



# NORWEGIAN DEFENCE MATERIEL AGENCY

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## REQUEST FOR INFORMATION

**No. 100945**

**Long Range Precision Fire System**

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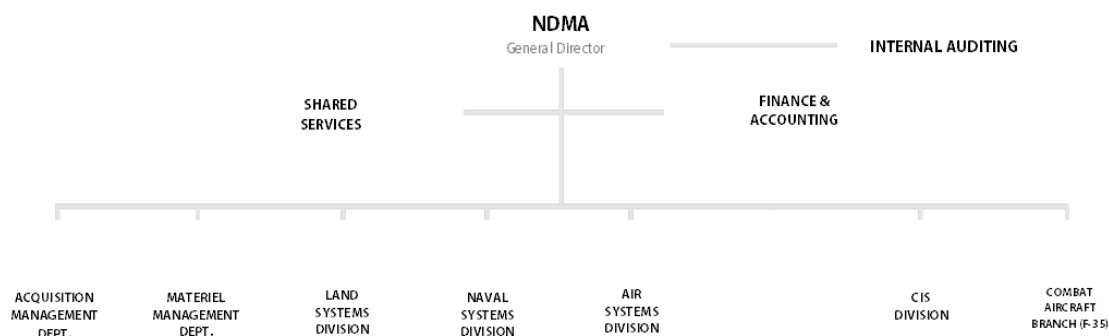
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	<b>Annex A</b> ODIN FSS - brochure	
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## 1 Introduction

### 1.1 The Norwegian Defence Materiel Agency

This Request for Information is carried out by the Norwegian Defence Materiel Agency (NDMA). NDMA is an agency in the Norwegian Defence Sector and is directly subordinate to the Norwegian Ministry of Defence (MoD). NDMA shall ensure that the Norwegian Armed Forces and other undertakings in the defence sector shall gain access to cost-efficient, safe materiel in accordance with adopted long-term plans. NDMA's main tasks are planning, acquisition, management and disposal of materiel for the Norwegian Armed Forces (NAF) and other MoD agencies. NDMA is the technical competent authority in certain areas and provides the Ministry of Defence, the Armed Forces and other parts of the sector with advice and expertise within the agency's area of responsibility. NDMA also follow up international partnerships relating to materiel and assist the Ministry of Defence to promote Norwegian industry. NDMA has approximately 1,450 employees, 60% of whom are civil employees and the rest military.



The planned procurement will be executed by the Land Systems Division, which is responsible for acquiring and ensuring the delivery of needed ground combat and support equipment for the Norwegian Armed Forces (NAF).

Further information is available on the following website: [www.fma.no](http://www.fma.no)

The Norwegian Defence Materiel Agency will in the following be referred to as NDMA or 'the Purchaser'.

### 1.2 Purpose

The purpose of this Request for Information (RFI) is to provide the Norwegian Defence Materiel Agency (NDMA) with a more in depth knowledge of the market with respect to potential suppliers, technical performance, price, and lead-time for delivery of a Long Range Precision Fire System (LRPF system). The gathered information will be used to determine the project feasibility as well as to define the projects technical and functional requirements, budget and time frame.

NDMA's intention is to identify suppliers with the ability to take full system responsibility and deliver a complete Long Range Precision Fire System including through life support. The system should be qualified and used by, or planned for delivery to, other customers.

This RFI is on purpose kept at a questionnaire level to avoid detailed requirements. The intention for this is to allow for suggestions and input to support NDMA in developing realistic requirements and define a project schedule and budget with an acceptable level of risk.

To allow for a quick response, and to keep the workload at an acceptable level, the RFI reply is expected to be based on existing data.

NDMA will, if requested by the respondent, be open for pre and post clarification meetings regarding this RFI.

### **1.3 Project schedule**

NDMA plans to carry out the project in accordance with the below tentative schedule.

2022-2023	Pre- project activities, External Quality Assurance Government approval.
2024	Invitation to Tender
2025	Contract Award
2027-2029	LRPF Deliveries and implementation in the Army

## **2 The Request for Information**

### **2.1 Company information**

Please provide NDMA with the following information concerning your company:

- Company name, legal form, address and contact persons.
- Information whether your company intends to engage/has a Norwegian firm or contact person as your representative in Norway.
- If the company relies on other enterprises to meet requirements for economic and financial capacity and/or technical and professional qualifications.

## 2.2 Technical information

### 2.2.1 Preliminary functional requirements

The LRPF system is expected to be a self-propelled system that fires munition; missiles, guided rockets and rockets with a range from less than 40 km, out to more than 300 km. The system needs to be interfaced towards existing Norwegian C4I systems – in particular the ODIN Fire Support System. The ability to operate in the north of Norway is important.

### 2.2.2 System Description and Specification

The Respondent is requested to provide a system description, including a performance specification. In addition, the Respondent is requested to provide a set of functional requirements corresponding to the proposed system. Any characteristics considered as special features or advantages should be emphasised.

The system description and performance specification should as a minimum include information regarding the below topics;

#### **Munition systems**

- Type and performance of guidance
  - Precision
  - Redundancy and ability to withstand countermeasures
  - Ability to find and track moving targets
  - Guidance limitations
- Communication with munitions
  - Data input before launch
    - Ability to set flight path
    - Target category
  - Data sent to munition after launch
    - Change target
    - Abort
    - Target type
  - Data sent from munition after launch
    - Ballistic data
    - Information from target area
- Type and performance of warhead
  - Effect on different target categories
  - Payload
  - Fuzing options
- Maximum range
- Minimum range
- Time of flight
- Interfaces to external systems
- Physical characteristics
  - Drawings and/or pictures of the materiel.
  - Overall dimensions.
- Environmental conditions, test and qualification
  - Standards used
  - Climatic

- Mechanical
- Electrical and electromagnetic

### **Launcher vehicle**

- Number and tasks of crew
- Procedures and time to
  - Set target
  - Launch munitions (from stopped in position)
  - Reposition (from last round to start moving)
  - Loading munitions
- Time between each launch
- Description of loading system and procedure
- Operational weight
- Weight margins
- Range
- Speed
- Mobility
  - Gravel road
  - Off road
  - Ice/ slippery roads
  - Snow
- Protection
  - Ballistic
  - CBRN
- Physical characteristics
  - Drawings and/or pictures of the materiel.
  - Overall dimensions.
- Environmental conditions, test and qualification
  - Standards used
  - Climatic
  - Mechanical
  - Electrical and electromagnetic
- System overview and technical specification of the included sub-systems
  - Chassis
  - Launcher
  - Fire control system
  - Armament for self-protection
- Interfaces to external systems
- GFE Integration
  - Artillery Fire Support System (Odin FFS)
  - Battle Management System
  - Radio/Communication system
- Integration of third-party munition systems

### **Munition resupplying system**

- Types of vehicles or systems with technical description and specification
- Description of loading system and procedure

### **Maintenance equipment**

- Description of equipment and procedures

### **Training system**

- Crew training concept
- Simulator system
- Live fire training system
- Maintenance training

### **2.2.3 Maintenance**

The NAF will most probably conduct maintenance level 1 (ML1) to maintenance level 3 (ML3) activities for the launcher vehicle itself, while the munitions are expected to be limited to ML1 activities due to complexity. The Contractor through a Contractor Logistics Support (CLS) agreement is expected to perform the remaining maintenance.

NDMA is interested in information:

- Describing the existing maintenance concept for the launcher vehicle and the munition system.
  - Any existing equipment/solutions to verify munition functional performance to be used by the NAF.
- Describing any existing agreements or arrangements for both launcher vehicles and munition capability sustainment.

### **2.2.4 Maturity of design**

NDMA is using Technology Readiness Levels (TRL), ref. US DoD Deskbook/ISO 16290, as a measure of a technology's qualification development state. Information regarding TRL for both launcher vehicles and munitions are of interest to NDMA.

NDMA is interested in information regarding:

- State of development  
If available, TRL for major system components or functional capabilities. If TRL is not used to describe state of development, other information describing the maturity of design
- Development programmes for capability enhancements
- If system qualified:
  - Qualification date
  - Qualification company/country/agency
- If system fielded:
  - Fielding date
  - Fielding country/agency

## 2.3 Commercial information

### 2.3.1 Price information

Kindly state your budgetary prices for the quantity range described below, the description is only indicative and the Respondent is requested to fill in all relevant price information for alternative or corresponding solutions, such as multiple types of munitions.

Description (The Respondent is free to change or add other information)	Qty range	Price
Launcher system (incl. vehicle)	6-18 ea*	*
Short range munitions (e.g. 20-150 km)	1-300*	*
Medium range munitions (e.g. 80-300 km)	1-300*	*
Long range munitions (e.g. Beyond 300 km)	1-100*	*
Operators training system		
Etc.		

\*Please describe if there are different unit prices based on order quantity within the above quantity ranges. If so, describe the price and the quantity the price is applicable for.

The munition capability sustainment is considered to be significant during the munition lifetime that is expected to be 20 years. Is there any information describing:

- Yearly (or other interval) maintenance cost per munition system
- Cost for capability sustainment/enhancement
- Costs for obsolescence management
- Necessary for Mid-life upgrades, or service-life extensions

The basis for the prices such as currency, advance payment, delivery terms etc. should be stated.

Please inform us if any of our functional and commercial requirements or conditions have a considerable impact on costs/prices.

### 2.3.2 Time of delivery

Please give a description based on then following main issues:

- Lead-time, from contract award until delivery.
- Schedules for delivery of the materiel and quantity as mentioned above.
- Possibility for any “large scale” benefit by joining production lines established for existing or expected future customers at certain time slots.

### 2.3.3 Procurement with Industrial Cooperation

The planned procurement will be subject to Industrial Cooperation Agreement equivalent to 100% of the total contract value, including the Contracts amendments. More information about industrial cooperation is available at [www.fma.no](http://www.fma.no).



### **2.3.4 Other commercial information**

Please give a description based on then following main issues:

- Quality Assurance level in the AQAP and/or ISO system.
- Your standard warranty terms for this kind of material.
- If export of equipment or associated information is subject to special regulations, this must be stated. If for the same reason any requested information is being withheld from the Norwegian Defence Materiel Agency, this must also be stated.
- If the Respondents documentation is classified the Respondent is requested to inform NDMA of such classification and who to contact to arrange for necessary agreements to exchange the information.
- Please submit a reference list of your customers.

## **3 Request for Information Reply**

### **3.1 Structure of RFI reply**

The reply should be structured as follows:

Marking	Document name	Article reference
1	Company information	2.1 Company information
2	Technical information	2.2 Technical information
3	Completed price matrix	2.3.1 Price information
4	Completed delivery schedule	2.3.2 Time of delivery
5	Other commercial information	2.3.4 Other commercial information
6	Other relevant information, if any	
7	Redacted version of the RFI reply, if relevant	4.1 Public disclosure and duty of confidentiality

### **3.2 Address**

Reply shall be submitted electronically through the Merccell-portal. In order to simplify the review of the information, the Purchaser requests that:

- The files are submitted in readable (OCR) PDF format or Microsoft Office compatible format.
- The files are identified to reflect the content of the file.

### **3.3 Request for Information reply – due date**

The requested information shall be at the Norwegian Defence Materiel Agency disposal no later than September 1<sup>st</sup> 2022 at 1600 (CET).

## **4 Administrative Regulations**

### **4.1 Public disclosure and duty of confidentiality**

The Freedom of Information Act applies to public access to documents relating to a public procurement. The Purchaser and its employees have a duty to prevent others from gaining access to and knowledge of information about technical installations and procedures or operational and business matters that should be kept secret for competitive reasons, cf. FOA §§ 7-3 and 7-4, cf. the Public Administration Act § 13.

The Respondent may submit a version in which information that should be kept secret for competitive reasons is redacted. Examples of such classified information can be personal data, reference descriptions, information about partners, unit prices, hourly rates etc.

This notwithstanding, the Purchaser shall, if access is requested, consider whether the information is of a nature that means the Purchaser is obliged to grant access.

The Respondent shall protect confidential information that is made available to them in connection with the request for information.

#### **4.2 Use of information**

The requested information will only be used for internal purposes in NDMA and the Norwegian Armed Forces.

NDMA does not intend to make any procurement based on this RFI or to pay for any of the information provided.

#### **4.3 Planed procurement procedure**

The project is in a concept phase and the procurement procedure has not yet been settled. The requested information will be used to evaluate potential procurement procedures.

#### **4.4 Point of contact**

All communication shall be addressed to:

- Commercial point of Contract: Bård Tronvold  
Phone: +47 481 45 473  
E-mail: btronvold@mil.no

All written communication shall be in either the Norwegian or English language.