ($W_3 = 10\%$): Content of the requirements compliance matrix and security compliance

The criterion will be assessed considering the information provided in the compliance matrix. Please note that the compliance matrix should not only indicate "yes/no/partial compliance" for each requirement, but provide clear information on the fulfilment of the requirement, justification of any decision or assumption and

explanation on the approach. This information should be provided using the template contained in Appendix V.

Additionally the Security Compliance Report (Appendix W) shall also be filled in by the bidder (rightmost column).

4. Price of the bid ($W_{Price} = 30\%$)

The price of the bid shall be calculated as the sum of the following three prices:

- The fixed price for the design, development and implementation of the module 1 technical requirements described in Appendix A;
- The fixed price per year multiplied by 4 (the number of potential module 2 specific contracts) of corrective maintenance and operational support ($P_{Module\ 2}$) based on the service level and conditions as laid down in Appendices P and Q;
- The Price of the following standard scenario for services ($P_{Scenario}$), under Module 3, 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 the framework contract. This scenario is not used for evaluating the compliance of the economical proposal against the framework contract (FWC ceiling), but to compare the different proposals of the tenderers.

Table 5- Defined Scenario

	Price offered / Day / Profile in the bid A	Person days for the price evaluation B	Total A x B
Project Manager	P_M	50	
Senior Analyst	P_A	50	
User Experience Expert	P_{UX}	30	
Multimedia Design Expert	P_{MULTI}	50	
Senior Programmer	P_{SP}	100	
Programmer	P_P	150	
Quality Assurance Officer	P_Q	20	
Tester	P_T	100	
Total for scenario			$P_{Scenario}$ $= \sum(A \times B)$

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 bids that have reached:

- a minimum of 60 % for Q_1 ,
- a minimum of 60 % for Q_2 ,
- 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 50 % for the score S will be taken into consideration for awarding the contract.

16 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.

17 Intellectual Property Right (IPR)

Please consult the draft framework 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 Special negotiated procedure under Article 134(1)(e) RAP

EMSA may at a later stage exercise the option to increase the estimated value of the contract via negotiated procedure with the successful tenderer in accordance with Article 134(1)(e) of the Rules of Application to the Financial Regulation.

19 List of Appendices

Below is the list of all Appendices of relevance to this tender procedure.

The bidder should note that Appendices C, D, E, G and H of the tender specifications only provide a summary of the relevant technical documents for the current Earth Observation Data Centre. Should the bidder require the referred Appendices in their entirety, they can be made available upon written request to the dedicated email box OPEN162017@emsa.europa.eu. This documentation will be provided directly to the bidder and not published on the EMSA website.

Appendices:

- A. ORCHESTRA – Technical Requirements
- B. SSN Ecosystem - Guiding principles for system architecture
- C. EODC Technical Design Document (TDD)
- D. EODC External Interface Control Document (EICD)
- E. EODC EOP Lot1 Integration ICD
- F. EODC Operational Maintenance Manual (OMM)
- G. EODC Incident Handling Procedures (IHP)
- H. EODC Installation Manual (INS)
- I. ICT Architecture, System and Application Technical Landscape
- J. Access and Identity Management Guide
- K. UserInfo service – API documentation
- L. Central Country Database (CCD) ICD
- M. Central Organization Database (COD) SIG
- N. Central Geographical Database (CGD) overview and interface
- O. SafeSeaNet Ecosystem Graphical User Interface overview
- P. Project Delivery
- Q. Service Procedures for Maintenance

- R. Initial Quality Gate for Java Projects
- S. EMSA Corporate Data Visualisation Guidelines
- T. Template for bidders
- U. CV Template
- V. Compliance Matrix
- W. Security Compliance Report
- X. CSN Alert Reports
- Y. CSN Alert Email
- Z. Re-opening of competition procedure example

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
CTM	Criticality/Time Matrix
CSN	CleanSeaNet
COTS	Commercial off-the-Shell
CMC	Control Management Console
CV	<i>Curriculum Vitae</i>
EC	European Commission
EICD	External Interface Control Document
EMSA	European Maritime Safety Agency
ENC	Electronic Nautical Chart
EO	Earth Observation
EODC	Earth Observation Data Centre (previously known as CSN DC)
EU	European Union
FAT	Factory Acceptance Tests
FTP	File Transfer Protocol
FWC	Framework Contract
GIS	Geographic Information System
GML	Geography Markup Language
GUI	Graphic User Interface
HTTP	Hypertext Transfer Protocol
ICD	Interface Control Document
ICM	Installation and Configuration Manual
ICT	Information and Communications Technology
IdM	Identity Manager (an Oracle application)
IHP	Incident Handling Procedures
INS	Installation Manual
IMDatE	Integrated Maritime Data Environment
IT	Information Technology
IPR	Intellectual Property Rights

Abbreviation	Definition
JSON	JavaScript Object Notation
LRIT	Long Range Identification and Tracking.
MAP	Maritime Application Portal
MARSURV	Maritime Surveillance
M5D	Message Digest Algorithm
MSS	Maritime Support Services
MSs	Member State(s)
NCA	National Competent Authority
NRT	Near Real Time
OGC	Open Geospatial Consortium
OMM	Operational and Maintenance Manual
RC	Release Candidate
RDF	Resource Description Framework
REST	REpresentational State Transfer
RPM	Red Hat Package Manager
ROA	Resource Oriented Architecture
S2S	System to System
SAR	Synthetic Aperture Radar
SAT	Site Acceptance Tests
SC	Specific Contract
SDI	Spatial Data Infrastructure
SDP	Software Development Plan
SO	Satellite Owner
SOA	Service Oriented Architecture
SOAP	Simple Object Access Protocol
SP	Service Provider
SRS	Software Requirements Specifications
SSN	SafeSeaNet
STP	Software Test Plan
TDD	Technical Design Document
TF	TeamForge
TPL	Test Plan
TS	Technical Specification

Abbreviation	Definition
VAS	Value-Added Service
VDS	Vessel Detection System
W3C	World Wide Web Consortium
WP	Work Packages
WWW	World Wide Web
XML	Extensible Markup Language

Glossary

Terms specific to the Maritime domain

The following table includes a glossary of the relevant terms commonly used in this Technical Specification (TS) and specific to Maritime domain.

Term	Definition
CleanSeaNet (CSN)	CSN is a satellite based monitoring system for marine oil spill detection and surveillance in European waters. The service is operated by EMSA and provides a range of detailed information including oil spill alerts to Member States, rapid delivery of available satellite images and oil slick positions. More information at: https://csndc.emsa.europa.eu/homepublic
European Maritime Safety Agency (EMSA)	EMSA provides technical assistance and support to the European Commission and Member States in the development and implementation of European Union (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 European Commission (EC). More info at: http://www.emsa.europa.eu

Terms specific to the Earth Observation domain

The following table includes a glossary of the relevant terms commonly used in this TS and specific to Earth Observation (EO) domain.

Term	Definition
Coverage	Coverages represent digital geospatial information representing space/time-varying phenomena.

Dataset	Dataset is a collection of data, vector or raster.
Dataset series	Dataset series is a temporal collection of datasets.
Earth observation	Earth observation is the gathering of information via remote sensing technologies supplemented by earth surveying techniques, encompassing the collection, analysis and presentation of geospatial data.
Geospatial	Geospatial are data and software components which deal with a geographic attributes.
Geospatial service	Geospatial service is a web service that delivers geospatial data.
GML	The Geography Markup Language (GML) is the XML grammar defined by the Open Geospatial Consortium (OGC) to express geographical features. GML serves as a modelling language for geographic systems as well as an open interchange format for geographic transactions on the Internet.
Ingestion	In this document ingestion has to be considered as synonymous of Data Acquisition (see the Background section).
Metadata	A Metadata is a document, typically in Extensible Markup Language (XML) format, that describes the content of a dataset or a geospatial service.
Process	A process is a software component that transforms data, provides services, or extracts information.
Raster	Raster dataset is a representation of the plant Earth as a surface divided into a regular grid of cells. Raster models are useful for storing data that varies continuously, as in an aerial photograph, a satellite image, a surface of chemical concentrations, or an elevation surface.
Satellite Owner	Satellite Owner is an organization that operates satellites.
Near-real-time	In the context of its use in CSN the term "near-real-time" refers the delay between the download of satellite images and the availability of this information through the CSNDC web services. This delay is defined in applicable Service's Framework Contract.

SAR	(As Synthetic Aperture Radar). SAR is a form of radar in which multiple radar images are processed to yield higher-resolution images than would be possible by conventional means. Either a single antenna mounted on a moving platform (such as an airplane or spacecraft or satellite) is used to illuminate a target scene or many low-directivity small stationary antennas are scattered over an area near the target area. The many echo waveforms received at the different antenna positions are post-processed to resolve the target. SAR can only be implemented by moving one or more antennas over relatively immobile targets, by placing multiple stationary antennas over a relatively large area, or combinations thereof. SAR has been extensively used in remote sensing and mapping. SAR images are used in VDS.
Sensors	Within the context of earth observation, sensors are satellite, UAVs, in situ or airborne devices which collect geospatial data.
Service Provider	Service Provider is the organization in charge to analyse an Earth Observation product in order to extract the information expected by the EMSA's.
Spatial Data Infrastructure	A Spatial Data Infrastructure a set of Geospatial services orchestrated in order to provide a Service.
Vector	Vector dataset is a representation of the planet Earth using points, lines, and polygons. Vector dataset are useful for storing data that has discrete boundaries, such as features, cost lines.

Terms specific to the ICT or Project Management domain

The following table includes a glossary of the relevant terms commonly used in this TS and specific to Information and Communications Technology (ICT) or Project Management domain.

Term	Definition
Application Programming Interface (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.

JavaScript Object Notation (JSON)	JSON is a lightweight data-interchange format. It is based on a subset of the JavaScript Programming Language
Interface	An interface is a shared boundary across which two separate components of system exchange information.
Interoperability	Within this context is the ability of systems to exchange information and accept services from other systems, in order to enable them to operate effectively together.
MD5	The MD5 is a message-digest algorithm is a widely used cryptographic hash function producing a 128-bit (16-byte) hash value , typically expressed in text format as a 32 digit hexadecimal number. MD5 is utilized in this TS to verify data integrity .
Process	A process is a software component that transforms data, provides services, or extracts information.
RDF	RDF is a family of World Wide Web Consortium (W3C) specifications . It has come to be used as a general method for conceptual description or modelling of information that is implemented in web resources .
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 systems 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.
SWOT	A SWOT analysis is a structured method used to evaluate the strengths, weaknesses, opportunities and threats of topic to address.

User interface	Everything designed into an IT system which includes one or more applications which a human being may interact with. This includes, but is not restricted to: display screen, keyboard, mouse, light pen, desktop appearance, illuminated characters, help messages, and how an application program or a Web site invites interaction and responds to it.
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 Specification and by several other related specifications, all of which are free open standards .

Terms specific to this FWC

Term	Definition
Helpdesk	Remote support to EMSA for the analysis and diagnosis of identified problems in the software application or hotfixes that are delivered under Modules 1 and 3.
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 ORCHESTRA 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">a. a “bug” (deviation of the system from the agreed specifications; and/ orb. changes of minor scale in the system behaviour.