



Rijkswaterstaat
Ministerie van Infrastructuur en Waterstaat

Information Notice – Weigh in Motion

Date: 07 May 2026

Nr.	Question	Answer
1	Clarification of the parallel existence of existing and new WIM sites The market consultation document states that the renewal of Weigh in Motion has a lifecycle extending to 2050, during which existing and new WIM sites will coexist in parallel for an extended period. Could you clarify what this means in relation to the scope of this market consultation, and whether—and if so how—this parallel existence has implications?	By the parallel existence of existing and new WIM sites, it is meant that the renewal of WIM is implemented in a phased manner at network level towards 2050, during which a transition period may occur in which both existing and newly deployed installations are present. This concerns a programmatic phasing and not the simultaneous operation of multiple systems at a single location or carriageway. Within the scope of this market consultation, the principle is that at each location and for each carriageway, only one system—either the existing or the new one—is operational. It is acknowledged, however, that the parallel existence at network level may have implications for data management, reporting, governance, and representativeness. Rijkswaterstaat therefore welcomes insights from market parties on how to deal with data originating from different generations of systems during this transition period.

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2	Clarification of the term “integrator” Section 1.3 states that the use of an integrator falls under the responsibility of the supplier and does not constitute a separate target group. In Annex 1.9, reference is also made to an ITS integrator. Could you clarify what Rijkswaterstaat means by “integrator” in this market consultation? Does this refer exclusively to an ITS integrator?	Rijkswaterstaat does not define an integrator as a separate role or target group. This market consultation is primarily aimed at suppliers with demonstrable WIM experience, who are responsible for assembling and managing the complete integration team required for their solution. The term <i>integrator</i> is used in a broad and functional sense and may, where relevant, include an ITS integrator. This covers all integration activities necessary to deliver a coherent and fully functioning WIM system, including power supply, data communication, gantries, civil integration (pavements), inspections, maintenance, replacement, and operational management. The engagement and delineation of any integrator(s) therefore fall under the responsibility of the supplier and are not prescribed by Rijkswaterstaat. Integration with data, systems, and processes of Rijkswaterstaat and other chain partners will require further alignment at a later stage; proposals and experiences from market parties on such integration are explicitly welcomed as part of this consultation.

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3	Clarification of “primary” target group and weighting of input Section 1.4 states that the consultation is formally open to all market parties, while also indicating that the primary target group consists of suppliers meeting the criteria in Section 1.3. Could you clarify what Rijkswaterstaat means by “primary target group” in the context of this market consultation, and how input from market parties that do not (fully) meet the criteria in Section 1.3 will be considered in the analysis and feedback?	The market consultation is formally open to all market parties, and all submitted input will be taken into consideration. By using the term “<i>primary target group</i>”, Rijkswaterstaat indicates the parties that are expected to be best positioned to provide the most relevant, experience-based and practice-oriented insights for the objectives of this consultation. The primary target group consists of suppliers that meet the criteria set out in §1.3, as these suppliers typically have demonstrable experience with certified WIM systems, lifecycle applications, and (future) automated enforcement. Input from these parties is particularly used to gain insight into technical feasibility, lifecycle aspects, integration complexity, and cost realism. Input from market parties that do not (fully) meet the criteria in §1.3 is also included in the analysis, for example where it concerns innovation, emerging technologies, or alternative approaches. The weighting of input is based on its relevance and substantiation, not on the type of party. In the feedback, insights are presented in an anonymized and aggregated manner, ensuring transparency and a level playing field.

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4	Interpretation and comparability of MUST-HAVE 1.5 (civil degradation & civil inspection) Annex 5 includes MUST-HAVE 1.5, stating that the WIM system must be resilient to civil degradation of the road surface (such as porous asphalt wear, rutting or settlement) and must include procedures for periodic civil inspection to maintain measurement performance. Could you clarify how Rijkswaterstaat will interpret and assess this requirement when analysing market input? Will Rijkswaterstaat apply a reference or minimum baseline (e.g. for degradation levels and inspection assumptions), or will responses be assessed based on the assumptions used by suppliers? If the latter, how will Rijkswaterstaat ensure comparability between supplier proposals, given that assumptions regarding ZOAB condition, degradation and tolerance bands may differ?	In this market consultation, Rijkswaterstaat does not apply a fixed reference or absolute minimum threshold for civil degradation or inspection criteria under MUST-HAVE 1.5. In accordance with Question 2 of the request, suppliers are asked to indicate for themselves whether and to what extent MUST-HAVE 1.5 is achievable within their solution, including the status of the relevant components (available, certified, under development, or not yet feasible). It is acknowledged that, in the Netherlands, existing standards and guidelines are applied, such as Rijkswaterstaat standards, relevant CROW publications, and practical guidelines for pavements and inspections (including aspects such as rutting, load-bearing intermediate layers around measurement points, and periodic inspections, for example using scanning vehicles). For bridge-WIM, known technical boundary conditions also apply within existing Rijkswaterstaat frameworks for structures. These references serve as contextual background in this consultation and are not used as assessment criteria. Comparability is achieved through a qualitative analysis of the market input based on the explicit explanations provided by suppliers, focusing on the consistency of assumptions, system maturity, and the plausibility of sustaining measurement performance over the long term under Dutch conditions (such as ZOAB degradation). The objective is to gain insight into which solution approaches the market considers achievable, and under what conditions.

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5	Relationship between measurement accuracy, civil conditions and automated enforcement The market consultation asks about achievable accuracy classes, MPE levels and resilience to civil degradation (including ZOAB condition) in relation to future automated enforcement. Could Rijkswaterstaat clarify how these aspects are considered in conjunction? Does Rijkswaterstaat consider both scenarios with high measurement accuracy under favourable civil conditions and scenarios with lower measurement accuracy under less favourable civil conditions—provided these are compensated by wider decision or legal margins—in principle suitable for automated enforcement? If so, how does Rijkswaterstaat expect market parties to explicitly articulate this trade-off in their responses so that solution approaches can be compared?	Rijkswaterstaat considers measurement accuracy, civil conditions and automated enforcement as interrelated aspects that together determine whether enforcement is practically feasible and legally robust. The purpose of this market consultation is to gain insight into how this balance can be achieved in practice, without defining a single predefined scenario in advance. Rijkswaterstaat considers it conceivable that multiple scenarios and quality classes may be applied simultaneously, for example for in-road WIM (R-WIM) and bridge-WIM (B-WIM), each with its own accuracy level and role within the overall enforcement and supervision concept. The decisive factor is whether the overall solution—including design choices, quality measures and (legal) margins—results in a reliable, certifiable and enforceable system that fits within an evolving legal framework. Rijkswaterstaat therefore asks market parties, based on their (international) experience, to explicitly describe which assumptions and trade-offs they apply and how these, in combination, contribute to solutions that enable (phased) automated enforcement.

Nr.	Question	Answer
6	Operational lifetime versus sensor replacement due to ZOAB degradation (MUST-HAVE 1.5) MUST-HAVE 1.5 states that the WIM system must support an operational lifetime of 15–20 years and be resilient to civil degradation of the road surface (such as porous asphalt wear, rutting or settlement). As degradation of ZOAB over time may necessitate sensor replacement without this being caused by system failure, could you clarify how Rijkswaterstaat distinguishes between these aspects when interpreting market input? Is foreseeable sensor replacement due to civil ZOAB degradation considered regular lifecycle maintenance within the required operational lifetime, or a shortcoming with respect to MUST-HAVE 1.5? What assumptions does Rijkswaterstaat expect market parties to apply in their responses?	The objective is to gain insight into maintenance strategies that ensure a WIM system remains reliable, available and suitable for (future) automated enforcement throughout its entire lifecycle, despite civil degradation of the road surface such as porous asphalt (ZOAB) wear. Rijkswaterstaat considers the required operational lifetime of 15–20 years to apply to the WIM system as a whole. Foreseeable sensor replacement as a result of ZOAB degradation is, in principle, regarded as regular lifecycle maintenance, provided that it is explicitly anticipated and can be managed within the system design and maintenance concept. Within the market consultation, Rijkswaterstaat therefore asks how suppliers deal with sensor ageing and failure, in particular how such issues are detected in a timely manner, how replacement can be planned and modularly executed, and how system downtime is minimised. This is essential to safeguard system continuity, certifiability and legal applicability. Market parties are expected to make their assumptions regarding ZOAB behaviour, inspection, monitoring and replacement frequencies transparent, and to explain how these contribute to maintaining the availability and reliability of the WIM system over its full lifecycle.

Nr.	Question	Answer
7	<i>QUESTION 3 - Which accuracy class(es) according to OIML R134:2006 do you consider achievable under Dutch road and traffic conditions (including congestion, variation in tires/wheels, weak soil conditions and porous asphalt (ZOAB)), and which factors influence this class?</i> In addition to the velocity range (95km/h), are there any other specific conditions related to Dutch road?	At this stage, Rijkswaterstaat does not assume a single predefined achievable accuracy class under Dutch road and traffic conditions. Determining which accuracy classes according to OIML R134:2006 are realistically achievable in practice—under conditions such as porous asphalt (ZOAB), weak subsoil, high traffic intensity, congestion, variation in axles and tyres, and pavement ageing—is explicitly a subject of this market consultation. In addition to the operating speed of approximately 95 km/h, Dutch road characteristics may pose additional challenges that cannot be assessed on a purely theoretical basis. Rijkswaterstaat therefore invites market parties to share their international practical experience, including how comparable conditions have been addressed elsewhere, which accuracy levels have proven sustainable, and which design or mitigation strategies have been successful. This input is required to understand how achievable accuracy, certifiability and long-term reliability can be realised in combination, with a view to a future certifiable and legally robust WIM system for automated enforcement.

Nr.	Question	Answer
8	<i>QUESTION 7 – Which operational, metrological or legal preconditions do you consider essential for a future-proof application of WIM in the Netherlands?</i> Which is the expected performance of the system? Are there any KPI, regarding, for instance, detection or measurement error?	At present, Rijkswaterstaat does not prescribe fixed operational, metrological or legal boundary conditions or performance indicators (KPIs) for a future-proof application of WIM. Determining which conditions and performance levels—such as detection reliability, measurement errors, availability or data quality—are realistically achievable in practice, can be safeguarded, and are legally defensible, is explicitly a subject of this market consultation. Rijkswaterstaat invites market parties to outline, based on their experience, which conditions and performance characteristics they consider essential for a sustainable and certifiable WIM application in the Dutch context. This may include aspects such as metrology, data quality management (DQM), operational management and legal robustness, as well as the interrelationship between system design, maintenance and performance. Input from market parties is required to understand which performance indicators are meaningful, manageable and enforceable over the system's lifecycle, and how these can contribute to a future-proof WIM system that can, in due course, support automated enforcement.

Nr.	Question	Answer
9	<i>QUESTION 9 - What major risks do you foresee for the technical, civil-engineering and operational feasibility of WIM systems during the implementation and operational phases up to 2050?</i> Risks related to software infrastructure (i.e. cybersecurity) are included?	Rijkswaterstaat recognises that the feasibility of WIM systems up to 2050 is influenced by technical, civil-engineering and operational risks, and that identifying and managing these risks is explicitly a subject of this market consultation. This question explicitly includes risks related to software, ICT infrastructure and cybersecurity, such as data integrity, system availability and software obsolescence within the ITS chain. Rijkswaterstaat invites market parties to provide insight, based on their experience, into the most significant risks they foresee, how these risks may develop over time, and which mitigating measures have proven effective in practice. This input is required to understand which risks are decisive for achieving a sustainable and future-proof WIM system.

10	<i>QUESTION 11 - What major opportunities do you foresee for the technical, civil-engineering and operational feasibility of WIM systems during the implementation and operational phases up to 2050?</i> Could you please clarify the question by means of some examples?	RWS explicitly invites the market to think along and share opportunities that can strengthen the technical, civil-engineering and operational feasibility of WIM systems over the full lifecycle, while acknowledging that legal and enforcement frameworks will continue to evolve towards 2050. Examples of opportunities we are keen to explore together include: • Technological opportunities Innovations in sensors, cameras, AI-driven analytics, self-diagnostics and data processing that improve robustness, accuracy, maintainability and adaptability over time. This includes the application of AI for earlier and faster detection of errors, degradation patterns and diagnostics of impacts on road assets. • Civil-engineering opportunities Better alignment between WIM system performance and pavement behaviour (e.g. ZOAB), improved installation concepts, modular sensor replacement, and smarter interaction between WIM and civil maintenance regimes. • Operational opportunities Standardisation, remote monitoring, predictive maintenance, improved data-quality management, and more efficient integration into the ITS and (future) enforcement chain. • Lifecycle and scalability opportunities Architectures that support phased rollout, upgrades and evolving requirements—technical or legal—without major reinvestments up to 2050. • Data fusion and chain integration opportunities The combination and cross-validation of data from multiple sources and sensors (in-road, bridge-based, on-board systems, static weighing and other measurements), including data from private operators and public authorities such as inspection services, police and BOAs, to improve reliability, coverage and decision-making.
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		• International experience and best practices Lessons learned from comparable deployments abroad that have demonstrably improved reliability, acceptance, cost control or enforceability under changing regulatory conditions. Market parties are explicitly invited to share their ideas, experiences and perspectives on where such opportunities exist and how they could contribute to a more robust, efficient and future-proof WIM system in the Dutch context.
11	Does Rijkswaterstaat intend to procure Weigh-in-Motion systems as a product or as a service?	Rijkswaterstaat has not yet made a decision in this regard. Within the framework of this market consultation, Rijkswaterstaat is interested in the advantages and disadvantages of both procurement models. Market parties are invited to share their experiences and insights with respect to the acquisition of WIM systems as a product or as a service, where relevant distinguishing between bridge-WIM and in-road WIM. This input will be used to better understand potential procurement models and their associated implications.

Nr.	Question	Answer
12	Additional Information I	During the information meeting of 14 April 2026, reference was made to the following public sources to support the context and issues related to infrastructure loading and overloading: • State of the Infrastructure Report 2024, concerning vulnerable structures (House of Representatives, Mobility Fund 2026): Vaststelling van de begrotingsstaat van het Mobiliteitsfonds voor het jaar 2026 Tweede Kamer der Staten-Generaal • Study on loading and overloading in medium-heavy road transport, available via Rijkswaterstaat: https://open.rijkswaterstaat.nl/publish/pages/162398/belasting_en_overbelading_middel-zwaar_wegtransport.pdf These documents are provided for background information and contextual understanding and do not form part of the assessment framework of the market consultation.
13	Additional Information II	During the information meeting of 14 April 2026, it was incorrectly stated that soft enforcement is not legally permitted in the Netherlands. In fact, a framework exists for administrative supervision by the Inspectorate of Environment and Transport (ILT) based on WIM data without follow-up weighing, aimed at addressing repeat offenders and enforcing behavioural improvement. This framework has not yet been applied, due to insufficient quality, continuity and coverage of existing WIM systems. With a sufficiently realized and robust WIM 2.0 infrastructure, this form of supervision could become operational and serve as a transitional step towards future direct automated enforcement.

Nr.	Question	Answer
14	What is the final submission deadline for responses to this market consultation? The English version of the market consultation document and the information-session PowerPoint refer to 14 May, whereas the Dutch version states 21 May	Following internal alignment, it has been confirmed that 21 May is the final deadline for submitting responses to the Weigh in Motion (WIM) market consultation.