



Flow Tender Specification General, ADM Lot

Description of the Context

ADM Flow Measurement Instruments - Supply, Implement, Manage and Maintain

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1 INTRODUCTION

1.1 Purpose of the Tender Specification General

This document is the Tender Specification General ('TSG') for the supply, implementation, management and maintenance of Flow Measurement Instruments. The TSG describes the context of the Contract and forms an inseparable part of the Agreement in conjunction with the Tender Specification Requirements ('TSR') and the Tender Specification Processes ('TSP').

1.2 Background

The current agreement for the Flow Measurement Instruments expires on **31 March 2026** with two extension options of one year each. This is the main reason for this call for tenders.

Two types of flow measurement instruments are currently used for the flow measurements: an Acoustic Flow Meter ('ADM') or a Horizontal Acoustic Doppler Current Profiler ('H-ADCP'). Most of these Flow Measurement Instruments are approaching their end of life. This is especially true for the ADM Flow Measurement Instruments. The suppliers currently repair these ADM Flow Measurement Instruments on a best-efforts basis, using a finite stock of spare parts. The timely implementation of this call for tenders will prevent RWS from being unable to continue producing discharge and flow velocity data at the Measurement Sites in the near future.

In view of the current market situation, RWS is looking for two Contractors: one Contractor for H-ADCP measuring instruments and one Contractor for ADM measuring instruments. To this end, this call for tenders uses both an H-ADCP Lot and an ADM Lot, each with a separate Tender Specification.

1.3 Client's Business Objectives

Through the Agreement and the requirements set out in the TSR and TSP, Rijkswaterstaat ('RWS') is pursuing the following business objectives:

- Guaranteeing the availability and accuracy of the discharge and flow velocity data produced at the Measurement Sites;
- Guaranteeing the availability of Measurement Sites for the next fifteen years (initial term of nine years with three extension options of two years each);
- Guaranteeing the availability and accuracy of the discharge and flow velocity data at the Measurement Sites through preventive and corrective maintenance on Flow Measurement Instruments;
- Providing support for the implementation of the Flow Measurement Instruments at the Measurement Sites;
- Providing support for the Management and Maintenance of the Flow Measurement Instruments at the Measurement Sites;
- Providing support in resolving Malfunctions and Incidents involving the Flow Measurement Instruments at the Measurement Sites;

1.4 Client's Quality Objectives

The result of the Flow Measurements is discharge and flow velocity data that meets the requirements formulated by the RWS department Data Collection & Analysis for Permanent Measurement Networks ('DCA-PMN') for measurement range, accuracy and availability. These requirements of DCA-PMN are based on the information needs formulated by Rijkswaterstaat Water, Traffic and Environment ('RWS WTE').



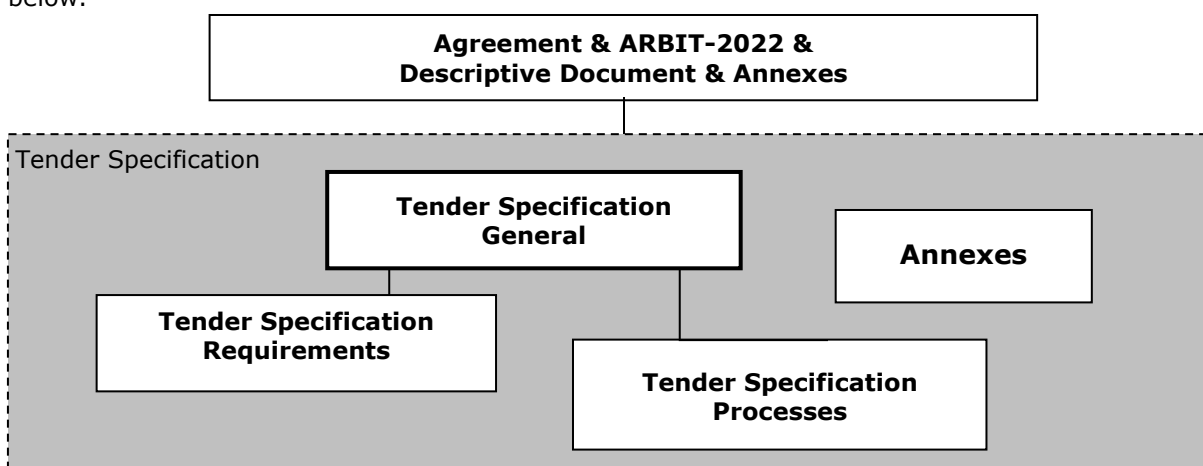
The other quality objectives stem from RWS's requirements for the use of Flow Measurement Instruments at the Measurement Sites and the characteristics of the Dutch National Water Monitoring Network ('LMW') data collection system:

- The Measurement Sites, including their Flow Measurement Instruments, must be of sufficient quality to be used uninterruptedly and sustainably under normal maintenance conditions.
- The Contractor provides preventive and corrective maintenance support in such a way that RWS can continue to use the Measurement Sites sustainably and efficiently over the intended term of fifteen years (initial term of nine years with three extension options of two years each).

Note: The Contractor cooperates with LMW's M&S (Management & Servicing) Contractor regarding the implementation, management and maintenance of the civil infrastructure at the Measurement Sites. This may affect the above quality objectives.

1.5 Structure of the tendering documents

The Tender Specification consists of three parts with a set of annexes. In addition to the Tender Specification, there is a higher-level Agreement based on ARBIT-2022 and a Descriptive Document with Annexes. The relationship between the tendering documents is shown schematically in the figure below.



The Descriptive Document ('DD') is the document (including Annexes) that provides information about the course of the tendering procedure, the requirements that the Tender Application and its contents must meet, the award criteria and the assessment procedure.

The Tender Specification consists of the following parts:

- **TSG:** this part describes the structure of the contract documents, the context in which the Client is putting this tender out to market and its considerations in this regard, as well as the objectives and initial situation of the Contract for the Contractor;
- **TSR:** this part of the Tender Specification describes the Client's requirements for the Flow Measurement Instruments based on its responsibility for the quality of the discharge and flow velocity data at the Measurement Sites determined by RWS WTE. Due to market dynamics, it was decided to have two TSRs: one TSR for H-ADCP Flow Measurement Instruments for the 'H-ADCP Lot' and one TSR for ADM Flow Measurement Instruments for the 'ADM Lot';
- **TSP:** this part of the Tender Specification describes the minimum processes that the Client requires the Contractor to establish in each phase of the Agreement to ensure a controlled situation throughout the term of the Agreement. While rendering the Performance, the Contractor must apply the requirements for these processes, which must be included and managed in the Contractor's Project Management Plan ('PMP');
- **Annexes:** the annexes contain the non-confidential general information for the Contract.



1.6 Structure of the TSG

This TSG has the following structure:

- Chapter 1: Introduction
- Chapter 2: Background information on RWS
- Chapter 3: Context and Scope of the Contract
- Chapter 4: Phases of the Contract.

1.7 Reading guide

This TSG is best read before the TSR and the TSP.

The meaning and definition of the terms and abbreviations used in this TSG can be found in **Annex A. 'Glossary Discharge, ADM Lot'** to the Tender Specification.



2 BACKGROUND INFORMATION ON RWS

2.1 Mission

RWS is the executive agency that manages and develops the national infrastructure networks, under the direction of the Minister and State Secretary for Infrastructure and Water Management, to optimally meet societal needs.

RWS implements this by ensuring:

- a sustainable living environment;
- dry feet;
- plenty of clean water;
- the efficient and safe flow of traffic on road and water;
- reliable and useful information.

In doing so, RWS aims to position itself as:

- a public-oriented network manager. Network here does not refer to a communication network, but to one of the three national infrastructure systems, namely the main waterway network, the main road network and the main water system;
- a leading client;
- a decisive crisis manager.

Working together to create a safe, liveable and accessible Netherlands. That is what Rijkswaterstaat stands for.

Also see: <https://www.rijkswaterstaat.nl/over-ons/onze-organisatie/onze-missie>

A Safe Netherlands

Together with other water managers such as water boards, provinces and municipalities, RWS protects the Netherlands from flooding.

Also see: <https://www.rijkswaterstaat.nl/over-ons/onze-organisatie/onze-missie/veiligheid>

A Liveable Netherlands

RWS's sphere of activity is the public space. This presents RWS with dilemmas, as the people, organisations and nature in this public space often have conflicting interests.

Also see: <https://www.rijkswaterstaat.nl/over-ons/onze-organisatie/onze-missie/leefbaarheid>

An Accessible Netherlands

Keeping the Netherlands accessible is often a matter of cooperation. RWS works with provinces, municipalities and businesses to improve the distribution of traffic throughout the day.

Also see: <https://www.rijkswaterstaat.nl/over-ons/onze-organisatie/onze-missie/bereikbaarheid>

2.2 Organisation of Rijkswaterstaat

2.2.1 General

The RWS organisation is broadly outlined below. Around 10,000 people work at RWS across more than 200 locations. Up-to-date information on RWS can be found at: <https://www.rijkswaterstaat.nl/over-ons/onze-organisatie>.



Organisatieonderdelen Rijkswaterstaat



2.2.2 RWS-CIV

The Contracting Authority for the Measurement Sites is Rijkswaterstaat Central Information Services (RWS-CIV). Up-to-date information on RWS-CIV can be found at: <https://www.rijkswaterstaat.nl/over-ons/onz-organisatie/organisatiestructuur/centrale-informatievoorziening>.

2.2.3 DCA-PMN

The functional manager and user of the Measurement Sites is the Data Collection & Analysis department within RWS-CIV.

2.2.4 RWS-WTE

The information needs formulated by Rijkswaterstaat Water, Traffic and Environment ('RWS WTE'). Up-to-date information on RWS WTE can be found at: <https://www.rijkswaterstaat.nl/over-ons/onz-organisatie/organisatiestructuur/water-verkeer-en-leefomgeving>.

2.2.5 Other RWS departments

Up-to-date information on Rijkswaterstaat's other departments can be found at:

- for the Corporate Department: <https://www.rijkswaterstaat.nl/over-ons/onz-organisatie/organisatiestructuur/corporate-dienst>;
- for Major Projects and Maintenance: <https://www.rijkswaterstaat.nl/over-ons/onz-organisatie/organisatiestructuur/grote-projecten-en-onderhoud>;
- for Programmes, Projects and Maintenance: <https://www.rijkswaterstaat.nl/over-ons/onz-organisatie/organisatiestructuur/programmas-projecten-en-onderhoud>;



3 CONTEXT AND SCOPE OF THE CONTRACT

3.1 Current situation

At various locations in the Netherlands (also called Measurement Sites), RWS measures the flow rate and current velocity of water in rivers and canals using what are known as Flow Measurements. These Flow Measurements provide discharge and flow velocity data, which is transmitted to the RWS data centre via the Dutch National Water Monitoring Network (*Landelijk Meetnet Water*, 'LMW'). The data collected at the Monitoring Sites is an important source of information not only for matters such as international and national water distribution, high water levels (flooding), drought and salinisation issues, but is also necessary for real-time navigation guidance.

Below is a graphical overview of current and planned Measurement Sites in the Netherlands. Within the overall tender period, RWS may designate new Measurement Sites that the Contractor must establish in cooperation with LMW's M&S Contractor for that Measurement Site.





3.2 Scope of the Contract

Through this call for tenders, RWS is looking for two Contractors: one for ADM measuring instruments and one for H-ADCP measuring instruments, which will each be individually responsible with LMW's M&S Contractor for producing accurate discharge and flow velocity data. The Scope is equivalent for both Contractors and includes the following activities:

1. Supporting and advising LMW's M&S Contractor in designing the civil infrastructure for the Flow Measurement Instrument at each Measurement Site;
2. Supplying Flow Measurement Instruments that meet the requirements in the TSR to the Corporate Instrument Stock department ('CIB');
3. Inspecting the placement, mounting and alignment of Flow Measurement Instruments at Measurement Sites by LMW's M&S Contractor;
4. Calibrating the Flow Measurement Instruments at the Measurement Sites;
5. Calculating the Flow Value for each Measurement Site, including selecting the calculation method to derive the requested discharge and flow velocity data from the Flow Measurement Instrument readings, in order to demonstrate that the required accuracy of the discharge and flow velocity data is met for each Measurement Site;
6. Guaranteeing the availability and functionality of the Flow Measurement Instruments;
7. Supplying functionally equivalent Flow Measurement Instruments under warranty in case of defects;
8. Providing support for the implementation of Flow Measurement Instruments at Measurement Sites by preparing and providing an Installation Manual with instructions for the proper placement, mounting and alignment of Flow Measurement Instruments at both civil and non-civil interfaces for each Measurement Site;
9. Providing support for the Management and Maintenance of Flow Measurement Instruments, including by preparing and providing a Maintenance Manual with instructions for preventive and corrective maintenance, at least focusing on cleaning and 'like for like' replacement of Flow Measurement Instruments;
10. Providing support in resolving Malfunctions and Incidents on Flow Metering Instruments, including by providing a Maintenance Manual with instructions on making temporary and permanent functional repairs to Flow Measurement Instruments.
11. Providing second-line support by:
 - o Remotely assisting the Implementation by LMW's M&S Contractor;
 - o Remotely assisting the Management and Maintenance by LMW's M&S Contractor;
 - o Remotely assisting the resolution of Malfunctions and Incidents by LMW's M&S Contractor.
12. Providing third-line support by:
 - o Repairing defective Flow Measurement Instruments and their components;
 - o Dismantling depreciated Flow Measurement Instruments and their components;
 - o Recycling Flow Measurement Instruments and their components.

3.3 Training, Education, Instruction & Advice

As part of the Contract, the Contractor must:

1. Train, educate and instruct the personnel of LMW's M&S Contractor on the proper placement, mounting and alignment of Flow Measurement Instruments at Measurement Sites;
2. Train and advise RWS personnel on the correct interpretation of discharge and flow velocity data from the Flow Measurement Instrument;
3. Train, educate and instruct the personnel of LMW's M&S Contractor on the preventive and corrective maintenance of Flow Measurement Instruments, including cleaning and 'like for like' replacements;
4. Train, educate and instruct the personnel of LMW's M&S Contractor on troubleshooting for Malfunctions and Incidents.



4 PHASES OF THE CONTRACT

4.1 Introduction

The Contract has the following phases:

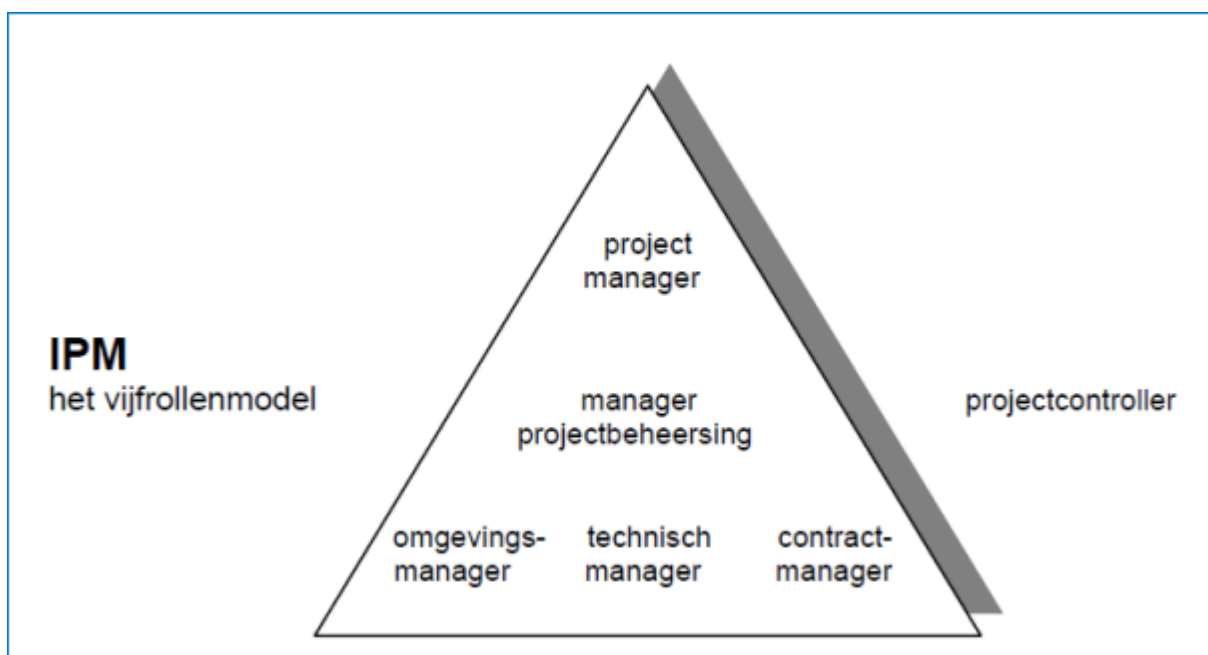
1. Preparing Installation Instructions and Maintenance Manuals;
2. Training, educating and instructing the personnel of LMW's M&S Contractor;
3. Supplying Flow Measurement Instruments to the Corporate Instruments Stock department;
4. Advising LMW's M&S Contractor on designing the civil infrastructure at Measurement Sites;
5. Supporting LMW's M&S Contractor in placing, mounting and aligning Flow Measurement Instruments at Measurement Sites;
6. Calibrating Flow Measurement Instruments at Measurement Sites;
7. Verifying and validating that the discharge and flow velocity data from the implemented Flow Measurement Instruments meets the required accuracy;
8. Technical delivery of the Flow Measurement Instruments;
9. Providing second- and third-line support to LMW's M&S Contractor for the implemented Flow Measurement Instruments at the Measurement Sites.

The Contractor must comply with at least the TSR and TSP requirements during each phase of the Contract. The Contractor may also contribute its own knowledge and expertise in each phase provided it is in line with the TSR and TSP requirements and improves the requested Performance.

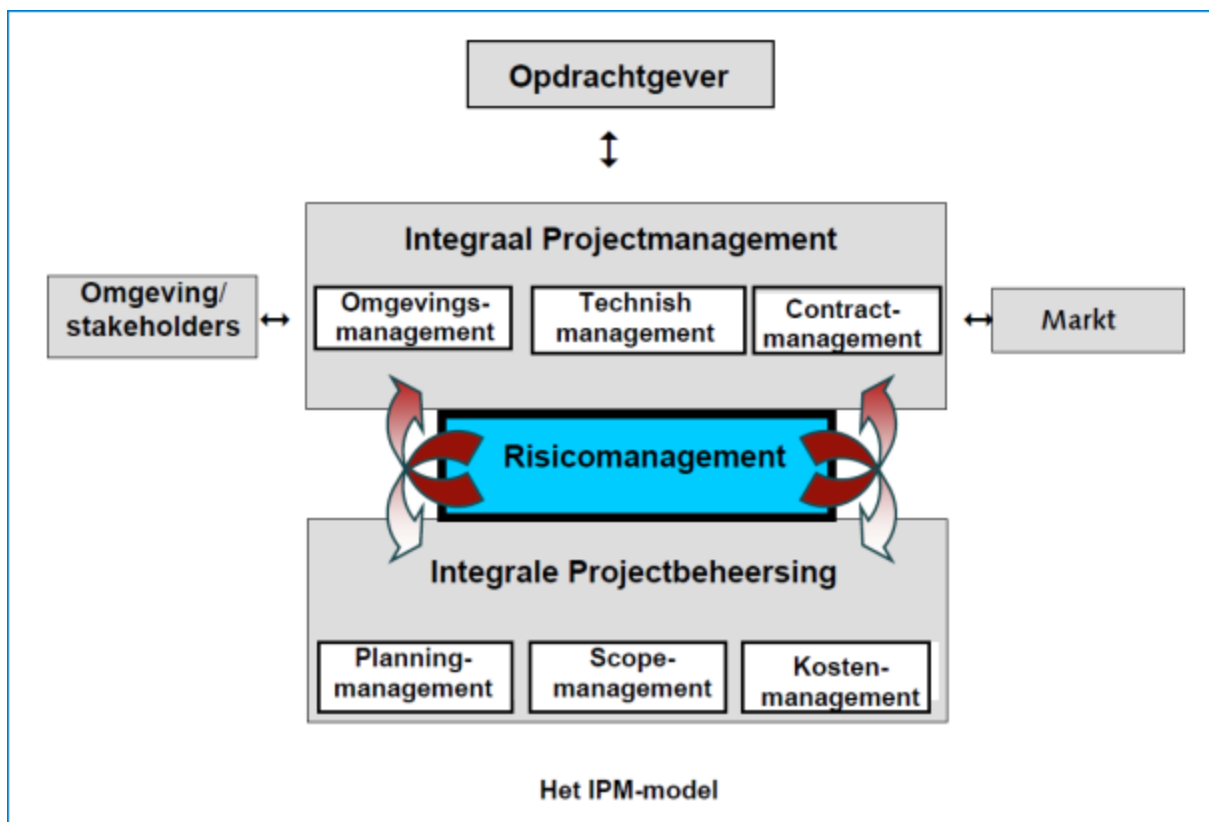
The Contractor must work intensively with LMW's M&S Contractor, particularly in phases 2, 4, 5 and 9, and advise and support this contractor, where necessary, to ensure the production of accurate discharge and flow velocity data from the Measurement Sites to RWS.

4.2 Organisation

4.2.1 Project Organisation for the Contract



4.2.2 Contract Management Organisation for the Contract



4.3 Overall planning

The overall planning for the delivery and implementation of the new Flow Measurement Instruments at the Measurement Sites is shown in **Annex B. 'Master Plan for the Replacement of Flow Measurement Instruments'** to the Tender Specification.

This overall planning considers the age of the current ADM Flow Measurement Instruments at certain Measurement Sites and the required accuracy of the discharge and flow velocity data. However, it is also highly dependent on the final condition of the civil infrastructure at each Measurement Site and the lead time to obtain permits for the Measurement Sites.

The Contractor cannot derive any rights from the overall planning in **Annex B. 'Master Plan for the Replacement of Flow Measurement Instruments'** to the Tender Specification.