

REQUEST FOR INFORMATION (RFI) ON COMMERCIAL SOLUTIONS FOR REFUELLING OF NAVAL SHIPS AT SEA DURING EU MARITIME OPERATIONS

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List of Acronyms

ACRONYM	EXPLANATION	COMMENT
AOO	Area Of Operations	
CMF	Combined Maritime Force	A US-led coalition based in Bahrain.
F-44	NATO standard fuel for ship based helicopters .	
F-76	NATO standard fuel for ships propulsion systems.	Ships diesel.
FCdr	The EU Force Commander	The highest EU military commander in theatre. For Op ATALANTA the FCdr commands from a deployed flagship.
MGO	Marine Gas Oil	
MTOW	Maximum Take of Weight	
RAS	Replenishment at Sea	
STANAG	NATO Standardisation Agreement	To access STANAGs respective national military authorities should be consulted.
VPD	Vessel Protection Detachment	An armed team providing force protection to the ship

1 Introduction

This document details requirements for different options for refuelling naval ships during EU Maritime Operations. The level of detail is adjusted to serve the purpose for a Request For Information (RFI) to industry in order to receive views on possible solutions including cost indications.

The respective replies to the RFI will be kept Commercial In Confidence and will inform further decisions and development of requirements.

All requirements are numbered where mandatory, or minimum requirements, are marked as shall and need to be fulfilled for the option to be viable. Requirements that are desirable and wished for are marked as should.

2 Operational conditions and background

In recent times naval forces have engaged in a range of maritime tasks worldwide, including support to humanitarian relief following the Haiti earthquake. The EU's Operation ATALANTA off the Horn of Africa continues to be effective with the mandate extended so far for a further two years by the EU Council until December 2012.

Operation ATALANTA is conducted in very large Area Of Operations off the Horn of Africa covering Gulf of Aden, Arabian Sea, Somali Basin, and parts of the Indian Ocean. The operation has a clear requirement for organic tanker support where the military resources not always are available meaning that in stead of staying on task ships need to clear their operating area to refuel.

The other task forces in the area, notably the NATO Operation Ocean Shield and US led Combined Maritime Force, normally share tanker assets with ATALANTA , implying that any customer base for a commercial tanker solution is larger than the EU force itself even if the contract is drawn up with the Operation ATALANTA.

Beyond ATALANTA, the EU doctrine opens up for a variety of scenarios where future EU Maritime forces may be engaged, such as:

- Conflict Prevention (CP)
- Separation of Parties by Force (SOPF)
- Stabilisation, Reconstruction and Military Advice to 3rd Countries (SR)
- Evacuation Operation (EO)
- Assistance to Humanitarian OPS (HA)

In all these scenarios the roles of maritime forces are versatile and the logistics support required underlines the need for refuelling capability at sea. Furthermore, such scenarios might be conducted in the context of the EU Maritime Rapid

Response mechanism¹ which provides for either a Rapid Reaction, i.e. operational within 5-30 days, or an Immediate Response, i.e. operational within 1-5 days. Even if naval forces by nature are self-sustained initially. For any such operation re-supply is necessary to be able to remain in the area of operations.

For future operations, and in addition to, the inclusion of contractors in the EDA TPLS platform², dormant contracts or arrangements could in future be drawn up with the ATHENA mechanism³, administering financing of common costs, and potentially managing other costs, of EU operations having military or defence implications.

3 Requirements

For the purpose of this RFI the following background should apply for the requirements:

- The AOO coincides with that of the EU Operation ATALANTA⁴.
- The contract period for Op ATALANTA is assumed to be 12 months after which the contract could potentially be extended for 1 year at a time.
- The amount of ships fuel (MGO/F-76) yearly to be delivered by the contractor at sea is assessed for the EU force alone potentially be up to 20,000 m³.
- It is also assumed that ships of other coalitions, notably NATO Ocean Shield and CMF, will potentially draw on the commercial RAS capability provided.
- For potential framework contracts with ATHENA for future maritime operations it should be assumed that the contract period will, in principle, not exceed 4 years.

¹ In essence, the Maritime Rapid Response mechanism allows EU Member States to indicate where they have forces deployed all year around, potentially available for an EU operation. If for example a Member State Naval Task force is deployed to Asia for exercises, indicated as a force in the mechanism database, they could potentially be pulled out of their exercise and instead form part of an EU Naval Operation with a very quick response in that area.

² Serving as an interactive showcase for European industries having expertise in the field of civilian mission and military operations. <http://www.eda.europa.eu/tpls/> - At the link the TPLS platform is described and the website also facilitates a formal registration of industries and customers.

³ The ATHENA mechanism administers the financing of common costs of EU operations having military or defence implications. <http://www.consilium.europa.eu/showPage.aspx?id=746&lang=EN> - At the link further description of ATHENA is found including guidelines and templates for bids, contracts etc.

⁴ The area is roughly the Gulf of Aden, the Arabian Sea and the northern part of Indian Ocean.

3.1 Common requirements to option 1 and option 2

3.1.1 General

- REQ-01 The contractor shall no later than 6 months after signature of contract start to provide the service in theatre and should do so within 2 months.
- REQ-02 The Master of the ship shall adhere to the FCdr tasking regarding RAS (timings, location, priority, rules for using communication equipment etc) or whom so ever he delegates such authority. Such tasking might include RAS of ships from other forces than the EU force.
- REQ-03 The Master of the ship shall upon direction of, and in coordination with, the FCdr plan own port visits.
- REQ-04 When the ship is alongside in port, it shall be kept at a readiness to sail within 12 hours, unless otherwise decided by the FCdr.
- REQ-05 The Flag State and the Master of the vessel shall accept and sign arrangements for having a deployed VPD onboard for the duration of the deployment to theatre.
- REQ-06 The contractor shall in general adhere to STANAG 1065 (Replenishment at Sea - ATP-16(D)/MTP-16(D)). For ship to ship replenishment the principles of this document, less the positioning of the ships, shall be followed. More specifically see requirements described in REQ-28 and REQ-34.

3.1.2 Crew

- REQ-07 The crew involved in RAS operations shall to be trained in NATO procedures and shall have conducted dry practice RAS events until assessed as competent.
- REQ-08 Before deployment to theatre all the vessels crew shall pass to a security vetting process.
- REQ-09 If requirements in REQ-22 is met, the crew should be trained and certified to land and handle military helicopters of Lynx size.

3.1.3 Light and meteorological conditions

REQ-10 RAS shall be provided during day time conditions and should be provided during night time conditions.

REQ-11 Replenishment shall be possible up to sea state 5

3.1.4 VPDs

REQ-12 The Master shall adhere to any Force Protection related advice provided by the VPD team leader for the duration of the deployment to theatre.

REQ-13 The vessel shall provide food and accommodation for a military VDP of normally 8 (maximum 12) persons supplied by the EU force and should provide facilities for medical support (the VPD team brings own medical equipment).

REQ-14 A designated lockable storage area for VPDs equipment of 8 m³ shall be made available.

3.1.5 Communication

REQ-15 The vessels bridge shall be equipped with 24/7 internet access.

REQ-16 The vessel bridge shall have electric connections (220V, 50/60 Hz) for communications equipment and possible crypto brought by the VPD.

3.1.6 Vessel

REQ-17 The vessel shall be equipped and supplied for at minimum 30 days at sea without the need to be replenished.

REQ-18 The vessel shall have a Range of 7,000 NM at an economic speed not being less than 12 knots, it should have a range of 12,000 NM and should have a minimum economic speed exceeding 15 knots.

REQ-19 The vessel shall be double skinned if it is a tanker.

REQ-20 The vessel shall have a maximum continuous speed of minimum 14 knots in Sea State 5 and should have a maximum continuous speed above 18 knots.

REQ-21 The vessel shall have a maximum draught of 9 meters and maximum length overall of 195 meters allowing the ship to come alongside in the main ports envisioned. Furthermore, the ship shall meet the requirements to pass through the Suez and Panama canals.

REQ-22 The vessel should have a helipad with a F-44 refuelling capability for helicopters with a minimum MTOW of 6,200 kg allowing helicopters of Lynx size to land, and should have a helipad for helicopters with a MTOW of 10,000 kg allowing for helicopters of NH 90 size.

3.1.7 Fuel types, storage, quality and RAS capacity

REQ-23 The contractor shall be responsible for the quality of fuel provided during RAS and shall adhere to the rules in the STANAG 3149 (Minimum Quality Surveillance of Petroleum Products).

REQ-24 F-76 shall be supplied as the norm. When F-76 is unavailable, MGO of an appropriate quality shall be supplied (the different fuel types need to be stored in separate tanks).

REQ-25 The vessels storage capacity for RAS shall, for ships fuel (MGO/F-76), be at minimum 4,500 m³ and should be over 7,000 m³ (please indicate in the RFI reply the maximum storage capacity).

REQ-26 The vessels storage capacity for RAS should, for F-44 helicopter fuel, be at minimum 500 m³ and should be more than 1,000 m³ (please indicate in the RFI reply the maximum storage capacity).

REQ-27 The vessel shall have the capacity for 3 RAS events per 24 hrs and should have the capacity for 5 RAS events.

3.2 Option 1 - Under Way Replenishment

REQ-28 The contractor shall in general adhere to STANAG 1065 (Replenishment at Sea - ATP-16(D)/MTP-16(D)) when converting/preparing the vessel to conduct RAS.

REQ-29 A continued speed of 12 knots shall at minimum be kept during RAS operations, a continued speed of above 15 knots should be possible.

REQ-30 The vessel RAS system shall have a minimum transfer rate per hour of at least 400 m³/hour for MGO/F-76 and 40 m³/hour for F-44 and the RAS transfer rates should meet the maximum transfer rates as detailed in STANAG 1310 (Design Criteria for Replenishment Aspects of New Construction Naval Vessels, Table 1).

REQ-31 The vessel shall be equipped with two RAS rigs (single liquid stations), one on each side of the vessel, for underway abeam refuelling in accordance with STANAG 1310 (Design Criteria for Replenishment Aspects of New Construction Naval Vessels).

REQ-32 The vessel should be equipped with 1 RAS rig for underway astern refuelling in accordance with STANAG 1310 (Design Criteria for Replenishment Aspects of New Construction Naval Vessels).

3.3 Option 2 - Ship to Ship Replenishment

REQ-33 The vessel shall be capable of providing and handling YOKOHAMA fenders, enabling Frigate up to LPD sized ships to come alongside for replenishment.⁵

REQ-34 The fuel transfer installation shall adhere to STANAG 1084 (Replenishment of Fuel in Harbour and Replenishment of Water in Harbour and at Sea). The installation should adhere to the requirements outlined in REQ-32 for couplings and for transfer capacity requirements outlined in REQ-30.

4 RFI questions

The RFI replies should cover the following:

1. Underway and ship-to-ship replenishment should be treated as two separate options in the RFI replies. If both options can be offered that is of course welcome. For each option the questions below should be answered.
2. Regarding each requirement above, confirmation of the mandatory requirements that can be met in full and confirmation of the level of which desirable requirements can be met.
3. A fair presentation of the financial (and contractual, if any) conditions for each requirement in both options, notably:
 - a. A cost indication for mandatory requirements (shall) versus desired requirements (should).
 - b. A breakdown between the running costs and the fixed costs.
 - c. An indication of cost driver requirements with an estimate of reduction on costs if the requirement is downgraded or if certain capabilities are provided by other parties.
 - d. A cost indication for time or bare charter, with a separate indication of start up costs.
 - e. Sketches or alike to visualise each option, enhancing understating.
4. Possible business cases indicating the preferred case.
5. Proposed ways to handle the responsibility for possible spillage and accidents.
6. Willingness to be contracted for Op ATALANTA and/or to sign a possible Framework arrangement with ATHENA.

⁵ Ships sizes varies from small frigates with a length over all of about 90 meters and displacement of 1,500 tonnes up to larger LPDs (Landing Platform Dock ships) with a length over all of about 180 meters and displacement of 20,000 tonnes.