



**Item 11: International cooperation**

**Item 11.3: Updates by other organisations in liaison**

**11.3e) Report by ISWIM**

# **International Society for Weigh-in-Motion Report**

## **55th CIML Meeting 20-22 October 2020**



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### **Purpose**

The International Society for Weigh-in-Motion (ISWIM) deals with the research, development, and operation of systems, installed in or under road pavements, bridges, rail tracks, and on-board vehicles. ISWIM furthermore progresses an understanding of the data collected by these systems and the use of this data to better design, maintain and operate transport networks and associated vehicles.

The purposes of ISWIM as detailed in Article 3 of its Statues are:

- Dissemination of knowledge and understanding of Weigh in Motion (WIM)
- The promotion and support of international research and development projects or actions on WIM
- The initiation, participation, and/or monitoring of activities relating to WIM standardisation
- Promotion of use and application of WIM systems and data.

ISWIM brings together three distinctive groups:

- Users of WIM and the information it collects
- Academics and researchers in WIM technology and its associated data
- Vendors that provide WIM products and/or services of systems for the weighing of vehicles in motion.

For these groups to work harmoniously necessitates an appreciation: common understanding, language, and expectations of what WIM can deliver and under what circumstances.

Responsibility of the International Society for Weigh-In-Motion (ISWIM) is to better inform stakeholders to the use, myriad applications, and appreciation of the information that is collected by WIM.

## **Membership**

ISWIM has individual members. Membership of ISWIM is gratis. The membership is wide-spread and includes representation from over 75 countries.

ISWIM also has a Vendor and Consultant College comprising 22-member organisations. Vendor and Consultant membership has an annual membership fee.

## **Conferences and Events**

The 8<sup>th</sup> International Conference for Weigh in Motion was held in Prague in 2019 comprising:

- over 205 delegates from 37 countries
- number of sponsors/exhibitors: 15
- technical/scientific sessions: 8
- panel Discussion sessions: 2
- end-User Workshops: 3

Key findings of the Conference where:

- Direct enforcement by WIM:
  - Czech Republic, Hungary, and Russia implemented it on several sites for 1-3 years with type-approved systems from several vendors
  - In France, two manufacturers demonstrated their ability to fulfill the requirements of the Ministry of transport (OIML 5 for the heavier trucks) over a long-term trial
  - Similar results were obtained in Belgium.

- New sensors are becoming mature:
  - Strain gauge strip sensor evaluated in Argentina, Poland, Oregon (USA)
  - Newly developed fibre optic strip sensors were successfully evaluated on sites
  - Bridge WIM is still progressing and used for bridge assessment as well as for other non-legal applications
  - On-board WIM now type-approved (Australia).
- Performance-Based Standard:
  - Heavy vehicles are not only submitted to maximum weights and dimensions but can exceed the standard limits if complying with performance criteria: impact on infrastructure, maneuverability, safety, environment friendly
  - WIM (above all on-board WIM) becomes part of the compliance assessment procedure/tools. HCVs (up to 74 t) in Finland and Sweden and many heavy vehicles in Australia now in operation under PBS.
- Better Integration of Data:
  - WIM is only part of the story
  - End users want the WIM data to be combined with other types of data such as ANPR, vehicle dimensions, etc.

In addition to ICWIM8 a significant work program of events in which ISWIM participated in and/or was invited to present was held across the globe (including but not limited to):

- Transport Research Board Annual Meeting – WIM Workshop USA
- Southern African Transport Conference, South-Africa
- ITS World Congress – Singapore WIM Workshop, Singapore
- CVSA Conference WIM Symposium USA
- PIARC 26<sup>th</sup> World Roads Conference UAE
- ANTT Workshop on WIM, Brazil.

Forthcoming key ISWIM events include:

- 3<sup>rd</sup> Regional ISWIM Seminar in South Africa 'Optimising Road Transport using Weight Data' – November 2021
- 9<sup>th</sup> International Conference for Weigh in Motion – Melbourne 2023.

### **Recent publications and social media**

- ISWIM WIM Users Guide – a guide on WIM and its uses, it had become evident to ISWIM that a 'user guide' would benefit all stakeholders. Becoming an informed purchaser and user ensures that the delivered system and associated service meet the expected needs be that of a public or private organisation. Additionally, the provider or vendor of this system or service is able to develop and deliver a fit for-purpose solution that meets the needs of their customer
- ISWIM as a liaison organisation of the TC9 SC2 p11 provided a detailed submission to the planned revision of OIML R-134 on WIM; the liaison officer is: Bernard Jacob (bernard.jacob@univ-eiffel.fr )
- ISWIM is currently developing a series of WIM Best Practice guides specifically aimed at the practitioner
- Newsletter – increased number of articles (stories across the world from users, academics, and vendors) and strong distribution with 4 editions annually
- The website remains a key content source and is currently being completely updated
- An active LinkedIn group.