Call for interested participants for a Bridge Weigh-in-Motion tender

Objective
The objective of this 'Call for interested participants for a Bridge Weigh-in-Motion tender' is:

- to identify the interested market parties for this potential contract;
- to collect ideas and input to increase market parties' interest and to further shape the potential contract's scope.

Background
Rijkswaterstaat is an agency within the Dutch Ministry of Infrastructure and Water Management. One of the tasks of Rijkswaterstaat is to carry out asset management and maintenance of bridges and viaducts in the Dutch main road network. Structural recalculations of these infrastructure objects are carried out to determine whether strengthening is necessary to comply with Eurocode and Rijkwaterstaat rules and guidelines related to structural reliability. In addition, periodic inspections of bridges and viaducts are carried out to assess the technical state of the object.

Bridge Weigh-in-Motion systems enable us to have a better understanding of actual traffic loads on a particular bridge or road section. The information that Bridge Weigh-in-Motion systems generate will be used in structural recalculations of our infrastructure and will be used to understand damage mechanisms that are found during inspections on bridges/viaducts and pavements. Bridge-specific Weigh-in-Motion data is particularly relevant for fatigue of steel bridges, as well as the monitoring of mass/axle load restrictions on (all) bridges or viaducts, e.g. during execution of renovation projects.

In addition, Bridge Weigh-in-Motion data will be used in predictive models for traffic loads on road sections without Road or Bridge Weigh-in-Motion systems. Also, Bridge Weigh-in-Motion data will be used as input for the revision of the Dutch National Annex to EN 1991-2 (for new bridges/viaducts) and NEN 8701 (existing bridges/viaducts), as a supplement to the data collected with our traditional in-road WiM-systems.

Single-contract approach
Rijkswaterstaat aims to accommodate all Bridge Weigh-in-Motion related services within a single contract. Arguments for this approach include:

- Long-term cooperation with possibilities for increasing efficiency ;
- Flexibility, necessary for various reasons:
    - Monitoring traffic loads on bridges/viaducts that are undergoing renovation. This will be a varying population of bridges and viaducts over time;
    - Determining traffic loads on bridges that are up for structural recalculation, where we expect that for a number of bridges the bridge-specific traffic load measurements would lead to other conclusions compared to applying solely the traffic load codes. This will be a varying population of bridges and viaducts over time;

- Preselection of vehicle combinations outside of the legal limits related to mass / axle loads. By varying the locations of Bridge Weigh-in-Motion systems, the Police and Transport Inspectorate have the element of surprise, ultimately leading to better compliance to the legal limits;

The need for flexibility expresses itself through a desired collaboration between Rijkswaterstaat and a Bridge Weigh-in-Motion supplier, where in consultation between both parties the time planning, division of tasks, and detailing of location-specific requirements will take place.
The single-contract approach implies that we are looking for parties with a Bridge Weigh-in-Motion system suitable for a large field of application (wide variety of bridge and bridge deck types), so that the system can be deployed on most of Rijkswaterstaat's bridges/viaducts.

Scope
The foreseen scope contains (but is not limited to) the following Bridge Weigh-in-Motion related services:

- Preparation of installation plans and work plans for bridges/viaducts selected by Rijkswaterstaat;
- The coordination of and responsibility of location-specific traffic measures/road blocks during installation, calibration, and deinstallation of the Bridge Weigh-in-Motion system, with the aim of providing a safe and adequate working environment;
- Installation of the Bridge Weigh-in-Motion system in line with the installation plan and work plan;
- Calibration of the Bridge Weigh-in-Motion system;
- Presenting to Rijkswaterstaat all obtained Bridge Weigh-in-Motion data in a secure online portal, showing individual vehicles passages over time. Each registration should include key vehicle combination characteristics, such as total mass, axle loads, axle distances, license plates (front and back) and an overview picture of the vehicle;
- Presenting to Rijkswaterstaat all live Bridge Weigh-in-Motion measurements per location in a secure online portal, with the ability to relay this information to Police/Transport Inspectorate for preselection of heavy goods vehicles;
- Supplying on a daily basis the data of vehicles that do not comply with the location-specific legal limits (e.g. total mass, ban on heavy goods vehicles, …);
- The deinstallation of the Bridge Weigh-in-Motion system.

The expectation is that the indicated services will be necessary for at least the coming five years, potentially longer. The duration of the contract is to be determined.

Questions
We kindly request you to answer the questions in the attached Excel-document. Your answers will be used to identify the interested market parties, and to collect ideas and input to increase market parties' interest and to further shape the potential contract's scope.

Activity	Date
Publication of market consultation on Tenderned	24-09-2024
Closing date for receiving responses to the market consultation	08-10-2024 until 15.00 uur