

Tender specifications

Attached to the Invitation to tender

Invitation to tender no. EMSA /OP/01/2016 for a study investigating cost efficient measures for reducing the risk from fires on ro-ro passenger ships (FIRESAFE)

1. Introduction

The European Maritime Safety Agency (hereafter EMSA or the Agency) was established under Regulation (EC) 1406/2002, as amended by Regulation (EU) 100/2013 of 15 January 2013, for the purpose of ensuring a high, uniform and effective level of maritime safety and prevention of pollution by ships. Among its tasks, the Agency provides technical and scientific assistance to the European Commission and European Union Member States on matters relating to the proper implementation of European Union legislation on maritime safety and pollution by ships, including technical assistance in the preparation of submissions to the International Maritime Organization (IMO) as appropriate (EMSA Work Programme 2016¹, §4.4).

More information about the Agency and its structure and activities can be found on the Agency's website <http://www.emsa.europa.eu>.

1.1. Background issues

The IMO Correspondence Group on Casualty Analysis (CA CG)² reviewed a number of fires on vehicle decks of either ro-ro passenger or ro-ro cargo ships took place in the period from 1994 to 2011. Their report of March 2013 noted:

"61 There have been a number of significant fire incidents on ro-ro passenger vehicle decks since 1994 and there is no sign of these diminishing. Since 2002 there has been a very serious incident every other year, resulting in six constructive total losses.

62 A significant number of the incidents have occurred as a result of electrical fires, particularly relating to refrigerated trailers, but also in some cases from the ship's own equipment.

63 Many of the findings of the casualty investigation reports studied reiterate well-known problems, e.g. the need to deploy drencher systems early in the fire, problems associated with water accumulating on the vehicle decks, structural fire integrity and fire containment."

This report was brought to the attention of MSC at its 92nd session and the relevant recommendations were forwarded to the SDC 1 and the SSE 1 sub-committees³. However, in the absence of any intervention, SDC

¹ As adopted by the EMA Administrative Board at its 40th meeting in November 2014 and aligned to the outcome of the EU budgetary procedure

² Document FSI 21/5

³ Documents SDC 1/24/1 and SSE 1/20

decided to invite “interested Member Governments and international organizations to submit proposals for new outputs to the Committee”⁴.

EMSA has further analysed this type of accident using the in-house EMCIP database (European Marine Casualty Information Platform which is managed by EMSA), as well as the MARINFO database which is populated with data from four commercial providers. This analysis has shown that the number of fires on ro-ro decks remains at high levels, including very serious accidents of which the NORMAN ATLANTIC and the SORRENTO are the most recent.

Statistics on this issue present a compelling need to consider whether any practicable solutions could be found to reduce the risk posed by fires on ro-ro decks.

1.2. EMSA initiative

In September 2015, EMSA held a workshop on fires on ro-ro decks for maritime administrations and accident investigation bodies, together with relevant speakers from industry. Following this workshop, a Group of Experts (GoE) was formed to discuss and further analyse this issue. One of the first tasks of the group was to evaluate and score the different risk areas that were identified in the casualty analysis correspondence group of the IMO FSI sub-committee which led to the development of document FSI 21/5.

The results of this exercise showed that the experts consider that *Electrical Fire as ignition risk* and *Fire Extinguishing Failure* are the greatest risk contributors. Consequently, it was proposed that EMSA will initiate the present study in order to further investigate these two risks and potential risk control options.

2. Objective, scope and description of the contract

EMSA intends to conclude a Service Contract for the provision of a study in two parts, investigating risk control options (RCOs) for mitigating the risk from fires on ro-ro decks in relation to *Electrical Fire as ignition risk* and *Fire Extinguishing Failure*. The study shall encompass both newbuildings and existing passenger ships. Information from other research projects shall be used for further analysis while strictly avoiding duplication of the work.

At the finalization of the two parts of the study, a coherence check shall be carried out in order for EMSA to assess whether there is an overlap in the impact of the suggested RCOs.

2.1. Electrical fire as ignition risk (first part)

2.1.1. Objective and scope

The main objective of the first part of the study shall be to identify a range of RCOs and assess those most likely to be cost beneficial in relation to cabling and electrical equipment faults leading to electrical fires on any ro-ro passenger ship, considering both open and enclosed ro-ro spaces. The work carried out in the “*Study on fire safety in connection with the transport of vehicles with electric generators or electrically powered vehicles*”

⁴ Document SDC 1/26, 24.6

on ro-ro and ro-pax ships” published by the Federal Ministry of Transport and Digital Infrastructure (Germany) which analyses similar issues, shall also be taken into consideration without being duplicated.

Overall, common tools used in risk analysis shall be used when carrying out the study as described in the Formal Safety Assessment (FSA) Guidelines of IMO. EMSA will make relevant accident data available to the contractor from the EMCIP and MARINFO databases, as far as this is permitted by disclosure clauses.

The analysis shall address both newbuildings and existing ships and if necessary, shall study separate RCOs taking into account the differences between the two groups.

2.1.2. Description

By the nature of their operations, ro-ro passenger ships tend to have long vehicle decks (open or enclosed), thereby creating very large un-subdivided areas. The short distance between vehicles, which often contain a considerable amount of combustible material, allows fire to spread quickly over the vehicle deck. In addition, the low ceiling level also creates conditions for a rapid fire growth⁵.

The main fire hazards and ignition sources from previous accidents are included in table 1 of Annex 6 of FSI 21/5 which is reproduced below:

Table 1 - Fires on ro-ro passenger ships from 1994 to 2011 (FSI 21/5)

Fire in vehicle cab	Electrical fire on vehicle	Fire on reefer (elect.)	Fire on reefer (other cause)	Vehicle engine fire (general)	Fire on other cargo unit	Fire in ship's equip.	Other cause	TOTAL
12	10	12	8	7	9	6	9	73

It was further reported in FSI 21/5 (Annex 6, paragraph 14) that “the biggest source of fires has been from reefer containers (20), 12 of which were electrical fires. Electrical fires in vehicles also represent a significant portion of the total. The six incidents related to ships' equipment were:

1. A fire started in a switchboard in the ballast control room located on the vehicle deck,
2. An electric motor providing power for an after door and stern ramp overheated,
3. A transformer providing ship's power for reefer units overheated
4. A cable providing ship's power to a reefer was frayed
5. Crew were hosing down and shorted a non-watertight electrical junction box.
6. The fire on *Commodore Clipper*, while considered as starting in a reefer unit, was a result of a fault in the ship's power cable connection to the reefer.”

The research project by Germany (SSE 2/INF.3)⁶ focussed on electrically powered vehicles (Battery Electric Vehicles (BEV) and Hybrid Electric Vehicles (HEV)), fuel cell vehicles and vehicles with refrigeration units that are connected to the ship's power distribution system. The expected frequencies taken into account in that

⁵ An analysis of fixed water sprinkler systems on ro-ro decks – Rasmus Frid and David Palm, Department of Fire Safety Engineering and Systems Safety, Lund University, Sweden

⁶ Study on fire safety in connection with the transport of vehicles with electric generators or electrically powered vehicles on ro-ro and ro-pax ships – BMVBS, Federal Ministry of Transport, Building and Urban Development

project were based on values from the SAFEDOR project that had considered incidents between 1994 and 2004.

The project made specific recommendations that aimed to reduce the ignition risk from these categories of vehicles. Among the recommendations, the report advocated *IACS Recommendation No 137 "Recommendation for protection of socket outlets for road freight units" for HGU trailers as well as for charging cables*. It is recognised that this recommendation tackles a very important issue, on which there is limited other information or 'best practices' available.

Based on the above information, the contractor shall perform a risk assessment following the methodology described in the FSA Guidelines (MSC-MEPC.2/Circ.12/Rev.1), leading to a range of proposed RCOs in relation to cabling and equipment faults leading to fires. The contractor shall assess the RCOs that are most likely to be cost beneficial for both newbuildings and existing ro-ro passenger ships. More specifically:

- Step 2 of the FSA process as described in the FSA Guidelines; a partial risk analysis shall be performed in order to quantify the probabilities of occurrence using up-to-date (until 2015) accident data in relation to electrical fires. The contractor shall take into account information that will be provided by EMSA stemming from the work of the GoE regarding the structure of the risk model. A sensitivity and uncertainty analysis shall also be performed;
- Step 3 of the FSA process; risk control options shall be developed together with the relevant quantitative reduction in risk. At least two RCOs shall be to the Agency's satisfaction before proceeding to the next step;
- Part of step 4 of the FSA process; the RCOs defined in step 3 shall be analysed in a way to facilitate the understanding of the costs and benefits resulting from the adoption of an RCO and the pertinent costs and benefits for these RCOs shall be estimated. Finally, the cost-effectiveness of the RCOs shall be expressed in terms of suitable indices.

Should it be necessary to visit existing ships in order to retrieve relevant information, provisions of anonymity shall be granted.

2.1.3. Deliverables

The contractor shall present the information detailed in 2.1.2 as the first part of the final report of the study. Following the delivery of the final report, EMSA may produce comments with regard to its contents and possibly also provide contributions from expert parties. The contractor shall duly consider these comments, provide EMSA with a response thereto and, if deemed necessary review the final report to reflect additional, relevant elements arising from such comments.

2.2. Fire extinguishing failure (second part)

2.2.1. Objective and scope

The main objective of the second part of the study shall be to identify a range of RCOs and assess those most likely to be cost beneficial in relation to fire extinguishing failure on board any ro-ro passenger ship, considering both open and enclosed ro-ro spaces.

Overall, common tools used in risk analysis shall be used when carrying out the study as described in the FSA Guidelines of IMO. EMSA will make relevant accident data available to the contractor from the EMCIP and MARINFO databases, as far as this is permitted by disclosure clauses.

The analysis shall address both existing ships and newbuildings, and if necessary shall study separate RCOs taking into account the differences between the two groups.

2.2.2. Description

The vast majority of the relevant accident investigation reports highlight the importance of early detection of fire and quick activation of the fire extinguishing means. Ships with open or closed ro-ro decks would have different accident scenarios, and would require different risk mitigation measures.

The main problems encountered for fire extinguishing are mostly related to the human factor (inappropriate crew actions and lack of training) and fixed fire extinguishing installations. With regard to the latter, extensive research has already been carried out in the past (e.g. IMPRO project) which has led to the revision of the prescriptive requirements of fixed water based fire-fighting systems but not the performance based option of the relevant revised Guidelines⁷.

Furthermore, the following issues in relation to fixed fire extinguishing systems have been recognised in different sources:

- The pumping efficiency of the fixed fire extinguishing systems has been questioned in relation to its coverage (e.g. KRITI II accident, where 7 sections were opened simultaneously).
- The KRITI II accident investigation report further stated that two out of the three sprinkler heads that were tested from the main area where the fire occurred were found clogged.
- The IMPRO project demonstrated the decrease of the drencher head effectiveness in the case of shielded fires.
- FSI 21/5 reported that in the UND ADRIYATIK and PEARL OF SCANDINAVIA cases, benefits from the use of automatic systems were observed
- FSI 21/5 also points out that there were 7 cases of unsuccessful or partially successful deployment of the drencher system. The study by Germany⁶⁶⁶ reported that *"It could make sense to have the fire extinguishing system (water spray system or high pressure water mist system) start automatically after detection by the fire detection system to contain fires already at a very early stage"* and that pop-up nozzles may be advantageous in some cases but only for newbuildings due to the structural complexity of such a system.
- In some cases, the remotely operated systems were found to be problematic (LISCO GLORIA, UND ADRIYATIK), while in the case of the NORMAN ATLANTIC, there were questions about whether the correct drencher systems were selected, possibly due to the proximity of the control panel to the fire.

In relation to crew actions and relevant training, it was seen in some cases (LISCO GLORIA, UND ADRIYATIK) that the human factor could also be critical and some inappropriate actions in real accidents were analysed. In addition, many of the accidents considered in the 2015 workshop demonstrated that manual fire-fighting is very often nearly impossible due to the small space between vehicles (JOSEPH AND CLARA SMALLWOOD).

Since significant research has already been performed in relation to the required pressure of the fixed fire-extinguishing systems, this study shall focus more on the unsuccessful or partially successful deployment of drencher systems. It is important to get a better understanding why problems occur and to find cost effective risk control options that would mitigate the risk from these incidents.

Based on the above information, the contractor shall perform a risk assessment following the methodology described in the FSA Guidelines (MSC-MEPC.2/Circ.12/Rev.1), leading to a range of proposed RCOs reducing the risk of unsuccessful or partially successful deployment of drencher systems. The contractor shall

⁷ MSC.1/Circ.1430 Revised Guidelines For The Design And Approval Of Fixed Water-Based Fire-Fighting Systems For Ro-Ro Spaces And Special Category Spaces

assess the RCOs that are most likely to be cost beneficial for both newbuildings and existing ro-ro passenger ships. More specifically:

- Step 2 of the FSA process; a partial risk analysis shall be performed in order to quantify the probabilities of occurrence using up-to-date (until 2015) accident data. The contractor shall take into account information that will be provided by EMSA stemming from the work of the GoE regarding the structure of the risk model. A sensitivity and uncertainty analysis shall also be performed;
- Step 3 of the FSA process; risk control options shall be developed with the relevant quantitative reduction in risk. At least two RCOs shall be to the Agency's satisfaction before proceeding to the next steps;
- Part of Step 4 of the FSA process; the RCOs defined in step 3 shall be analysed in a way to facilitate the understanding of the costs and benefits resulting from the adoption of an RCO and the pertinent costs and benefits for these RCOs shall be estimated. Finally, the cost-effectiveness of the RCOs shall be expressed in terms of suitable indices.

Should it be necessary to visit existing ships in order to retrieve relevant information, provisions of anonymity shall be granted.

2.2.3. Deliverables

The contractor shall present the information detailed in 2.2.2 as the second part of the final report of the study. Following the delivery of the final report, EMSA may produce comments with regard to its contents and possibly also provide contributions from expert parties. The contractor shall duly consider these comments, provide EMSA with a response thereto and, if deemed necessary review the final report to reflect additional, relevant elements arising from such comments.

3. Contract management responsible body

EMSA– Unit B.2.1, in charge of Ship Safety, will be responsible for managing the contract.

4. Project Planning

4.1 Reporting

The report shall comprise the two parts as required in sections 2.1.3 and 2.2.3 of these tender specifications. It shall be supplied in electronic form and one copy in paper form.

The report shall be written in clear, concise and correct English.

The report shall be fully proof-checked by the contractor and presented in the style / layout described below.

As regards the editorial features of the reports, the contractor shall adhere to the following:

- The text font shall be 'Verdana'; font style regular; size 10.
- No bold font shall be used.
- The cover sheet of the report can be formatted as per contractor design. The rest of the report text shall be delivered in "Verdana" font as described above.

The report shall include:

- a contents page that links to the relevant sections;

- a figures page that links to the relevant figures;
- a tables page that links to the relevant tables;
- an abstract of no more than 200 words and an executive summary of maximum 6 pages;
- the following standard disclaimer:

“The information and views set out in this [report/study/article/publication...] are those of the author(s) and do not necessarily reflect the official opinion of EMSA. EMSA does not guarantee the accuracy of the data included in this study. Neither EMSA nor any person acting on EMSA’s behalf may be held responsible for the use which may be made of the information contained therein.”

4.2 Meetings

The contractor shall hold a kick-off meeting with EMSA, at the contractor’s premises or other place of the contractor’s choice during the first month of the implementation of the contract.

At the completion of the final report the contractor shall organise a meeting at the contractor’s premises or other place of the contractor’s choice to present to EMSA, and discuss in detail, the results of the study. At the end of each month of the study (every four weeks starting from the signing of the contract) web-meetings shall be arranged in order to report on the status of the study.

The contractor shall also present the results of the study to the workshop on fires on ro-ro decks of 2016 that is expected to be held at EMSA’s premises at the end of November 2016. The contractor shall cover all expenses in relation to this presentation within the price of the provided service.

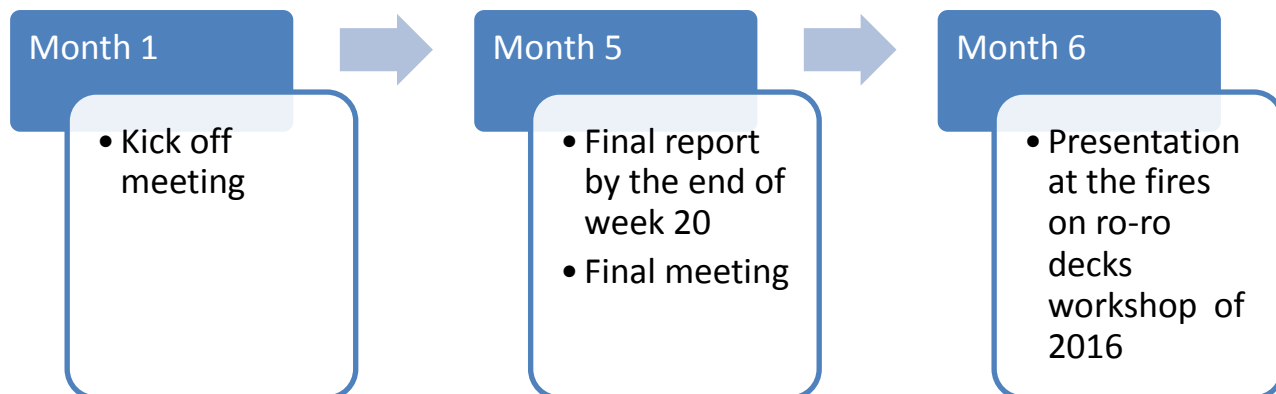
Note: If the submitted reports are not of a standard deemed by EMSA to be sufficient, they will be returned to the contractor with appropriate comments, who will be responsible for their revision or rewriting.

Finally, the contractor shall appoint a dedicated contact person who will establish and maintain direct communication with EMSA regarding any technical or contractual issues.

5. Timetable

The estimated date for signature of the contract is late May 2016.

The timetable is set based on the required deliverables and meetings of the study and shall be as follows:



As can be seen from the above, a maximum duration of 20 weeks shall be foreseen for the delivery of the final report, while a presentation at the fires on ro-ro decks workshop of 2016 shall be held after the approval of the final report by EMSA.

6. Estimated Value of the Contract

The maximum budget available for this contract is EUR 150.000 excluding VAT.

7. Terms of payment

Payments shall be issued in accordance with the provisions of the **draft service contract** available in the Procurement Section under the call to tender EMSA/OP/01/2016 on EMSA's website (www.emsa.europa.eu).

8. Terms of contract

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

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

9. Financial guarantees

N/A

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 criteria⁸. 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 14.5 and 15 of the present tender specifications.

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

Tenderers are exempt from submitting the Legal Entity Form and Financial Form requested if such a form has already previously been completed and sent either to EMSA or any EU Institution. In this case the tenderer should simply indicate on the cover letter the bank account number to be used for any payment in case of award.

Part A: All the information and documents required by the contracting authority for the appraisal of tenders on the basis of the points **13, 14.2 and 14.5** of these specifications (part of the exclusion criteria).

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

⁸ To rely on the capacities of a subcontractor means that the subcontractor will perform the works or services for which these capacities are required.

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 shall be quoted for the entire study as defined in section 2 above.
- b) Prices for the study shall include all the required meetings and travel deemed necessary for the completion of the study.
- c) Prices must be quoted in Euro.
- d) Prices must be fixed amounts, non-revisable and remain valid for the duration of the contract.
- e) 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 service provider 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 (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:

- a) 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 still complies with the requirements. In this case the tenderer should simply indicate on the cover letter the procurement procedure where the evidence has been provided.
- 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

14.4.1 Requirements:

The successful tenderer shall have a strong background in risk analysis, in particular related to IMO's FSA procedure and cost benefit analysis, but also technical expertise on issues related to fire safety of passenger ships, and the capacity to produce feasible RCOs with their relevant maintenance and operational costs.

In order to prove this technical capability, the tender shall include professional CV's of the team members proposed for the project, examples of the successful completion of similar technical projects by the company and other relevant studies.

14.4.2 Evidence:

The following information shall be provided:

- i. A list of the resources to be used for the study, including technical equipment and available data sources especially regarding the cost of RCOs;
- ii. The details of educational and professional qualifications of the persons providing the services, proving a relevant in-depth knowledge of the subjects of this tender;

iii. A list of the relevant projects in the past 5 years proving previous achievement and experience in the field of risk analysis;

iv. A list of major projects concerning fire safety carried out in the past 5 years;

Evidence of the knowledge and experience in the fields mentioned above shall be provided on the basis of a list of related services in which the tenderer has participated and worked. This shall include a description of the services with indication of the objectives, contracting parties, duration and budget.

14.5 Evidence to be provided by the tenderers

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

Please note that **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

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

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

1. **Quality criterion 1 Proposed methodology for assessment of the costs and benefits.** This criterion shall be evaluated based on a separate section in the tender referring to all tasks requiring an assessment of costs and benefits especially by providing the intended methodology for the estimation of costs. ($W_1 = 20\%$)
2. **Quality criterion 2: Proposed methodology of part 1.** This criterion shall be evaluated based on a draft list of contents of the report and an outline of the methodology proposed for the first part of the study described in section 2.1. ($W_2 = 25\%$)
3. **Quality criterion 2: Proposed methodology of part 2.** This criterion shall be evaluated based on a draft list of contents of the report and an outline of the methodology proposed for the second part of the study described in section 2.2. ($W_3 = 25\%$)

and the price criterion and associated weighting:

4. **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

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

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

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

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 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.

Annex

List of abbreviations

BEV: Battery Electric Vehicles
CA CG: Casualty Analysis Correspondence Group (of the FSI Subcommittee)
ECB: European Central Bank
EIB: European Investment Bank
EMCIP: European Marine Casualty Information Platform
EMSA: European Maritime Safety Agency
EU: European Union
FSA: Formal Safety Assessment
FSI: Flag State Implementation (IMO Subcommittee)
GoE: Group of Experts
HEV: Hybrid Electric Vehicles
IMO: International Maritime Organization
IPR: Intellectual Property Rights
RCOs: Risk Control Options
SDC: Ship Design and Construction (IMO Subcommittee)
SSE: Ship Systems and Equipment (IMO Subcommittee)