Rijkswaterstaat
Ministerie van Infrastructuur en Milieu

Information meeting

European Tender for the supply of CT sensors for the National Water Measuring Network

12 March 2020

Agenda

1. Introduction project team
2. Rules and purpose information meeting
3. Procurement procedure, Tenderer, planning
4. Project context
5. Required sensors and services
6. The Tender
7. Questions & closure

The project team

• Ciska Smeets	Project manager
• Martijn Andernach	Technisch manager
• Marcel Kars	Contract manager
• Marc Hartogs	Technical advisor
• Mando de Jong	Technical advisor
• Christine Arendse	Procurement manager
• Edwin Stalman	Contract advisor

Rules and purpose information meeting

1. Questions are now being answered provisionally
2. Do not derive any rights from an oral answer
3. Questions and answers definitively via TenderNed
4. Clarification but no discussion
5. Questions TenderNed become part of binding Q&A (NvI)

When is this meeting a success?

1. It is clear why RWS is putting this order on the market
2. Tender process and planning is known
3. The scope of the assignment is clear
4. Specific elements in technical and service requirements are explained
5. Clues how to register
6. Your questions have been addressed

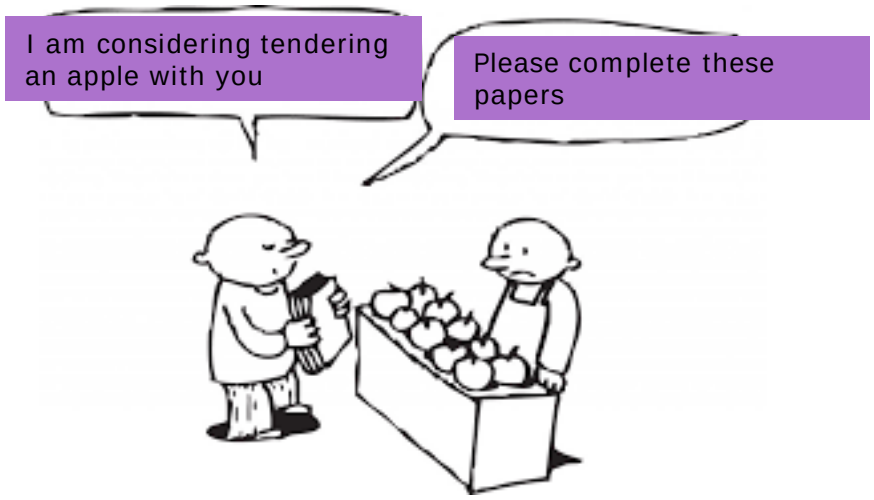
Purpose

RWS Measures salinity for operational water management. RWS measure's salinity with CT sensors in a monitoring network (LMW). With this tender we replace our current salinity sensors.

Why now?

1. Production current CT sensors will stop;
2. Technically improved CT sensors are available with possible
   - contribution to lower total costs in the chain for our monitoring network;
   - more sustainable maintenance.

Procurement procedure & planning



Procurement procedure

- Purchase conditions, rules and policy
  - European open tendering procedure according to the 2012 Public Procurement Act
  - General contractual conditions: ARVODI 2018
  - Communication exclusively via Tenderned
- Tender
  - Use formats, ensure completeness, ask questions
  - Information meetings
  - Submit your proposal with qualified digital signature
- Rating
  - Separation of Quality and Price
  - Verification process

Verification process

- Each Tenderer is ready for verification
- Reimbursement of costs hardware incurred
- After provisional award, request to start verification with the Tender rated first
- If verification does not lead to approval, the verification process starts again with a second successive Tenderer…
- Only definitive award if verification leads to final approval

TenderNed

- Use of TenderNed is mandatory
- Do you have a question about the use of TenderNed? Then first view the frequently asked questions
- The service desk is available on workdays from 8.30 a.m. to 5 p.m. via the number 0800-8363376 (free) or (calling from abroad) +31 70 379 88 99 or servicedesk@TenderNed.nl

Qualified digital signature

- Signed by a legal representative of the tenderer by means of a qualified electronic signature (PKIoverheid certificate or EU Qualified certificate).
- Qualified electronic signature required for:
  - Statement of agreement (Akkoordverklaring) of a person authorized to sign proposals

Applicable language

Contract: - contract in Dutch
- communication with contract advisor in Dutch
- Dutch is leading

Tender: - communication in Dutch & English (marktconsultation, information meeting)
- mandatory use of TenderNed in Dutch & English
- submitting Tender in Dutch or English

Translation? Time and informal English documents

Tenderer: the requirements & documents to be submitted

Uniform European Tender Document (UAE) (Annex 3): for Tenderer and for Combinations. In addition, also an UAE of a third party when an appeal is made to demonstrate a core competence.

Akkoordverklaring / Statement of Agreement (Annex 5): Qualified electronic signature (s) (also in Combination).

Certificate / Proof of quality management system: The manufacturer must have a quality management system (NEN-EN-ISO 9001 with) for the application area of manufacturing CT sensors.

Tenderer: the requirements & documents to be submitted

Uittreksel beroeps- of handelsregister / Extract from the professional or trade register: recent and current (maximum six months old). The legal validity of the signatory must appear from the deduction set. Also in Combinations.

Referentieverklaring(en) / References (annex 6): At least one of the three core competences must be demonstrated by the Tenderer himself. The other 2 core competences may also be supported by third parties. For reliance on third parties, see also the obligation of an UAE.

Planning

Friday 14th Feb 2020	Tender announcement
Thursday 12th Mar 2020	Information meeting12:30-14:30 hours
April 2020	(possible) Individual information meeting
Tuesday 21th April 2020	(possible) 2nd Information meeting 15:00-17:00 h.
Friday 15th May 2020	Deadline for asking questions
Friday 22th May 2020	Publication formal Q&A (NvI)
Tuesday 2th Jun 2020; 23:59 hours	Deadline for the Tender
Thursday 16th July 2020	Notification award decision
Aug-Sep 2020	Verification phase
Thursday 1st Okt 2020	Start Contract

Planning Contract deliveries and services

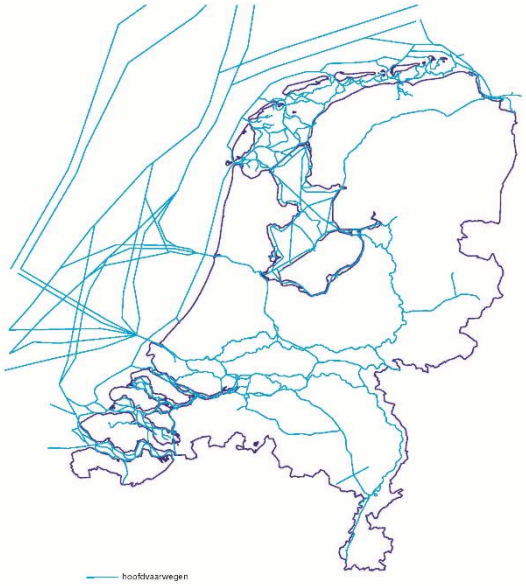
- After definitive award, meet up about delivery schedule and batches
- Deliveries first year 2021: between 75 and 125 pieces
- Initial deliveries 2021-2023: around 200 pieces
- Delivery & Services 8 years + 3 years + 2 years + 2 years
- Extensions are unilaterally called by RWS
- After the Contract period expires, the "revision clause“ is in place: preventive and corrective maintenance for lifespan of CT sensors can be agreed upon between Parties as part of this EU Tender

Project context

Rijkswaterstaat in a nutshell

Rijkswaterstaat is the executive organisation of the Ministry of Infrastructure and Water Management.

Road network



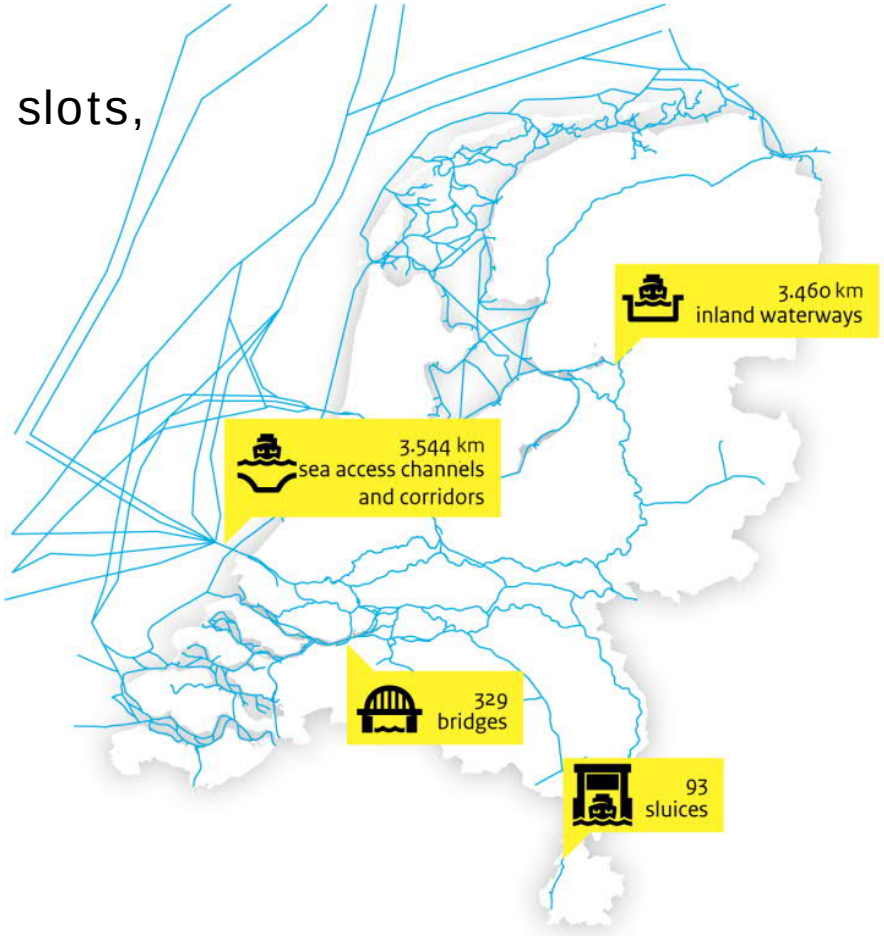
Waterways network

Main water systems

Main Waterways Network

Information of water levels, tidal time slots, and currents for shipping information.

Salinity information for water distribution and current models.



Main Water Systems

Information of water quality for water management, drinking water supplies, agriculture, European regulations etc

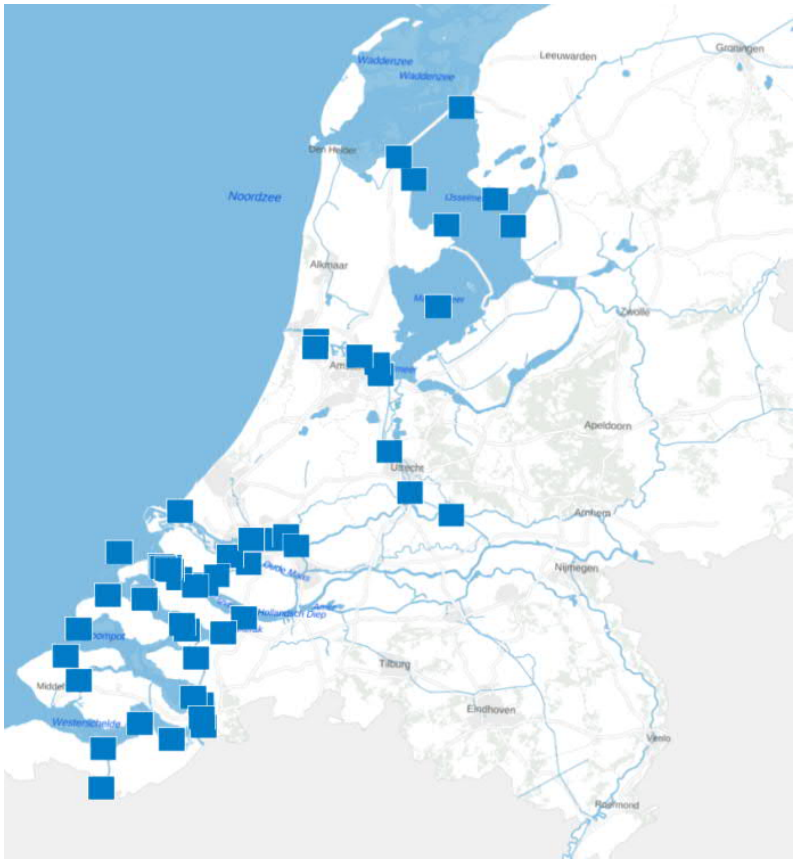
Salinity information used:
- Operational water management
- Modeling
- Salt intrusion at locks and rivers
- Salt at inlets for fresh water

National Monitoring Network
Landelijk Meetnet Water (LMW)

Salinity is determined from Conductivity / Temperature

56 online locations, each 1 – 3 sensors

105 installed CT-sensors currently



Typical applications in the network

Some locations accessible by car, others by ship only
Some locations are mains powered, others by solar only

Sensor mount variants

On several locations the available dimensions for sensors are limited

Cost saving across monitoring chain

Rijkswaterstaat aims at maximal cost reduction across the entire monitoring chain – including cost for adaptation and maintenance.

- A period between site visits that is as long as possible.
- A period between sensor swaps that is as long as possible.
- Initial site construction adaptation costs that are as low as possible.
- A required sensor reserve pool that is as small as possible.

Required sensors and services

Scope of the procurement

Supply
- Supply of sensors
- Availability & technical continuity

Services
- Preventive maintenance
- Corrective mainenance
- Storage of sensor stock and transport
- Support for maintenance personnel

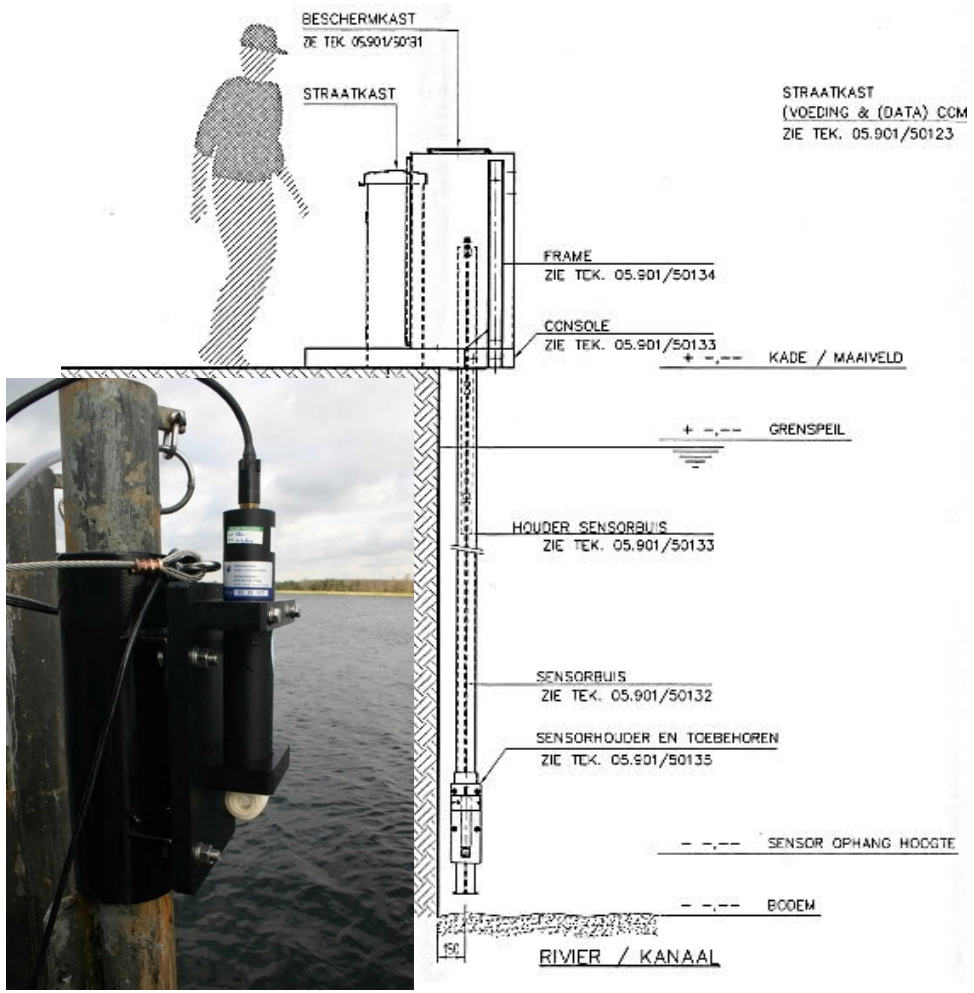
Number of sensors:

200	initial sensors (initial 3 years)
50	possible future expansion
??	possible future replacements

Technical scope

Scope:
- sensor
- sensor cable(s)
- evt. interface unit

Technical interfaces:
- Construction / deployment
- Electrotechnical (connector etc)
- Power supply (available power)
- Signal connection (signal, messages etc)



Requirement for active anti fouling

Fouling determines interval for service visit
- Currently: every 6 to every 2 weeks under heavy conditions
- 33 out of 56 locations accessible by ship only
- determines a large part of the operational cost

Scientific literature and market consultation points out:
active anti fouling can stretch the interval up to 3-6 months.

accessible	number of sites
by car	23
by ship	33
Total	56

Requirement and BPKV weight on dimension

In the monitoring network, a variety of sensor mount options exist.

Sensor dimension determines the number of measurement sites that need to be adapted. Sensor dimension requirements are based on total implementation cost:

- Requirement: < 97 mm (in VSE requirements)
- Added value: < 79 mm (in tender document)

Power consumption

When measurement sites rely on solar panels, limited power is available for the CT-sensor. To a certain extent, expansion is possible but involves extra implementation costs.

- Requirement: 2,0 W (in VSE requirements)
- Added value: lower (in tender document)

	number of sites
Mains voltage	26
Solar panels	30
total	56

Required service interval

Every sensor return for maintenance implies cost, both for our service employees and for required transport and service.

The required service interval determines life cycle costs:

- Requirement: 6 months (in VSE requirements)
- Added value: 1 year / no parts replacement on-site (in tender document)

Standardization

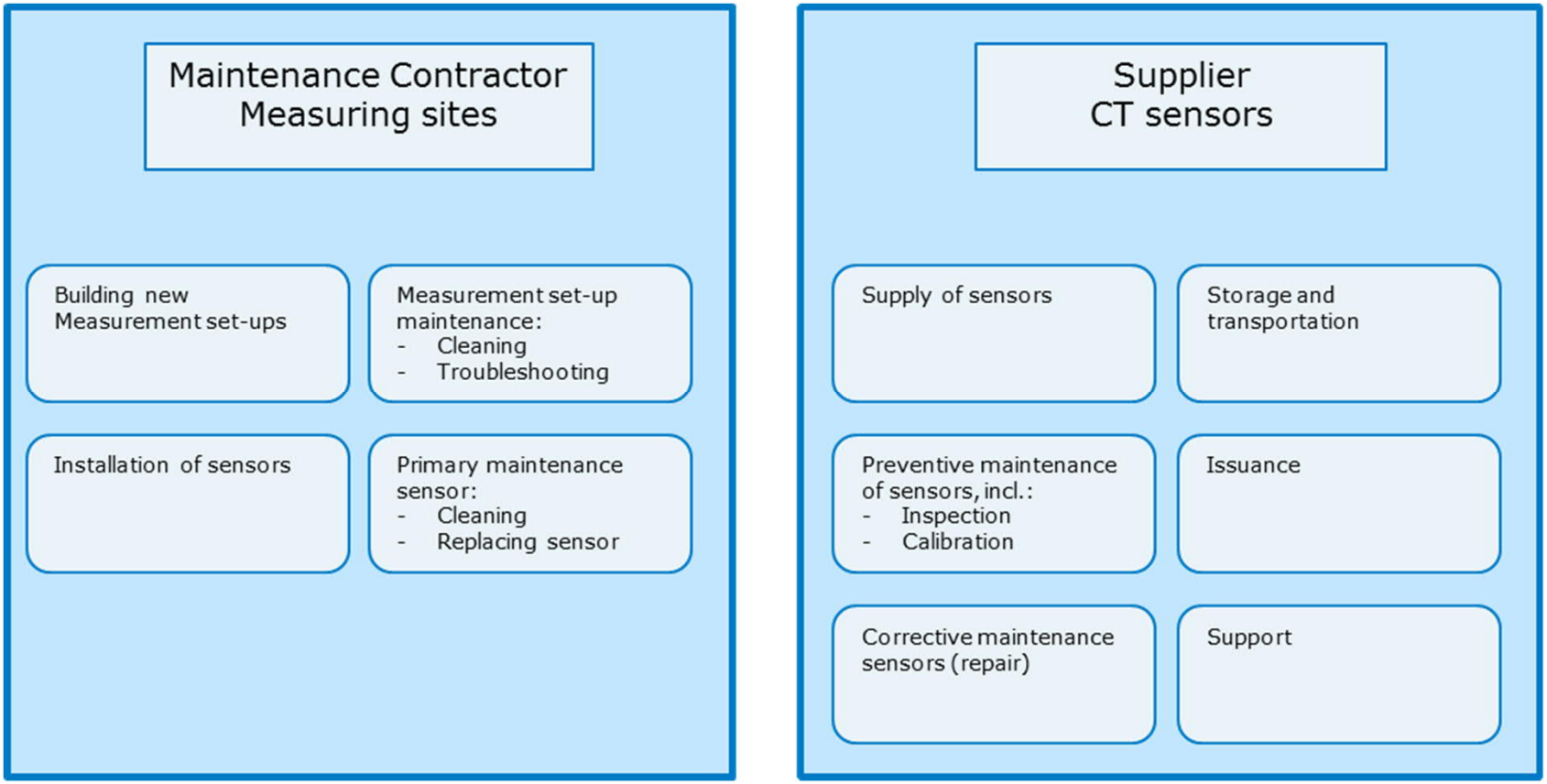
A single sensor type that fits all measurement sites has added value:

- Single type spare sensors for maintenance employees
- Single type spare sensor stocks for contractors and main stock
  - A smaller number of sensors required for the same availability
- Reduction of confusion risk, so a reduction of data loss

Requirement:	2 types to comply with range and uncertainties (see conditions in VSE requirements)
Added value:	1 type that suits all requirements (in tender document)

Services

Management of the monitoring network



Sensor maintenance based on ‘exchange from stocks’

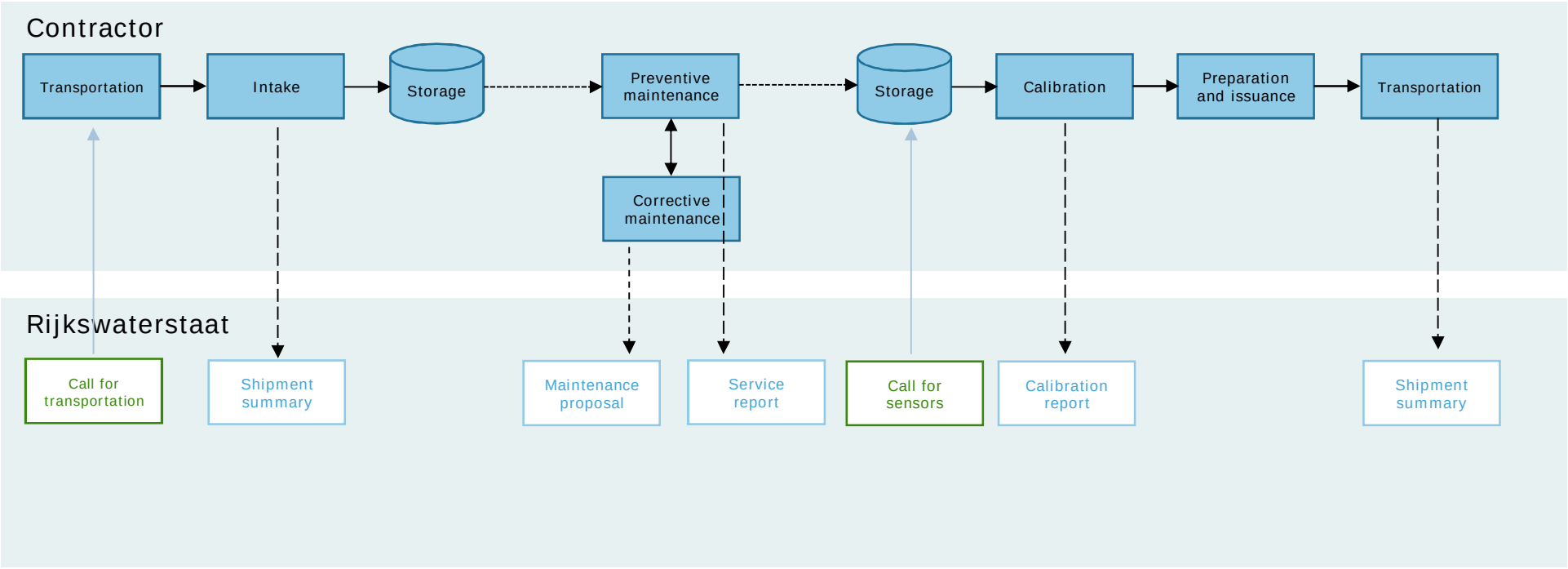
Required services

Supply of sensors	Supply, initial and replacement sensors Technical continuity
Maintenance	Calibration Preventive maintenance Corrective maintenance
Support	Remote support Consultancy and training
Logistics	Preparation and issuance for use Intake after use Storage Transportation

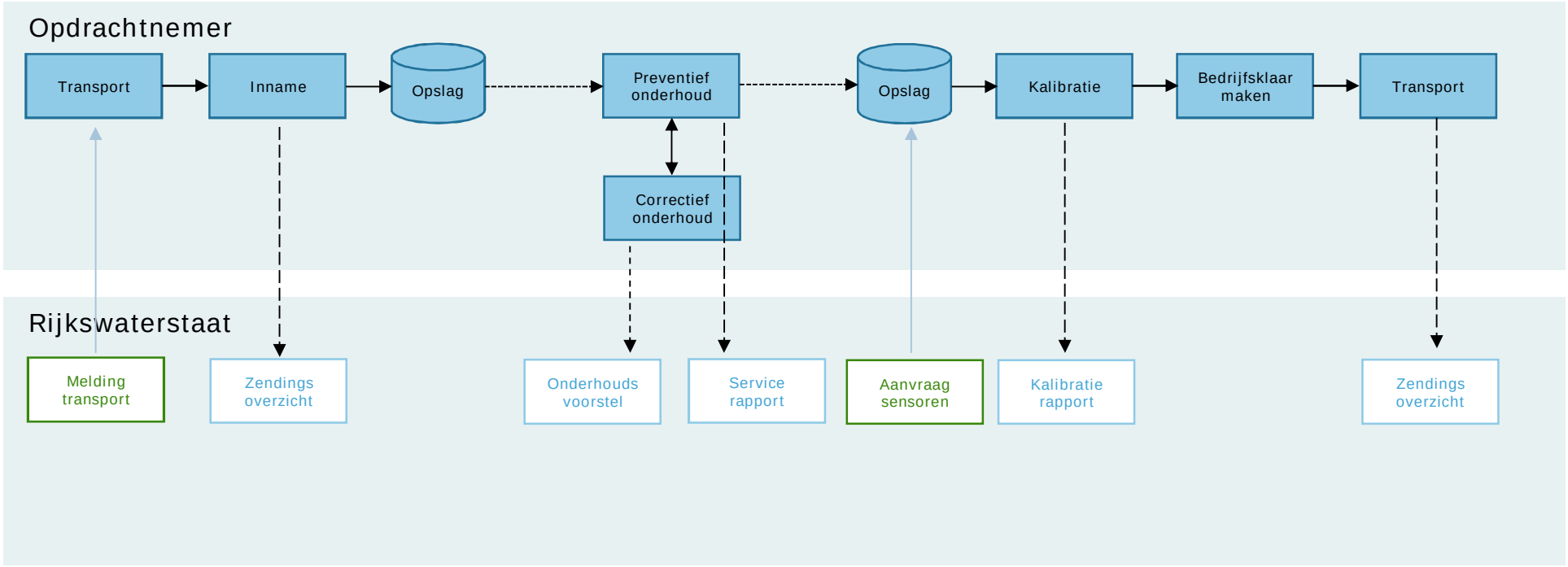
Some highlights

Preventive maintenance	Aim: to prepare the sensor for a full period of use. Turnaround time should fit in issuance service level.
Calibration	Calibration is the basis of our monitoring network, no field or workshop calibration will be performed by us. Turnaround time should fit in issuance service level.
Storage	Storage is included for an effective maintenance process. It facilitates last-minute calibration, and so a longer period of use.
Issuance of sensors	Issuance entails a final calibration, handling and transportation to a location indicated by RWS in the Netherlands. Service level: 5 working days.
Intake of sensors	Inspection of sensor state and registration of parts. Service level: 5 working days.
Transportation	- Transportation to and from the Rijkswaterstaat-location to the contractor. - If so, international transportation between the contractor and supplier.
Support	Support services to maintenance staff and RWS consultants by telephone and on site.

Maintenance process flow



Processchema onderhoud



The Tender


Eeny, meeny, miny, mo...
CARTOONSTOCK
Search ID: shin51
With all three suppliers evenly matched on price, quality and technical expertise, Mark resorts to his last remaining selection tool.

Tender: EMVI and BPKV

No.	BPKV-criteria	Rating
1	Price	40%
2	Quality	60%

EMVI = Most Economically Advantageous Tender

BKPV = Best Price Quality Ratio

Tender: Price Form and Price List

Tender PRICE: 2 documents to be submitted:

- Prijsformulier / Price Form (bijlage 09)
- Prijslijst / Price List

Price Form is used to be able to objectively compare the registrations financially.

Price List is used as the basis for contract execution.

Tender: Price Form

Dit deel in te vullen door inschrijver

Inschrijver vult alleen de blauwe velden in

Bedragen in € excl. BTW

ANNEX 9

			vermenigvuldigings-factoren: aan deze getallen kunnen geen rechten worden ontleend	subtotalen op basis van prijzen vermenigvuldigd met de factoren en berekening totale inschrijfprijs
Levering complete systemen Systeemprijs per stuk. Vul hier het bedrag in waarvoor de gehele oplossing exclusief kabel wordt aangeboden. Een evt. benodigde interfacemodule hoort in de prijs opgenomen te zijn. Prijzen voor l… dienen altijd de gehele vereiste leveringsomvang en de vereiste diensten bij levering te omvatten … BPKV aangeboden meerwaarde.	stuk…rijs …initie… …g van 200 stuk… …eerste 3 j… …uksprij… Opvolge… …ng (na de …ste initiele 200)		200	€ -
			215	€ -
Kalibratie Vul hier de prijs in van de kalibratie. Dit bedrag omvat de gehele …rle… zoa… …schre… …en dient inclusief de transportkosten van en naar de ophaallo… …in Nede… …ruike… eventuele verzending naar de fabrikant te zijn.	Stuksprijs		1600	€ -
Preventief onderhoud Vul hier de prijs in voor een enkele beurt voor preve… …or… …oud … het systeem. Dit bedrag dient inclusief alle transportkosten van en naar de ophaall… …land… bij de gebruiker en eventuele verzending naar de fabrikant te zijn. Wanneer verva… …g van v…bruiksmateriaal regulier onderdeel is van het preventief onderhoud, dient dit ook in de prijs op… …omen te worden.	Stuksprijs		1600	€ -
Correctief Onderhoud Uurtarief voor het uitvoeren van het correctief onderhoud. Het tarief omvat niet het benodigd materiaal. Het materiaal dat benodigd is voor het correctief onderhoud wordt genoemd op de prijslijst.	uurtarief		1280	€ -
Ondersteuning Uurtarief voor training en advisering. Telefonische ondersteuning en ondersteuning per e-mail is hiervan uitgezonderd. Het uurtarief dient ook de reiskosten te dekken. Reisuren mogen als werkuren verrekend worden.	uurtarief		150	€ -
Jaartarief vaste dienstverlening Vul hier het jaartarief in voor het verlenen van alle vaste dienstverlening. Voor deze prijs wordt de gehele vaste dienstverlening doorlopend geleverd betreffende Technische continuïteit, Ondersteuning op afstand en opslag. Bij het jaartarief moet een onderbouwing aangeleverd worden met met onderliggende kostenposten.	Jaartarief		10	€ -

Dit deel niet aan te passen door inschrijver

Inschrijfprijs € -

Tender: Price Form points of attention

- The multipliers are based on an expected Life Cycle during 10 years of use.
- To be able to objectively compare, requested prices are clearly defined in the Price Form. Pay close attention to the description which costs must be included in this amount.
- Offered prices include the added value offered in the criteria Quality.
- Work and systems that are included on both the Price List and in the Price Form format must be priced the same.

Tender: Price List

Price List is used for contract execution so that invoices can always be traced to items on the Price List.

- Tariffs and items as stated in the Price Form
- Prices for parts of the system

Tender: Quality

No.	Quality criteria	Scoring element	Rating
5.2.1	Technical functionality	a. Diameter	25%
		b. Maintenance-free period	15%
		c. Power consumption	10%
		d. Standardization to a single type of sensor	10%
5.2.2	Services	a. Organizing the work processes; connecting processes Tenderer to RWS processes	25%
		b. Guaranteeing quality by applying the PDCA in the processes	10%
5.2.3	CO_2-ambition level	a. The Tenderer's ambition having insight and reducing CO_2 emissions	5%

Tender: Technical functionality

Technische bijlage / Technical appendix: description of the technical solution offered: inter alia the sensor; any interface module; active anti fouling; etc. No points are given for this. (max. 4 pages excl. product folders)

Meerwaarde technische functionaliteit / Added value of technical functionality: performance criteria with added value of additional features: saving of operational costs or increasing reliability of the collection of measurement data. (max. 2 pages)

Tender: Services

Inrichten van de werkprocessen / Organizing the work processes: 1) connecting Issuance (Uitgifte) and Preventive Maintenance processes to RWS processes; 2) Scope of Preventive Maintenance (activities); 3) Clarify the implementation of the calibration. (max. 8 pages)

Borgen van de kwaliteit / Guaranteeing quality: by applying PDCA. The higher the quality of the Contractor's supplies and services, the less contract management effort it will cost. (max. 4 pages)

Tender: Level of ambition CO_2 reduction

Verklaring ambitieniveau CO_2 reductie / Declaration level of ambition CO_2 reduction (Annex 8) : indicate the level of ambition for the CO_2 performance ladder that you will achieve within 1 year.

Questions & closure

1. It is clear why RWS is putting this order on the market
2. Tender procedure and planning is known
3. The scope of the assignment is clear
4. Specific elements in technical and service requirements are explained
5. Clues how to register
6. Your questions have been addressed

Good luck with the Tender