

## **Tender Specifications**

### **Attached to the Invitation to tender**

## **Invitation to tender No. EMSA/NEG/30/2019 for Alternative Learning Management System - Proof of Concept**

### **1. Introduction**

The European Maritime Safety Agency (EMSA) was established under Regulation (EC) 1406/2002 for the purpose of ensuring a high, uniform and effective level of maritime safety, maritime security, prevention of, and response to, pollution caused by ships as well as response to marine pollution caused by oil and gas installations. Among its core tasks, EMSA has been entrusted to develop technical solutions, including the provision of relevant operational services, and to provide technical assistance and training to assist Member States in building up the necessary national capacity for the implementation of relevant legal acts of the Union. In addition, the Agency has been tasked to provide technical assistance, as regards relevant legal acts of the Union, to States applying for accession to the Union, and, where applicable, to European Neighbourhood partner countries and to countries taking part in the Paris MoU. Non-European States either bordering the European Union or countries taking part in the Paris MoU, perform similar inspections as a direct implementation of the International Conventions.

Since 2011, EMSA has implemented its e-learning capabilities through the development of a comprehensive set of distance learning modules that have been made available through its learning management system, the "Maritime Knowledge Centre" (MaKCs). The latter is hosted and operated by EMSA and is based on a Learning and Content Management System (LCMS) licensed to EMSA by "eXact Learning Solutions Srl".

The contractual framework governing the maintenance of existing contents and the development of new modules that are delivered through MaKCs will expire in May 2020. Furthermore, the Agency is developing a new training and professional development policy which foresees the design and delivery of online courses and blended educational solutions as from 2021.

To lay the groundwork for the future distance and online learning policy and strategy of the Agency, EMSA needs to assess what the market has to offer in terms of sound, cost-efficient, state-of-art alternative LCMS platforms, suitable for further expansion/ enhancement, allowing EMSA to steer its development according to the stakeholders' needs and to the Agency strategic view of future training and professional development.

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

The objective of this procurement is to award a Service Contract for the execution of a Proof of Concept (PoC) that will demonstrate the suitability of commercial off-the-shelf (COT) products which would support the future distance and online learning policy and strategy of the Agency.

The PoC's conclusions will also be instrumental to drafting the tender specifications of a subsequent implementation contract, should EMSA decide to change the existing platform at the end of the PoC.

## 2.1 Scope

The PoC shall, through the comparative assessment of commercial products which are widely available on the market and that comply with the requirements of this Tender Specifications, identify the most suitable and cost-efficient LCMS system that could replace the existing e-learning platform.

The PoC shall include an analysis of benefits and constraints connected to the implementation of the suggested solutions; and it shall describe and document the arrangements necessary to install, configure, customize, migrate exiting data to, test and deploy the proposed LCMS solution at EMSA premises.

## 2.2 Description of tasks

The Proof of Concept shall focus on the following tasks:

- 1) Market research and comparative analysis of COT products that shall comply with the requirements of this Tender Specifications.
  - a) The tenderer shall propose at least 3 COT products. The proposed LCMSs shall be classified as COTs; they should therefore be products widely available in the market that will allow significant savings and simplifications in future procurement, development and maintenance.  
The assessment shall take into account:
    - i. The compliance with the requirements of this Tender Specifications;
    - ii. The comparison elements listed under point d) below;
    - iii. The configuration required to achieve the need of the business (e.g. User Interface (UI)) customization to meet EMSA visual identity), and
    - iv. The configuration required to integrate the LCMSs with existing organizational systems.
  - b) The assessment shall indicate and describe any case of partial compliance or non-compliance with any of the requirements for the products assessed.
  - c) Extension of out-of-the-box functionalities via custom development should be avoided or otherwise properly described and justified, bearing in mind any long-term support and maintenance implications (such custom functionality will not be supported by the COTs vendors, so they would bring their own set of issues when upgrading the COT product).
  - d) The Market Analysis shall at least take into account the following elements of comparison and EMSA's preferred options specified hereinafter (the list is not exhaustive as more elements can be considered by the tenderer):

Comparison element	EMSA's preferred option
Fee type	Distributed free of charge
Source code availability	Open source
Licensing models	Perpetual licence, unlimited number of users
Installation type	On premise
Business orientation	Corporate training with competencies' tracking
eLearning standards compliance	SCORM 1.2
Content creation possibilities	Course creation and creation of native course materials
Programming language	None
Platform	Stand alone

Integration possibilities	Web API
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The meaning of each comparison element is provided below, according to EMSA's understanding:

- i. *Fee type*: considering the distribution model of the software, whether it is distributed free of charge or on paid basis.
- ii. *Source code availability*: considering the possibility of modifying the files which make up the system and allows its customization;
- iii. *Licensing models*: considering the limitations in use by e.g. the number of registered users, the number of connected users, the validity period, the number of courses, etc.
- iv. *Installation type*: considering the type of installation proposed or necessary for the specific solution (e.g. SaaS, own cloud deployment or physical infrastructure, etc.).
- v. *Business orientation*: considering the focus of the LCMS with regards to the final audience and objectives of its implementation (e.g. eCommerce, educational, corporate training, etc.)
- vi. *eLearning standards compliance*: considering the adherence to any international (e.g. SCORM) or local (e.g. national or regional) standards;
- vii. *Content creation possibilities*: considering the provision, as part of the LCMS solution, of internal or separated tools for course creation and creation of native course materials;
- viii. *Programming language*: considering the programming language in which the LCMS system is written;
- ix. *Platform*: considering whether the LCMS solution can be installed as a stand-alone application or need to be integrated with other software applications.
- x. *Integration possibilities*: considering the possibility to integrate the LCMS with other applications.

## 2) Cost analysis to justify the proposed solutions as the most efficient and sustainable option.

The contractor shall perform a cost analysis looking at the Total Cost of Ownership (TCO) of the LCMS products proposed pursuant to point 2.2.1.a):

- i. It shall assess both the purchase price and the costs of operation for at least 5 years;
- ii. It shall compare the advantages and disadvantages of purchasing and operating the proposed products, and
- iii. It shall describe the overall benefit to the Agency's for the long term.

## 3) Demonstration of the proposed solution at EMSA premises;

The tenderer shall:

- i. Demonstrate the suitability of at least 3 COTs to implement the LCMS requirements as per section 2.2.1, at EMSA premise; showing their viability and highlighting any technical issues it might have identified during the PoC;
- ii. Suggest the overall technical direction for the implementation of the assessed products;
- iii. Underline any constraints to the initial roll-out of a system into production.

The scope of the demonstration shall be limited to 1 end-user and 1 system-user.

#### 4) Evaluation of the Proof of Concept

The tenderer shall provide EMSA with a detailed Evaluation Report regarding the prospective feasibility of the new LCMS, with a view to assist the Agency understanding how the concept will perform as a product in production; identifying any open questions or highlighting any improvements to the initial scope of the PoC.

### 2.3 LCMS requirements

#### 1) The proposed LCMS solutions shall:

- a) allow branding free options, making it possible to customize the UI to match EMSA visual identity;
- b) enable the storage, extraction and restoring of contents and historical data (usage and learning data) in standard formats; ensuring that the same data can be extracted and migrated to another COT LCMS platform in the future, without extensive data transformation and manipulation;
- c) enable the author to re-use existing learning contents developed in SCORM 1.2 and SCORM 2004 formats, and currently delivered through the existing LCMS platform, for the creation of courses in the proposed LCMS;
- d) allow the import of existing historical usage and learning data (e.g. csv files) from the existing system to the proposed LCMS solution, to display such data in the proposed solution and to compile reports and statistics;
- e) provide the necessary means to control the activities which users are allowed to perform within the system, by real-time assignment and modification of user roles, managing course registration and customizing user profiles; and hence granting independency to user communities working within the LCMS;
- f) allow the management of communities (e.g. organizations, groups, cohorts) to enable dedicated access rights to different courses, contents, marking and ranking policies, certification and badging processes, statistical and reporting functionalities; based f.i. on the user's registration and authentication data (e.g. country, organization, or custom field value);
- g) provide the necessary tools for the creation of 'local administrators' to independently manage their user and courses, certification, reporting etc.; at community level;
- h) allow the import of user registration and authentication data (e.g. through CSV file) from the existing LCMS platform; to the sake of enabling existing users' access to the proposed LCMS solution, through the EMSA's IdM system;
- i) permit the inclusion of custom fields to the default user profile data;
- j) allow self-registration and self-enrolment; and manual registration and enrolment of users by an administrator;
- k) provide for the necessary means and tools for the creation of tailor-made courses using the LCMS embedded learning management tools or by uploading SCORM files. No coding skills shall be required to create courses.

The proposed solution shall embed learning management tools that shall allow:

- i. the course author to follow easy steps and intuitive action to add and remove contents, guiding him in the configuration and set-up of the course;
- ii. the author to categorize courses and contents and present courses in a grid or list view, helping prospective students to find the courses also through the use of search and filtering tools;
- iii. the use of multimedia files (e.g. audio, video, text, zip, pdf, HTML files; links; SCORM packages) that shall be uploaded in a repository and made available at any time for being reused in different courses;
- iv. the configuration of access levels for courses; set the maximum number of attendees, allow prospective students to be wait-listed; to specify the time the course and materials will remain available online;
- v. to configure course completion and certification criteria, set prerequisites for course enrolment;
- vi. grouping courses into categories (e.g. programmes, schemes, paths); with the possibility to select specific links, quizzes, documents, contents, SCORM packages or assignments that shall be included in the same category, setting up enrolment pre-requisites and completion criteria for each category;
- vii. embedding assessment tools like pre-tests, intermediate and final testing quizzes to assess students at different stages of a course.

The proposed LCMS shall embed tools and features that will enable the author to develop and set-up surveys and quizzes by using question pools, configuring the feedbacks for correct and wrong individual questions or entire quizzes; using a wide array of different question types. Categories might be assigned to individual questions or to entire quizzes and maximum or minimum number of attempts might be set for each question or entire quiz. Quiz questions results might be printed or e-mailed. The author shall be able to review quiz statistics, to analyse quiz reports, to resume quiz attempts; to add media files to the quizzes; and to create custom quiz certificates.

- l) embed student surveying tools to collect students' feedback;
  - m) embed communication tools that will enable the tutor to engage with students via synchronous and asynchronous discussions: forum, chat, internal messaging, e-mails, web-conferencing, course announcements, etc.;
  - n) provide tools and means to track students' performance, to apply custom grading scales and policies, to track offline assignments, to track the elearning material usage, and the like. The tutor shall be able to run statistics and compile reports making use of the tracking data.
- 2) The proposed LCMS solution shall be deployable within EMSA ICT infrastructure (e.g. interface with EMSA Identification Management System (IdM); access through EMSA maritime application portal). More information about EMSA ICT infrastructure and Identification Management System (IdM) can be found in appendixes A and B respectively.
  - 3) The platform shall allow the extensibility and enhancement of functionalities by integrating the software solution with third-party tools and services, preferably by deploy plug-ins, add-ons, Web APIs or other technological solutions that shall prioritize configuration over recoding and development.

## 2.4 Deliverables

The tenderer shall deliver a PoC Final Report containing:

- The Market Research and Comparative Analysis of COT products, as per point 2.2.1;
- The Cost Analysis, as per point 2.2.2;
- The Demonstration Installation and Deployment Guidelines, as per point 2.2.3;
- The PoC Evaluation regarding the prospective feasibility of the new LCMS, as per point 2.2.4.

## 3. Contract management responsible body

EMSA Unit B.3 in charge of Environment & Capacity Building - will be responsible for managing the contract.

## 4. Project Duration and Meetings

1. The Service Contract will have the maximum duration of six months. Estimated dates for the completion of the different tasks performed under the Service Contract are displayed under section 5.
2. The following meetings are envisioned. With the exception of the kick-off meeting (which should take place at EMSA premises), all other meetings may take place by videoconferencing:
  - **Kick-off meeting:** A kick-off meeting will be held in order to define the details of the work to be undertaken after the signature of the Service Contract;
  - **Intermediate meeting(s):** When deemed necessary by any of the parties of the Service Contract, intermediate meetings may be held to discuss issues relevant to the implementation of the contract;
  - **Milestone meeting(s):** a milestone meeting shall be held at the completion of a milestone, to enable the contracting parties to discuss the work accomplished and about future developments;
  - **Project Management meetings:** biweekly meetings will be organised to review the status of ongoing developments, discuss about pending issues and analysing potential or actual bottle-necks, risks and specific situations that may affect the successful conclusion of the project.

## 5. Timetable

The estimated date for signature of the contract is 6 September 2019. The following table introduces the milestones foreseen for the Service Contract and the preliminary deadlines.

Milestone	Expected Delivery
Signature of the contract	06/09/2019
Kick-off meeting	16/9/2019
Market assessment and cost analysis (Interim report)	18/11/2019
Demonstration at EMSA premises	20/01/2020
PoC Evaluation (Final report)	17/02/2020
Contract end	05/03/2020

## 6. Estimated Value of the Contract

The maximum budget available for this contract is EUR 30000 excluding VAT.

## 7. Terms of payment

Payments will be made in accordance with the provisions of the draft **Service Contract** available in the Procurement Section under the call to tender **EMSA/NEG/30/2019** on EMSA's website ([www.emsa.europa.eu](http://www.emsa.europa.eu)).

## 8. Terms of contract (purchase order)

When drawing up a bid, the tenderer shall bear in mind the terms of the draft Service 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 part of the work or realise the work in co-operation with other partners it shall indicate in its 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<sup>1</sup>. The exclusion criteria will be assessed in relation to each economic operator individually. Concerning the selection criteria, the evidence provided will be checked to ensure that the tenderer and its subcontractors as a whole fulfil the criteria.<sup>2</sup> However, the selection criteria may apply individually where it is relevant in view of their nature.

## 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 shall 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, 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.<sup>3</sup>

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) it shall indicate it in its offer by completing the form "Statement of Subcontracting / Joint

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

<sup>2</sup> To rely on the capacities of a subcontractor means that the subcontractor will perform the works or services for which these capacities are required.

<sup>3</sup> 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).



Offer". This document is available on the Procurement Section / Calls for Tenders (Documents for tenderer) of EMSA's website ([www.emsa.europa.eu](http://www.emsa.europa.eu)).

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, the bank account on which payments are to be made and the email address to be used for contacts during the procurement procedure.
- b) **The Financial Identification Form completed**, signed and stamped. This document is available on the Procurement Section (Financial Identification Form) of EMSA's website ([www.emsa.europa.eu](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 ([www.emsa.europa.eu](http://www.emsa.europa.eu))

Tenderers are exempt from submitting the Legal Entity Form and Financial Identification 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 shall 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 Technical and professional capacity (part of the Selection Criteria) set out under point **13.3** 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 **Award Criteria** set out under point **15** of these specifications;

**Part D:** Setting out prices in accordance with point **11** of these specifications.

## 11. Price

A price must be quoted for the Alternative Learning Management System - Proof of Concept.

Prices must be fixed amounts and non-revisable.

Prices must be quoted in euro.

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. However, the selection criteria may apply individually where it is relevant in view of their nature.

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 tenderer 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](http://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 exclusion situations listed in the Declaration of Honour.

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

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

##### **13.3.1 Tenderer's technical capacity**

###### **13.3.1.1 Requirements**

The tenderer's technical capacity will be evaluated on the basis of the tenderer's experience in configuring, customizing and deploying commercial off-the-shelf LCMS platforms; integrating LCMS platforms in organizational ICT infrastructures.

###### **13.3.1.2 Evidence**

To prove their technical capacity the tenderers shall provide a description of at least 1 but no more than 3 projects relevant to the tasks specified in point 2.2.1.a, 2.2.2 and 2.3, provided in English language, indicating the role of the company in the project; and describing the tasks performed by the company.

##### **13.3.2 Professional capacity**

###### **13.3.2.1 Requirements**

The suitability of the tenderer's key technical and management persons who will be performing the tasks under the service contract will be evaluated on the basis of their professional experience in project relevant to the tasks to be performed under the service contract.

###### **13.3.2.2 Evidence**

The bid shall include detailed curriculum vitae of the team members who will be performing the tasks under the service contract. The CVs shall be in EuroPass or equivalent format. A link may be provided. The tenderer may later-on replace key persons. Such replacement shall only happen with the explicit written agreement of EMSA..

## 14. Declaration of Honour (DoH)

Please note that the tenderer shall provide information with regards its situation and on the natural or legal persons that are members of the administrative, management or supervisory body or that have powers of representation, decision or control and beneficial owners.

The successful tenderer must provide the documents mentioned as supporting evidence before signature of the contract and within the deadline given by EMSA. This requirement applies to each member of the group in case of joint tender.

## 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. Quality criterion 1 ( $W_1 = 30\%$ ), preliminary analysis of LCMS products that meet the business and technical requirements of the tender. The bidder shall present the results in a synoptic table that will indicate the compliance of the LCMS solution with the requirements provided in sections 2.2.1.d and 2.3 with a description of advantages and disadvantages of each system;
2. Quality criterion 2 ( $W_2 = 20\%$ ), methodologies to carry out the tasks specified under section 2.2;
3. Quality criterion 3 ( $W_3 = 10\%$ ), description of Project Management methodology, including the project plan, the work breakdown structure with the description of work packages as well as the estimated effort for each task and a relevant schedule/time plan; roles, tasks and responsibilities of each member of the proposed team and description of their involvement and interaction within the project; methodology and plan for gathering and clarifying (if needed) business requirements from EMSA team;
4. Quality criterion 4 ( $W_4 = 10\%$ ), sample template of the Proof of Concept evaluation report with an introductory description of the main contents.

and the price criterion and associated weighting:

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

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

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

Only bids that have reached a minimum of 60 % in quality criteria 1 and 2 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 60 % 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 used in the award procedure where this entails a breach of the principle of equality of treatment, including distortion of competition that cannot be remedied otherwise.

## 17. Intellectual Property Right (IPR)

Please consult the contract for IPR related clauses.

If the results are not fully created for the purposes of the contract this shall be clearly pointed out by the tenderer in the tender. Information shall 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.