

PIARC – XXVI World Road Congress 2019, Abu Dhabi, Oct. 6-10

**Workshop WS1: “Weigh-in-motion for Road Infrastructure and Freight Transport”**

**Monday, Oct. 7, 8:00-11:30, sponsored by TC B4 (Freight Transport) and TC C3 (Bridges) and ISWIM**

**Organisers: Bernard Jacob, Ifsttar, France, TC B4 & Aleš Žnidarič, ZAG, Slovenia, TC C3**

*Each keynote speech will last for 10-12 mn. Then the panel discussions will involve both the panellists answering to some prepared questions, and the audience, to be as much interactive as possible.*

**Short Summary**

The use of WIM data to ensure durable, safe and resilient infrastructure and fair/compliant road freight transport is presented. The required data and quality and their application for bridge and pavement assessment and monitoring, for intelligent access strategies, for a full compliance of heavy vehicles are discussed.

**Description**

The part 1 of the workshop briefly remind how WIM systems can collect extensive data on heavy vehicle loads and dimensions and what is the quality of data needed for infrastructure applications. Bridge and pavement advanced assessment and monitoring, and intelligent access programme or smart infrastructure access programme strategies are based on WIM data processing.

The part 2 demonstrates how WIM data can contribute to an optimal road freight transport system by ensuring a full compliance of weights and dimensions and thus a fair competition, by adapting the tolling or road pricing rules and implementing performance based approaches.

**Part 1: WIM data for infrastructure assessment and management (8:00-9:30)**

Chair: Aleš Žnidarič (TC C3, Bridges)

1.1. Load measurements by WIM, data required and quality

*Bernard Jacob (Ifsttar, ISWIM, France)*

1.2. Bridge assessment and monitoring (extreme loads, fatigue, damage prediction and detection...)

*Aleš Žnidarič (ZAG, Slovenia)*

1.3. Pavement issues (structural fatigue, surface wear - rutting, polishing -) and effect of different loading case (e.g. multiple axles, dynamic effects...)

*Margo Briessinck (MOW, Belgium)*

1.4. Use of WIM data for implementing IAP/SIAP strategies

*Claude Rospars (IFSTTAR, France) – on behalf of Gavin Hill (TCA, Aus) and Franziska Schmidt (IFSTTAR, Fr)*

Panel discussion 1 – Moderator: Aleš Žnidarič

*Speakers + Pierre Gilles (SPW, BE), Nicolas Bardou (Cofiroute, FR)*

**Part 2: WIM for optimizing a freight transport system (10:00-11:30)**

Chair: Bernard Jacob (TC B4, Freight Transport)

2.1. Compliance of weights and dimensions and fair competition

*Aleš Žnidarič (ZAG, Slovenia) – on behalf of Gavin Hill and Chris Koniditsiotis (TCA, Australia)*

2.2. Approach of the Walloon legal metrology for WIM free-flow direct enforcement

*Jehan Boreux, Adriana Antofie, Pierre Gilles (SPW, Belgium)*

2.3. Economical perspective, road pricing and tolling

*Ghislaine Bailleumont, APRR, France*

2.4. Weight and dimension regulation and PBS approach

*Karel Kural, HAN University, The Netherlands (FALCON and AEROFLEX projects)*

Panel discussion 2 – Moderator: Bernard Jacob

*Speakers + FHWA, Trafikverket (Sweden), IRU (subject to availabilities)*

**Date: 30/09/2019**