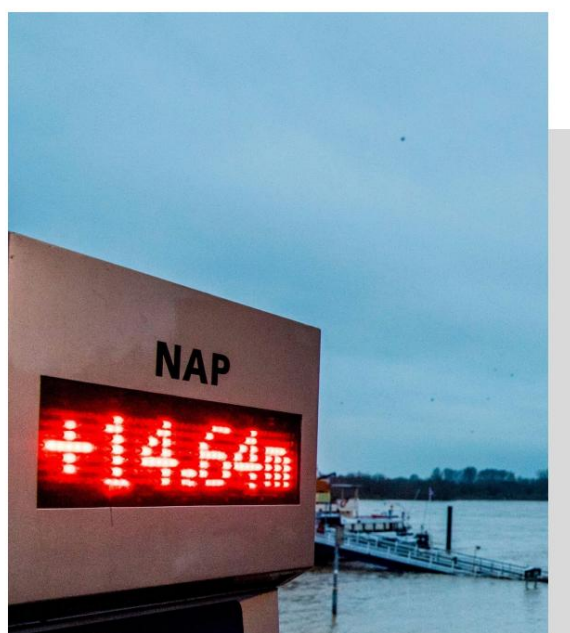




Report market consultation

Purchase and maintenance of radars for water level and wave height

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1 Introduction

1.1 Reason

This report is the summary of the results of the market consultation Radar for Water Level and Wave Height. Rijkswaterstaat (RWS) attaches great importance to value the opinion of market parties and want to involve them early and actively before the proposed tender starts.

In order to carry out its tasks, RWS needs information about the condition of the area under its management. Water data is collected, stored and distributed via the National Water Monitoring Network (LMW). Measurements take place on the North Sea, in the Wadden Sea, the estuaries, the rivers, the lakes and canals. It is data on water quantity and water quality such as water levels, wave height, discharge data, temperature, salinity and also meteorology. The data is relevant for real-time shipping information, operation and maintenance of flood defences, water drainage and storage, water level management and calamity abatement.

Team Instruments of the CIV ensures the availability of all measuring equipment for the LMW. The LMW currently contains about 290 sensors for water level and wave height. These are located at about 250 measuring stations; this is because several sensors have been installed at a number of measurement locations to ensure the availability of . through redundancy increase measurement data. Not all of these 290 sensors will be renewed.

The intended procurement of radar level meters will be Q2 or 3 in 2024 take place. The technical scope of this tender includes:

- a radar level meter,
- accessories (cables, mounting bracket, etc.) and
- control software if necessary.

The processing of raw data into parameters is almost entirely out of scope.

1.2 Purpose of the Market Consultation

RWS has published the Market Consultation Document on TenderNed with the aim of reaching as many market parties as possible, to interest them and to encourage them to think along.

With this Market Consultation, RWS aims to:

- a) gather input for the procurement strategy and contract strategy (new get ideas, test existing ideas);
- b) involving the market at an early stage in the project in order to align the tender documents as closely as possible with the market situation;
- c) to determine whether there are sufficiently qualified contractors in the market how there is sufficient capacity in the market;
- d) gain insight into the real feasibility of the project and into the preconditions under which the project can be carried out, in particular in the field of of sustainable ambitions.

RWS has emphasized that this market consultation is not part of the intended tender and that no rights can be derived from it. Insights obtained from the market consultation may be used by RWS in the preparation of the tender and tender documents. RWS reserves the right to not or not fully use these insights.

1.3 Outline of the market consultation approach

The market consultation started with the publication of the Market Consultation Document in Dutch and English on TenderNed.

Any interested market party, who considered that it could contribute to the market consultation, was requested to provide the answers to the questions raised in this market consultation in writing.

Six market parties responded to the market consultation, namely:

1. Radac
2. Miros
3. Observer
4. RS Aqua
5. RMA Geolux
6. Vegan

RWS CIV held talks with all six market parties to have them provide additional explanations to their answers.

The information from this market consultation means that Rijkswaterstaat will have to carry out further research in order to possibly fit the four radar types in less than 4 lots. spend. The market paints a differentiated picture about which properties are decisive for our wave measurement requirements and which radars are suitable for standpipe application. There are, of course, differences between market parties and the way of fulfilling our technical requirements. See also the summary of the answers to the various requested topics in the next chapter.

RWS CIV would like to thank all market parties that took part in this market consultation.

This report of the market consultation, in which the questions and answers are completely anonymous, will be published on TenderNed on 21 October 2022. The market consultation report is also sent digitally to the market parties that took part in the market consultation.

2. Summary of Answers

Specifications and Performance
Talks were held with suppliers in the oceanographic radar segment and from the process segment. There is sufficient market supply for each of the requested sensor types. Manufacturers have stated that it can supply suitable sensor types for multiple sensor types. Not all manufacturers can supply all requested sensor types. The manufacturers and market parties have informed us technically informed about their vision of the specific technical advantages of the sensors offered and the underlying motivation for this. A good picture is also given of the development choices that manufacturers have made to their offer.
Installation properties
The reactions of market parties show the installation properties of the systems offered fit well into the practice of the application at Rijkswaterstaat. Setting the radar to a It is possible to issue water level relative to a reference plane, an overview is given of the available data connectivity and physical mounting options.
Wave Measurements
The suitability of radars for wave measurements has been discussed in detail. The general picture is that wave measurement is in principle possible up to certain physical fundamental limitations. As a result, certain specifications of radars are relevant in a generic sense, such as the beam angle. This can be required in the tender to make the desired wave measurements. Several parties have pledged to provide reports of experiences other users have.
Verification of the specifications
The market parties have provided a good picture of the extent to which the performance (such as application high above sea level and wave measurements) can already be substantiated with field tests that have already been carried out. There is a lot of diversity in this between the market parties, but in general it is view that the basic performance can be discussed and that more specific performance should be investigated by RWS or should follow from meeting the underlying technical specifications.
Lifetime, maintenance and services
The market guarantees the delivery reliability of the radars for the coming years, because there are also there is usually no intention to replace the product or a 2022 version has just been released on the market. Delivery reliability is indicated in "years". There is 1 market party that makes this explicit in 10 years. The radars are maintenance-free: no preventive or corrective maintenance. Maintenance advice would be an annual visual check, especially to scan the environment for, for example, vegetation that is a nuisance can cause. With multiple maintenance operations, the costs can increase. Certainly if, for example, maintenance would take place outside Europe. RWS sees that cost-increasing effect in this market not. Besides that maintenance will be minimal, the maintenance locations are in Europe or Great Britain. And if necessary, support can be organized by the market.
Interested in the assignment
The scope of the assignment is the purchase and maintenance of radars in 4 different circumstances. RWS is curious as to whether there are reasons for market parties to participate or not and explains the open question down. There are no prior reasons for market parties not to want to participate. The possible plot layout has also been presented. The preference of plots ranged from 1 contract for all lots, but there was also a preference for 2 lots: 1 contract for radar types a, b and c and 1 contract for radar types d or 1 contract for radar types a and b and 1 contract for radar types c and d. And finally, RWS asks about market parties' familiarity with the general government purchasing conditions. These will be applied. Experience shows that manufacturers outside Europe have difficulty with this to accept conditions. Not all market parties are familiar with the Government Purchasing Conditions. RWS will draw attention to the Government Procurement Conditions in the tender.

Purchasing
strategy SMEs are the largest player in the market and act as manufacturers or dealers. The majority in this market has between 15 and 35 employees. The market is diverse; not all market participants can supply all 4 types of radars. There is a willingness in the market to enter into a partnership in order to be able to deliver everything. There is still some technical work to be done, but RWS seems to be organizing a tender with 2 or more lots on the basis of this market. Prices are commercially confidential. There is, however, a price difference between the oceanographic radars segment and the process segment. Due to the favorable MTBF and the robustness of the radars, a long contract duration does not appear to be a problem. A wish has also been expressed for a long-term contract to contribute ideas to innovation, research and development as a partner and/or launching customer of RWS. The market has concerns about fixing prices for a long period of time. It is very difficult (probably also undesirable) to fix technical specifications and prices for 15 years. The various factors that influence the price of these radars were also discussed: exchange rate fluctuations; inflation causing wages to rise; supply electronic components; energy costs. Not all manufacturers have an ISO9001 certificate
Sustainability and making impact In
response to ambitions formulated by RWS, based on the idea that sustainable impact can be made, the market has been asked questions about the extent to which these ambitions can be fulfilled. With regard to energy consumption, a number of market parties have insight into this energy consumption in the production of the radars. To reduce logistics movements, in most cases software in the radar can be used to use a diagnostic file that can provide its service remotely. In practice, however, clients visit all radars physically once a year. The market sometimes works with 'conflict mineral statements' (from suppliers), because clients request this. These are mainly certificates not verified by third parties. A materials passport was also discussed. The radars are robustly designed and have a modular structure in a sensor and an antenna. The systems generally last longer than 15 years. There is no sustainability gain in the context of reusing newly purchased radars. In the context of social aspects, the market is familiar with: -guest lectures, workshops, presentations -internship and graduation places -social involvement through the deployment of employees in voluntary work -equal rights for employees -sponsoring sports clubs -internal policy of sustainable business management -outsourcing repetitive work to sheltered workshops RWS currently does not see the possibility of achieving an acceleration in the context of social impact through the mandatory application of social return, since it concerns the delivery of high-quality instruments by mainly (small) SMEs. However, efforts on social aspects could possibly be included in the tender.
In
conclusion There was room for market parties to air ideas, suggestions, comments, opportunities and risks with regard to the intended tender. Market parties have responded differently to this: from technology to commercial. The processing of the 'final' answers from the market has been included in the above topics.