



Defence Materiel Organisation
Ministry of Defence

Request for Information

TEStLAneAnalysis Mobile (TESLA-M)

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Colophon

The Netherlands Ministry of Defence
Defence Materiel Organisation (DMO)
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Reading Guide

This document is a Request for information (RFI) from the Netherlands Ministry of Defence (NLD MOD).

This document contains the following chapters:

- | | |
|-----------|---|
| Chapter 1 | This chapter explains the purpose of this RFI and the procedures and planning relevant to this RFI. |
| Chapter 2 | This chapter gives the background and all questions regarding the measurement vehicle can be found. |
| Chapter 3 | Conclusion. |

1 General information

The Netherlands Ministry of Defence (NLD MOD) is considering renewing its measurement vehicle and invites potential suppliers for these systems to respond to this Request for Information (RFI).

1.1 Purpose RFI

This RFI is part of a market survey. It is not the intention to provide a detailed proposal at this moment. In this RFI the NLD MOD informs the market about our current challenges, invites and encourages the market to provide us with information and solutions that would help the NLD MOD address these challenges. The NLD MOD wants to gather as much information as possible concerning possibilities and restrictions in the vendor market and the available solutions.

Vendors that are interested and able to contribute as a prime or subcontractor to this project are invited to respond to this RFI.

1.2 Organisational description

The NLD MOD comprises 7 organisational elements. The Central Staff makes the Defence policy. The 4 armed forces Services ensure that military personnel and material are mission-ready. Support Command and the Defence Materiel Organisation (DMO) support the armed forces Services by providing products and services.

The DMO ensures that military personnel have modern, robust and safe materiel to work with. This organisation is involved in the procurement, maintenance and sale of materiel.

For more information about the Netherlands Department of Defence or the Defence Materiel Organisation, please visit <http://english.defensie.nl>.

1.3 Assessment of the responses

The response to this RFI will be assessed by NLD MOD. To have a clear understanding of the capabilities and limitations of the proposed system an additional request for more detailed information can be part of the assessment.

If the results of this RFI lead to a European Tender for this need, companies that have responded to this RFI will not be favored or disadvantaged. At the start of a possible European Tender all companies will have the same information, excluding any information that is acquired through this RFI that is (commercially) confidential.

The NLD MOD reserves the right to use any information provided by respondents for future tender(s) (if any), for example to draw up the requirements and/or to determine a suitable procurement strategy.

1.4 Planning

The planning of this RFI is as follows:

Phase	Date and Time	Task	Result
1	May 9	Publication RFI	RFI (this document)
2	May 17	Closing date for asking questions before 12:00 PM UTC +1	Questions from potential respondents are received by the Ministry of Defence
3	May 23	Questions from interested parties regarding the RFI are answered	Answers will be communicated with the potential respondents
4	June 4	Closing date for a final reaction to the RFI before 12:00 PM UTC +1	Answer forms from potential respondents are received

The table above provides an overview of the intended planning. The specified dates are indicative and may be changed during this RFI.

1.5 Instructions for responding

The NLD MOD requests you to answer the questions in this questionnaire as detailed as possible. Any other information provided which you consider to be of importance will be appreciated.

The deadline for your reaction to be received by the MOD is June 4rd, 2019.

All electronic documents must either be in the Microsoft Office suite file formats, PDF or as an ODF file. Please note that our mailbox is limited and not able to receive messages/attachments that exceed **5MB** or documents with a password. It may be necessary to divide your response into several e-mails.

Responses to this RFI can be send to the following e-mail address:

RFI.C4I@mindef.nl

Your e-mail should be directed to the MOD contact person for this RFI, Ms. M. Alleblas-Bahnerth.

In order to enable careful evaluation of your information please refrain from limiting yourself to the use of cross-references to answers to other questions.

Respondents are requested to use either the English or the Dutch language.

1.6 Restrictions

If you wish to cooperate with this RFI you have to agree to the following three restrictions:

Restriction 1.7a The NLD MOD does not reimburse any kind of costs that are connected to answering this RFI or related activities.

Restriction 1.7b Depending on the results of this RFI, the NLD MOD has the right to refrain from any further activities regarding this RFI or to choose a different procurement strategy more fitting to the suppliers market.

Restriction 1.7c The RFI is non-binding for all parties involved, and no rights can be derived from this RFI.

2 Background & Questionnaire

2.1 Introduction

The NLD MOD is investigating the possibility to purchase a measuring and regulating vehicle in which a professional from behind his build-in workplace (electronic laboratory) is capable to look into the electromagnetic spectrum. The measurements will be part of a test cycle with a close look in the radio spectrum; its bandwidth and depth in time will also be necessary.

After a trigger that simulates a signal, the system is capable to record and capture the event that occurred in this spectrum. The system must be able to operate within the frequency areas ELF up to SHF/EHF.

The current measurement vehicle of NLD MOD consists, beside the vehicle and installation, of 3 main parts;

- Measurement equipment; spectrum analyzer, IQ-recorder, signal generator, etc.;
- Computer equipment; PC, storage, LAN and monitors;
- And peripherals; antenna's, cables, workplace furniture, signal converters, camera system, etc.

For a future measurement vehicle, the NLD MOD aims to find a vendor who will renew all above summarized equipment, install this equipment in a new vehicle and conduct maintenance (eg. calibrating). The vehicle will be government furnished equipment of the NLD MOD. After delivery of the vehicle to the vendor, installation of the solution can be performed.

The vision for the new measurement vehicle is:

"A vehicle that makes it possible to perform measurements in the electromagnetic spectrum at various international locations. It is important that the antennas (external measurement setup) and the measurement equipment are mobile and can be quickly connected over LAN to the computer system. The computer system will be operated from within the vehicle and all test result must be saved on a removable hard drive."

In addition the NLD MOD is interested in all applicable information on developments of possible solutions as well as the (technical) innovation in measurement capabilities.

2.2 Questionnaire

The NLD MOD request to answer the questions in this questionnaire as detailed as possible, clearly explained and in the same order as the questions are stated. Any other information you consider to be of importance will be appreciated.

The response to this RFI must also clarify which items are standard and already available and which are in the progress of being produced or planned to be developed.

Please answer the questions with this vision in mind.

2.2.1 *General questions*

1. A company profile, including brochures (organization, products) and contact person.
2. Please elaborate on your companies knowledge and experience with measurement vehicles, particularly with installation/integration of the equipment.
3. Did you already deliver similar measurement vehicles? If so, please provide scope of delivery, partners/subcontractors, references, year of delivery and a budget indication?

2.2.2 *Technical questions*

4. The NLD MOD will provide the vehicle in which the equipment must be installed. What kind of information do you need to conduct the installation?
5. Which components of the system are "off-the-shelf" products?
6. Please elaborate if there is radio equipment available which is capable to create their own mobile network (2-5G and future) for testing purposes.
7. Are there points of concern regarding the functionality of the individual equipment and as a whole system in working state?

2.2.3 *Commercial questions*

8. Can you identify the cost-drivers of the system?
9. Are any export restrictions applicable for the system, or parts of the system?
10. Please describe your companies vision upon the maintenance of the system. In what way does the system require maintenance in a scope of 6 and up to 10 years?
11. Are you able to provide learning or training solutions for the introduction of the system in the NLD MOD organization? Please elaborate on what kind of solution you would offer the NLD MOD and why?

2.2.4 *Security questions*

12. Describe the security concept of your system. In what way are the measurement devices and peripherals connected to the computer system?
13. In which way does your system guarantee flexibility, for example when it is required to introduce additional (technical) measures to meet the security standards of NLD MOD?
14. Will you allow the NLD MOD to perform security tests (e.g. penetration) on your system during a Proof of Concept period?

3 In conclusion

The authors of this RFI have tried to inform you as detailed as possible regarding the wishes of the NLD MOD. In case you still have some questions or if you have found some deficiencies, you are kindly requested to contact Ms M. Alleblas-Bahnerth (RFI.C4I@mindef.nl).

Your remarks and or/supplements are highly appreciated. If any questions are missing which you think should have been asked, please do not hesitate to use the opportunity to point out which questions are missing in your opinion.

The NLD MOD informs you that any acquisition activities regarding this RFI are not appreciated.

You are kindly requested to answer the questions in this document as completely as possible. The questions should be regarded together with the context which is described in this RFI.

The NLD MOD would like to thank you in advance for your time and effort by answering our questions.

Annex A: Abbreviations

DMO	Defense Materiel Organisation
LAN	Local area network
MOD	Ministry of Defense
NLD	Netherlands
POC	Point of Contact
RFI	Request For Information
ELF	Extremely Low Frequency
SHF	Super High Frequency
EHF	Extremely Low Frequency

Annex B: Photo Impression current measure and regulating vehicle



Photo 1 Side view



Photo 2 - Workplace



Photo 3 - Verhicle



Photo 4 - Verhicle and Antenna