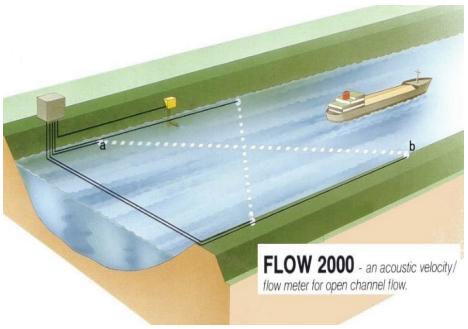
Rijkswaterstaat
Ministerie van Infrastructuur en Waterstaat

RWS INFORMATIE -

Draft Flow Integral Safety Plan (ISP)

Aanbesteden Debiet LMW



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Implementation Phase Coordinator:	*Contractor after tendering*

Credits

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Contents

Introduction

This ISP details the legally required H&S plan for occupational safety, expanded to include the other safety domains specific to Rijkswaterstaat. As the client, Rijkswaterstaat is responsible during the design phase for:

- Drawing up or arranging for this ISP to be drawn up; and
- Having this ISP form part of the contract file; and
- Making this ISP available at the construction site before implementation work starts (i.e. the moment when contractors arrive at the construction site).

If physical work is performed on the construction site, the contractor is then responsible for implementing this ISP and updating it as soon as the implementation work warrants it, for example in the case of work involving risk or if a new party starts working on the construction site under another contract. In these cases, the Implementation Phase Coordinator (on behalf of the contractor), in consultation with the Design Phase Coordinator (on behalf of the client), must ensure the necessary liaising and coordination.

The ISP is structured as follows:

- Chapter 1: a description of RWS's safety ambition and the project-specific safety objectives.
- Chapter 2: a description of the structure to be constructed, an overview of the companies involved on the construction site, the Design Phase Coordinator's name and the Implementation Phase Coordinator's name;
- Chapter 3: the measures resulting from the risk inventory and evaluation (RI&E) referred to in Annex B;
- Chapter 4: the arrangements for implementing the measures referred to in Chapter 3;
- Chapter 5: the manner in which measures will be implemented;
- Chapter 6: the structural, technical and organisational choices made in relation to the health and safety of employees and self-employed workers in the implementation phase, as well as the studies and reports that help substantiate these choices;
- Chapter 7: the manner in which information and instruction is provided to the employees at the construction site.
- Annex B: an inventory and evaluation of the hazards specific to the construction work in question (the object-specific risks), specific hazards resulting from the simultaneous and consecutive performance of the construction work and, where appropriate, the interaction with ongoing operations (the concurrent risks).

This ISP is a coordination document that will be updated as changes in practice warrant it. See the 'version management' table in the credits for this purpose. Example: at the time of preparation, the ISP for a five-year maintenance contract cannot yet foresee which parties will be hired in the fifth year. Once that is known, the ISP will have to be adjusted accordingly.
When fully completed and used correctly, this ISP meets the legal requirements for a H&S plan. A separate H&S plan is therefore not necessary.

1 Underlying principles and preconditions

1.1 DG's policy statement

With this policy statement, we pledge to do our utmost to perform our societal responsibilities as safely as possible across the full scope of our area of operations.

It is both our duty and ambition to protect the Netherlands against rising water levels. Users must be able to use our roads and waterways, surface waters and structures safely. Working to ensure the safety of local residents around our area of operations is also our concern. Moreover, we ensure that everyone who works at Rijkswaterstaat or on our behalf can do their job safely.

We aim for a proactive safety level on the safety culture ladder.
This means that we are continuously focused at Rijkswaterstaat on preventing safety risks and incidents, and we will continue to do so.

We achieve this by actively and effectively cooperating on safety and through proper coordination, both within Rijkswaterstaat and with our social partners, while maintaining individual responsibilities. Rijkswaterstaat serves as a role model in this regard and takes a leading position.

We work on this using a safety management system aimed at continuously improving the safety situation of our structures and infrastructure. We account for our progress and results in this regard.

Our occupational safety aim is zero fatalities and zero serious injuries. When external contractors work on our sites, we ensure that they also comply with the safety requirements and standards that we set for our own employees.

We are aware of the main security risks on our networks. We continuously cooperate to better manage these risks and develop the leadership, knowledge and expertise required for this purpose.

We also invest in an open culture aimed at continuously improving, learning and keeping each other accountable. A culture in which we openly address risks, dilemmas, mistakes and unsafe behaviour.

When necessary, we respond resiliently, decisively and professionally to dangerous situations and incidents. We communicate honestly, openly, promptly and correctly about this and work on providing clear information regarding safety on and around our networks.

Lastly, we analyse incidents to learn from them so that we can take measures to prevent them from reoccurring in the future. This allows us to become more aware of new developments that threaten safety in our area of operations.

January 2021

Michèle Blom
Director-General of Rijkswaterstaat

1.2 Ambition and objectives

Rijkswaterstaat is committed to a proactive and integrated approach to safety management for:

- Employees and other parties involved;
- Users of roads and waterways;
- Local residents.

Our aim is zero fatalities and zero serious injuries.

The client and the Flow tendering team for this specific project has translated this general ambition into the following project-specific objectives:

1. Ensuring Flow Safety during the design phase and tendering;
2. Ensuring Flow Safety during procurement and the award of the contract;
3. Ensuring safety in the implementation phase;
4. Ensuring safety is at level 3 on the safety culture ladder for Flow.

1.3 Rules of conduct for project staff

The following rules of conduct apply to this project:

1. I am a role model.
2. I always consider safety in my work.
3. I ensure a safe working environment.
4. I stop any job that does not feel safe.
5. I always report accidents and near-accidents on 0800-8002 and discuss them.
6. I ensure appropriate personal protection (PPE).

1.4 Relevant safety domains

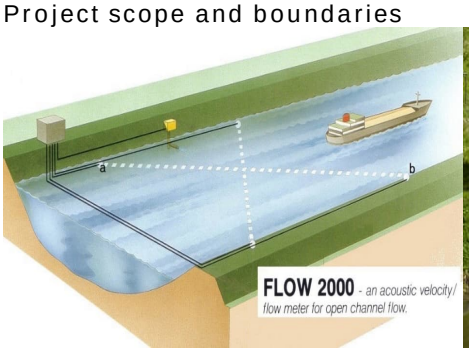
The following safety domains marked with a cross are relevant to this project:

☒ Occupational safety (always relevant)	☒ Electrical safety
☒ Traffic safety	☒ Tunnel safety
☒ Nautical safety	☒ Structural safety
☐ Safety against flooding	☒ Social safety
☒ External safety	☒ Fire safety
☒ Machine safety	☒ Integral security

The safety domains marked with a cross are addressed in this Draft ISP. These safety domains were selected in preparation for the Flow tender. The definitions of the above security domains are in Annex A.

2 The Safety and Flow project

2.1 Project scope and boundaries



2.1.1 Description of the project/construction work

AFM and H-ADCP instruments. Flow ensures the national safety of vital processes by regulating and managing water quantity, drinking water supply and shipping operations.

2.1.2 Locations of structures (physical boundaries)

Add photo of AFM and H-ADCP locations.

2.2 Parties involved

This section contains an overview of all parties involved who have an interest in this ISP.

2.2.1 Client

Organisation	Ministry of Infrastructure and Water Management Directorate-General Rijkswaterstaat
Name:	*Name*
Physical address:	*Address*
Postal code and city:	*Postal code, City*
Telephone number:	*Telephone number*
Email address:	*Email address*

2.2.2 Contractor(s)

Organisation:	*Name*
Name:	*Name*
Physical address:	*Address*
Postal code and city:	*Postal code, City*
Telephone number:	*Telephone number*
Email address:	*Email address*

2.3 Design Phase Coordinator, ISPA, CIS HSC and Implementation Phase Coordinator

2.3.1 Design Phase Coordinator, on behalf of the client

N.B. The statutory Design Phase runs until the shovel enters the ground and therefore does not end after the Contract Award. Where applicable, the Design Phase and Implementation Phase may run in parallel.

Design Phase Coordinator

Organisation:	*CIS-DCA-RDD*
Name:	*Jeroen Takkenberg*
Physical address:	*Derde Werelddreef 1*
Postal code and city:	
Telephone number:	
Email address:	

2.3.2 Integral Safety Project Adviser (ISPA)

Within the client's IPM team, the intention is to appoint an Integral Safety Project Adviser, who will provide support in relation to Integral Safety Themes. The ISPA works closely with the HSC (contractor), AIV CIS and internal HSC (client) coordinators. Among other things, the ISPA performs the following work:

- Reviewing and further detailing of the contractor's safety documentation (draft ISP, ISD and Structure RI&E) (including work plans and the H&S plan for the implementation phase);
- Advising the client and contractor on Integral Safety topics;
- Safety and observation rounds during measurements;
- Escorting Safety Walks;
- Making an inventory of incidents including analysis at each progress meeting by the IPM team. The inventory is shared with the ISPA;
- Contribution to T-reports;
- Attending systems-orientated contract management (SCM) safety reviews as a subject matter expert.
- Arrangements have been made with the Contractor(s) about reporting unsafe situations or acts. All dangerous situations and incidents, regardless of who caused them, must be reported so that lessons can be learnt and safety on the project improved. The client defines the role of the Integral Safety Project Adviser (ISPA).

2.3.3 Client's H&S Coordinator

Client's H&S Coordinator

Organisation:	*CIS*
Name:	*Not yet known*
Physical address:	*Address*
Postal code and city:	*Postal code, City*
Telephone number:	*Telephone number*
Email address:	*Email address*

2.3.4 Implementation Phase Coordinator, on behalf of the Contractor

Not yet known.

N.B. the statutory Implementation Phase begins when 'the shovel enters the ground'.

Implementation Phase Coordinator

Organisation:	*Name*
Name:	*Name*
Physical address:	*Address*
Postal code and city:	*Postal code, City*
Telephone number:	*Telephone number*
Email address:	*Email address*

2.4 Work planning

Intended start date of work on construction site/area	*Date*
Intended end date of work	Date
Intended duration of work	*Implementation period (optional)*
Intended long-term maintenance period	*Implementation period (optional)*

3 Safety, ISIPF and Technical Manager

3.1 Safety, ISIPF and Technical Manager

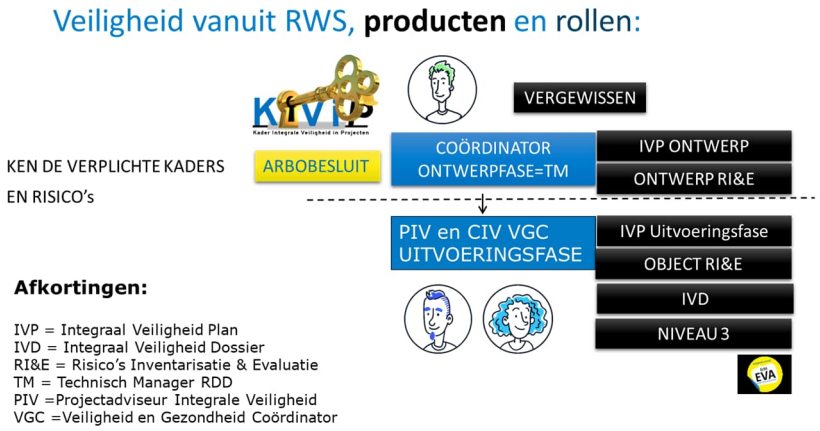
Safety is integral to our work, even if we outsource activities to other parties. Under the Working Conditions Act (Working Conditions Decree) [*Arbeidsomstandighedenwet (Arbobesluit)*], the client (RWS) and the contractor are jointly responsible for ensuring the health and safety of employees during the implementation phase. Action is thus required from Rijkswaterstaat, both in the preparation of a tender and during the implementation phase

In recent years, Major Projects and Maintenance and Programmes, Projects and Maintenance, together with the Dutch Labour Inspectorate, have worked on reviewing and improving our own work processes. Among other things, this has resulted in the Integral Safety in Projects Framework (ISIPF), included in the RWS working manual. The framework assumes a central role for the Technical Manager (TM).

RWS was recently certified at level 3 on the safety culture ladder. This means that ISIPF 3.4.0 must actually be used as a guiding framework in the CIS, including Data Collection and Analysis (DCA), and is not just a matter for Major Projects and Maintenance and for Programmes, Projects and Maintenance, from which the safety approach is originally derived. The ISIPF has roles that the RDD and permanent measuring network (PMN) have not defined separately: Environment Manager and Project Control Manager. However, the ISIPF does have the roles of Project Manager, Technical Manager and Contract Manager/Adviser(s).

The Technical Manager (TM) is operationally responsible for project safety. Since May 2023, the ISIPF has stipulated that the Technical Manager is also the Design Phase Coordinator (CO) for Integral Safety. The CO coordinates the duty to verify, the preparation of the Draft and detailed Integral Safety Plan (ISP) and the preparation/updating of the Integral Safety Dossier (ISD) and Structure RI&E.

Within the ISIPF framework, the RDD Technical Manager is responsible for starting the process of verifying, the ISP design phase and ISD/Structure RI&E. The RDD Technical Manager is assisted by a Health and Safety Coordinator (HSC) and Integral Safety Project Adviser (ISPA).


Veiligheid vanuit RWS, producten en rollen:
KIVI
Kader Integrale Veiligheid in Projecten
VERGEWISSEN
KEN DE VERPLICHTE KADERS
EN RISICO's
ARBOBESLUIT
COÖRDINATOR ONTWERPFASE=TM
IVP ONTWERP
ONTWERP RI&E
PIV en CIV VGC UITVOERINGSFASE
IVP Uitvoeringsfase
OBJECT RI&E
IVD
NIVEAU 3
EVA
Afkortingen:
IVP = Integraal Veiligheid Plan
IVD = Integraal Veiligheid Dossier
RI&E = Risico's Inventarisatie & Evaluatie
TM = Technisch Manager RDD
PIV =Projectadviseur Integrale Veiligheid
VGC =Veiligheid en Gezondheid Coördinator

8

4 Flow Safety Domains, Design RI&E and measures

This chapter further describes the safety domains with draft RI&E and measures that mitigate (reduce) the identified risks (Annex B). Although the entire ISP is a dynamic document that is updated as soon as the work warrants it, it certainly applies to this chapter.

4.1 Occupational safety

Eliminating and/or preventively managing risks in the performance of work by employees of Rijkswaterstaat and those working for RWS.

4.1.1 Occupational safety risks

The main risks relating to occupational safety are:
- Workers falling from heights when performing measurements, for example because height differences are not adequately protected.
- Workers drowning when working near water because there is insufficient protection in place.
- Workers being suddenly exposed to extreme weather conditions, such as lightning, heavy rain, gusts of wind or extreme heat/cold.
- Workers being electrocuted during measurements near live electrical components.
- Collisions due to employees having to drive long distances and getting tired or distracted while driving.
- Employees being insufficiently aware of object-specific risks.

4.1.2 Occupational safety measures

The following measures must be implemented so that the Contractor can ensure safety:
- The client must periodically review the contractor in relation to integral safety;
- The client must have provided this ISP including the RI&E to the contractor;
- The client must request the Integral Security Dossier from the manager/regional department and provide it to the contractor;
- The contractor must act in accordance with the regional department's internal rules and Rijkswaterstaat's internal rules;
- The contractor must not perform destructive acts on the structures;
- The contractor must coordinate with the manager/regional department regarding object-specific risks;
- The contractor must coordinate the measurements with the structural expert (and on site with the operator).
- The contractor must provide information and instruction prior to the works.

- The contractor must report all dangerous situations and accidents to the client's technical manager.
- The contractor must control the inventoried risks by implementing appropriate safety measures in accordance with the occupational hygiene strategy under Article 3(1)(b) of the Working Conditions Act.

4.2 Traffic safety

Eliminating and/or preventively managing risks to traffic participants on the road.

4.3 Nautical safety

Eliminating and/or preventively managing risks to traffic participants on the waterways and at sea.

4.4 Electrical safety

Eliminating and/or preventively managing risks of electrical installations.

The contractor will perform work on the existing installation, including public lighting, barriers and road-related systems. The contractor must work in accordance with the BEI (a framework for managing electrical installations) and draw up a BEI work plan so that it is clear how the various duties and responsibilities will be fulfilled. Section 2.2 mentions RWS's installation manager with whom the contractor must coordinate matters.

4.5 Structural safety

Eliminating and proactively protecting against the risk of collapse of a structure.

This aspect is covered by laws and regulations, including the Building Decree and the Eurocodes, and is partially included as standard in design and building contracts. The work and material choices must also comply with the Guidelines for the Design of Structures [*Richtlijnen Ontwerp Kunstwerken* (ROK)]. The contractor must ensure structural safety. In addition to the applicable laws and regulations on this topic, the contractor is expected to put its processes and expertise into practice in the same, or in a comparable way, as described in the Structural Safety Knowledge Portal. The 'Ensuring structural safety in the implementation phase' framework (24 April 2011) is in force at Rijkswaterstaat. This describes the main risks to be included in the client's risk register.

The following has been described as a main risk in the design phase: The design process is inadequately controlled in relation to structural safety. Potential causes include:
1. Insufficient coordination and supervision of the structural processes in the design phase;
2. The selected constructors lack sufficient competence;
3. Major structural risks are not identified and/or managed;
4. Calculations and drawings are not demonstrably or adequately checked (4-eyes principle) and/or verified.

4.6 Social safety

Eliminating and/or preventively managing risks to RWS employees and users of our facilities against hazards caused by or threatened by human activity in public spaces.

4.7 Fire safety

Eliminating and/or preventively managing risks of fire.

Protecting and keeping people safe in relation to fire and its consequences, and the prevention and protection of construction from
fire and its consequences.

Fire safety is and remains an important safety concern in the Netherlands. The fire safety regulations are partly defined within the theme
Structural Safety (fire-load resistance requirements).

Fire safety is also closely related to Emergency Response. For this aspect, also consider communication with the emergency services (Safety Region).

4.7.1 Fire safety risks

Annex B Draft Flow Safety RI&E must be further developed and supplemented.

4.7.2 Measure:

1. For the scope of this contract, this will mainly concern the maintenance of existing fire extinguishing systems and the possible storage of equipment near existing properties.
2. Practising fire evacuations.
3. Clearly indicating emergency exits in case of fire.

4.8 Integral security

Protecting or keeping establishments, people and infrastructure safe from deliberate disruptions.

The term Security is used internationally for both physical security and information security. Within the Ministry of Infrastructure and Environment, the term integral security is used for integrating the following sub-areas:
1. Physical security;
2. Information security;
3. Personal data protection (GDPR, privacy);
4. Integrity, particularly in a personal context.

In the Netherlands, physical security primarily focuses on fraud, theft and vandalism, but in some sectors also on terrorism. This also applies to the RWS sectors ‘Regulating and managing surface water’ and ‘transport’.

4.8.1 *Integral security: main risk*
Vital parts of the object are freely accessible to unauthorised persons, posing risks to availability.

4.8.2 *Measure:*
1. Physical security ensures that only authorised people have access to the site, building and equipment.
2. The contractor conducts an SCM review for the TSR and TSP Security (Information Security) and provides a completed Security ‘Comply or Explain’ list.

5 Arrangements

6 Method of supervision

7 Justification of structural, technical and organisational (STO) choices

8 Training and instruction

All Rijkswaterstaat project staff have taken the Integral Safety e-learning on the Ministry of Infrastructure and Water Management's Learning Portal.
All Rijkswaterstaat project staff who regularly visit construction sites are 'VCA-VOL' certified (an advanced health, safety and environment certification for operational managers).
All Rijkswaterstaat project staff who visit the construction site of a contractor that adheres to the Governance Code for Safety in Construction have a valid 'GPI' (general site safety instruction) certificate.
All RWS project staff apply the RWS Internal Safety Rules.

AAnnex Definitions

General definitions	
Safety	Eliminating and/or preventively managing risks that can lead to injury or to economic or environmental damage.
Integral safety	All safety domains of a system considered in conjunction, throughout the entire lifecycle of an object or a network link.
Risk	A risk is an uncertain future event with adverse consequences, in terms of personal distress, economic and environmental damage, and reputational damage. Safety risks include the first two in particular. A risk is usually described as a product of probability of occurrence and consequence.
Managing Risks	If the risk cannot be eliminated, it must be brought to an acceptable level for RWS. An acceptable risk is one that has been evaluated on the basis of the risk matrix. The residual risk must be explicitly evaluated according to the PMN framework.

Definitions of safety domains	
Note: The safety domains below apply during all life phases of an object (structure, road section, waterway section, machine, installation, etc.)	
Occupational safety	Eliminating and/or preventively managing risks in the performance of work by employees of Rijkswaterstaat and those working for RWS.
Traffic safety	Eliminating and/or preventively managing risks to traffic participants on the road.
Nautical safety	Eliminating and/or preventively managing risks to traffic participants on the waterways and at sea.
Social safety	Eliminating and/or preventively managing risks of flooding, waterlogging and water scarcity.
External safety	Eliminating and/or preventively managing risks of incidents with hazardous substances along transport routes (road, water, railways or pipelines) or at stationary installations.
Machine safety	Eliminating and/or preventively managing risks of machines.
Electrical safety	Eliminating and/or preventively managing risks of electrical installations.
Tunnel safety	Eliminating and/or preventively managing risks to traffic participants in tunnels.
Structural safety	Eliminating and proactively protecting against the risk of collapse of a structure.
Social safety	Eliminating and/or preventively managing risks to RWS employees and users of our facilities against hazards caused by or threatened by human activity in public spaces.
Fire safety	Eliminating and/or preventively managing risks of fire.
Integral security	Eliminating and/or preventively managing risks of human behaviour (conscious and unconscious, intended and unintended, deliberate and accidental) that can affect the condition, nature and functionality of Rijkswaterstaat's area of responsibility.

Definitions within Integral Security	
Physical security	Eliminating and/or preventively managing risks of physical human behaviour (conscious and unconscious, intended and unintended, deliberate and accidental) that can affect the condition, nature and functionality of Rijkswaterstaat's area of responsibility.
Information security	Eliminating and/or preventively managing risks of human behaviour in the form of penetrating information systems (conscious and unconscious, intended and unintended, deliberate and accidental) that can affect the condition, nature and functionality of Rijkswaterstaat's area of responsibility.
Personal data protection	Eliminating and/or preventively managing risks associated with unlawful and/or unfair use of personal data.

BAnnex Draft RI&E

This annex contains the specific risks associated with work within the project scope, namely object-specific risks and concurrent risks. These risks form the basis for the measures, arrangements and method of supervision described in this ISP.