

Intelligent Transport Systems

Agenda item 4 (f)



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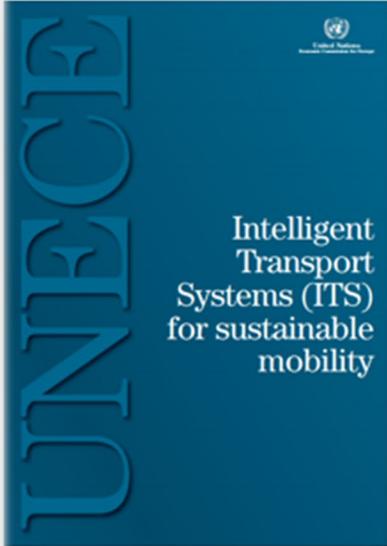


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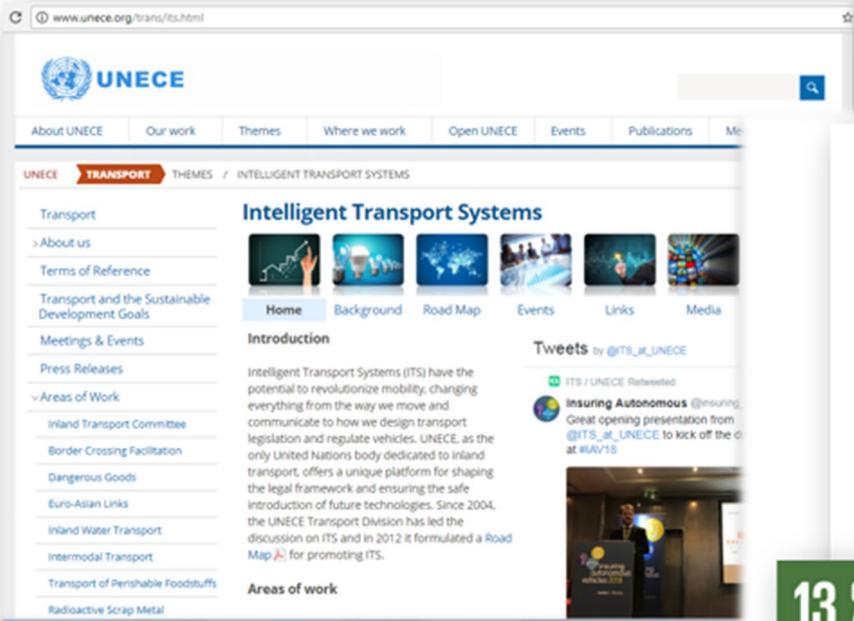
UNECE and ITS

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UNECE and Intelligent Transport Systems (ITS)



- Background document
- Strategic note
- Road map
- Adopted in 2012



Events in 2018

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The 2018 Future Networked Car symposium

- 1 Day symposium co-organized by ITU and UNECE
- Bringing the Telecommunication and the Automotive industries together meeting the regulatory and standardization bodies (ITU/UNECE)
- Policy dialogue on
 - DSRC/ITS-G5 and 5G and the automotive applications
 - Connected and Automated vehicles
 - Cyber security
 - Artificial Intelligence etc.



The 2018 annual ITS Flagship event

- 1 Day symposium co-organized by IRF and UNECE
- Bringing Mobility Providers, Road Operators, Infrastructure and the Automotive industries together meeting the regulatory and standardization bodies
- Policy dialogue on
 - Connected infrastructure for connected and automated vehicles
 - ITS: better mobility services to everyone?
 - ITS deployment and enforcement: challenges and opportunities
 - Getting the ITS governance right



ITC Working Parties ITS activities

(examples)

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Working Party on Intermodal Transport and Logistics

The Working Party regularly addresses the role of ITS in intermodal transport and logistics by inviting experts to present:

- projects,
- innovative solutions and good practices in ITS.

In 2018 the Working Party discussed the role and responsibilities of governments and regulatory authorities in providing the necessary framework conditions for discriminatory-free access to information by all parties in intermodal transport chains.

The Working Party on Inland Waterways

- Ministerial Declaration “Inland Navigation in a Global Setting” adopted at the International Ministerial Conference on Inland Water Transport held on 18-19 April 2018
- ITS applications in Electronic Ship Reporting and on the harmonization of pan-European River Information Services (RIS)
- Provisions for variable traffic signs were included in Resolution No. 90
- The workshop “Autonomous shipping and Inland Navigation” was held on 14 February 2018, at the fifty-second session of the Working Party.



Working Party on Road Transport (SC.1)

- harmonization of intelligent infrastructure had not received enough attention in the past
- April 2018, SC.1 held a special workshop which explored practices, trends and perspectives in smart road infrastructure
 - project called Traffic Management as a Service from the City of Ghent, Belgium,
 - Julius Baer bank on future scenarios,
 - Hellastron’s (Hellenic Association of Toll Road Network) virtual traffic management center and
 - National User Information System for the Aegean Motorway in Greece,
 - Smart Cities Initiative of FIA, and
 - public/private partnerships and
 - projects on smart infrastructure in the Netherlands.

ITC Working Parties ITS activities

(examples)

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RID/ADR/ADN Joint Meeting – achievements in ITS for TDG

The Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods, based on the outcome of the “Telematic” Working Group has established an ITS architecture to allow dematerialized information exchange suitable for the needs of transport of dangerous goods

The architecture is based on trusted party interfaces through which competent authorities may have access to the data required to be made available to them.

Efficiency of the system has been demonstrated on real scale projects.

The first steps are linked with digital documentation but the terms of reference of the working group included further applications such as improving and speeding emergency response... There is a clear link with the general policy concerning the improvement of safety, efficiency and sustainability through automation.

RID/ADR/ADN Joint Meeting – ongoing work in ITS for TDG

The Joint Meeting “Telematic” working group is establishing guidelines for the use of the approved architecture in order to allow some States to anticipate its use on a voluntary basis for digitalized data exchange related to the transport documentation based on possibility mentioned in the international agreements

Three countries have developed, or are at a late stage of developing, operational trusted parties interfaces. Five have expressed their interest and have joined this common effort.

Guidelines should be finalized in 2019

The Joint Meeting invites the ITC to support the effort of developing, publishing and promoting the use such guidelines.



ITC Working Parties ITS activities

(examples)

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The Global Forum for Road Traffic Safety (WP.1)

- Adoption of a WP.1 Resolution on the safe deployment of highly and fully automated vehicles in road traffic:
 - The resolution offers recommendations to ensure the safe interaction between automated vehicles, other vehicles and more generally all road users, and stresses the key role of human beings, be they drivers, occupants or other road users.
 - Global Forum intends to amend the resolution as technology develops and as experience accumulates regarding the use of highly and fully automated vehicles in road traffic and
 - turning attention to the legal contents of the 1949 and 1968 conventions on road traffic.
- Deliberations on activities other than driving in automated vehicles

ITC Working Parties ITS activities

(examples)

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World Forum on Harmonization of Vehicle Regulations (WP.29)

New certification concept for higher automation levels:
Idea currently discussed

The Horizontal Regulation concept
With 3 pillars

Pillar 1: Type Approval System
e.g. functional requirements

Pillar 2: Audits
Corresponds to ICT practices
Could involve simulations

Pillar 3: Real world test drive
Reality check
Validation



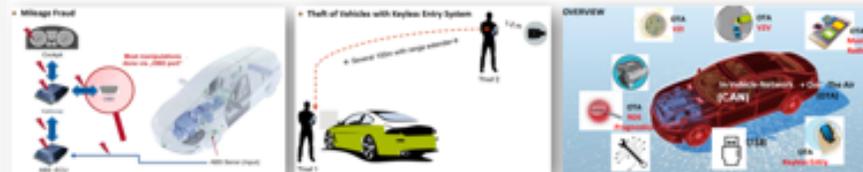
Lower levels of automation – WP.29 achievements



Draft recommendation on Software updates (incl. OTA)

Cyber security

Advocacy groups presented the following cases to WP.29:

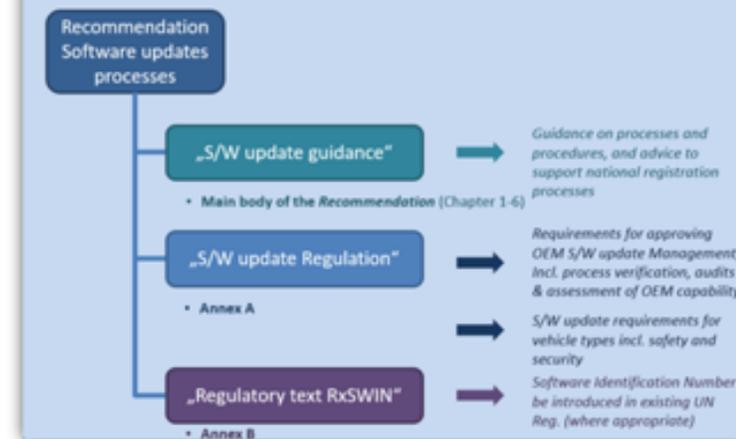


They also raised the concern of data protection

- Malicious or fraudulent activities
- Fully legal activities but not in the interest of the consumers
- (Concerns related to privacy, which is mentioned in the Universal Declaration of Human Rights)

→ WP.29 adopted guidelines on Cyber Security and Data Protection as part of Resolution R.E.3
→ Task Force on Cyber Security and Over the Air

Structure of the Recommendation on S/W update processes



Thank you!

Walter Nissler
Chief of Section
UNECE

Date 20 | 02 | 2019, Geneva



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