



PLENARY SESSION 4



INTERNATIONAL CONFERENCE
& 19TH GENERAL ASSEMBLY

HOSTED BY



한국교통안전공단
Korea Transportation Safety Authority

FROM PERIODIC INSPECTION TO WHOLE LIFE COMPLIANCE

SEOUL ▶ 2 - 4 April 2019



Conclusions Split Session

Vehicle compliance in low- and middle-income countries

Ferose Oaten



Panellists:

- ✓ Mr Paul Koffi KOFFI, UEMOA
- ✓ Dr Soames Job, WB
- ✓ Mr Marcelo Martínez, APPLUS
- ✓ Mr Kanvaly Bamba, CITA
- ✓ Mr Laxmikant N. Gujja, ARAI



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Session outcomes

- ✓ Growing consensus of the fundamental need for PTI
- ✓ Political will required at the highest level and CITA support needed
- ✓ Proper regulatory framework to support vehicle compliance and inspection activities; already available International Rules and Regulatory Framework within the UN to set up or strengthen
- ✓ Regional harmonisation of regulations, PTI standards and procedures
- ✓ Capacitate the authorities; provide the necessary skills into capacity building and governance
- ✓ Model for supervision, auditing and for strict enforcement
- ✓ Strong linkages between the government, the supervisory bodies, the operators and road safety stakeholders
- ✓ Data base for PTI information to be used
- ✓ Communication platform
- ✓ Education and awareness to the public
- ✓ Pre-shipment, pre-entry or pre-registration inspections essential
- ✓ Economic circumstances of each country - funding opportunities available from the World Bank, the UNRSTF and other development banks.





Conclusions Split Session

New Technologies

Nicolas Bouvier

Panellists:

- ✓ Mr Unseok Yeo, KOTSA
- ✓ Mr Atsushi Kasai, NALTEC
- ✓ Mr Enrique Taracido, APPLUS
- ✓ Mr Dietmar Bönninger, FSD
- ✓ Mr Sangho Yoon, Hyundai
- ✓ Mr Ignacio Lafuente, IDIADA



Session outcomes 1/3

- ✓ New Technologies = new and more safety needs. New inspection items arise.
- ✓ With the constant SW updates, new scenarios during type-approval and PTI.
- ✓ Privacy and data security to become part of vehicle inspection.



Session outcomes 2/3

- ✓ ePTI standards are on their way, and critical for our industry.
- ✓ Self-certification is not sufficient to ensure safety and consumers' trust in new technology. PTI can help solve this.



Session outcomes 3/3

- ✓ Data integrity is to be guaranteed by involving and sharing with independent actors, not by remaining within the OEMs' exclusive control
- ✓ Access to original in-car data is needed for PTI of the future. The Nevada concept thwarts neutrality and innovation. Independent and full access is the solution to be pursued.





Conclusions Split Session

Environmental Protection

Pascal Buekenhoudt

Panellists:

- ✓ Mr Sangwoong Park, KOTSA
- ✓ Mr Helge Schmidt, TÜV NORD
- ✓ Mr Gerrit Kadijk, TNO
- ✓ Mr Dirk Bosteels, AECC
- ✓ Mr Antonio Sánchez, VEIASA
- ✓ Mr Antonio Multari, MAHA



Main subjects

- ✓ NO_x - Test methods with load simulation (SET II & KD147)
- ✓ PTI-PN test procedure for vehicles with a DPF
- ✓ Quality Catalytic Converters



NO_x - Test methods with load simulation

- ✓ Loaded tests can be done quickly;
- ✓ Loaded tests are meaningful for NO_x measurements;
- ✓ Specific technical information concerning after treatment systems, software strategy ...



PTI-PN test procedure for vehicles with a DPF

- ✓ Some countries (DE, NL, CH, BE) will implement PN measurements in the next years;
- ✓ Test at low idle is quick;
- ✓ Other countries were interested in these projects;



Quality Catalytic Converters

- ✓ Some replacement Cats have poor quality;
- ✓ Test procedure (loaded) to test Cats where separate from CO also NO_x , and HC should be evaluated;



In General

- ✓ Emission controls technologies : anti-tampering provisions and improved controls are important for maintaining the low emissions during the lifetime of the vehicles,



In General

- ✓ The combination of comprehensive OBD-information and emission tests are necessary for a proper evaluation
- ✓ A need for specific technical information of the vehicle,



Looking to the future: Going from PTI to whole life compliance

- ✓ For this reason we need a complete package of different tests to verify the emissions. Starting with type approval regulations, durability requirements, in-service compliance testing, (E)OBD, road side testing, remotes sensing and enhanced PTI emission tests



관심을 가져 주셔서 감사합니다.

Thank you for your attention





Conclusions Split Session

Corporate Members' presentations

Inspection procedures
and methods

Eva Morger

Speakers:

- ✓ Mr Dietmar **Fink**, MAHA
- ✓ Mr Matthias **Kaiser**, BEISSBARTH
- ✓ Mr Ken **Wang**, Cosber
- ✓ Mr Christian **Vollmar**, MAHA
- ✓ Mr Georges **Petelet**, CAPELEC
- ✓ Dr Qinpeng **Ci**, SHENZHEN ANCHE
- ✓ Mr Sofiène **Ben Dhia**, ACTIA



Speakers:

- ✓ Mr Antonio **Multari**, MAHA
- ✓ Mr Stefan **Velkoski**, COSBER
- ✓ Mrs Chantal **Abou Jaoude**, MAHA
- ✓ Mr Baoqiang **Wang**, SHENZHEN ANCHE



Session outcomes

✓ SS1

- Advanced front lighting systems and LED headlights – how to adjust and test them properly;
- Benefits of a automated tyre inspection and an innovative method for tyre diagnostics during the PTI;
- Key figures regarding the test of electrical vehicles in China.



Session outcomes

✓ SS2

- Emission Testing under load for Pollutants (NOx and PN);
- Real emissions measurement for market surveillance – an alternative method;
- Method and procedure for Vehicle Emission Test;
- How to use vehicle data for PTI of connected vehicles.



Session outcomes

✓ SS3

- Mobile PTI testing solutions for light and heavy vehicles;
- Benefits of a automated tyre inspection and an innovative method for tyre diagnostics during the PTI;
- Increasing road safety and anti-fraud measures by advanced and automatic test equipment such as cameras, dimension check, weight check, under car scanner.



Session outcomes

✓ SS4

- Smart Vehicle Inspection Systems - centralized portal for management, administration, monitoring, reporting and analysis in modern PTI;
- Real emissions measurement for market surveillance – an alternative method;
- Vehicle emission detection system;
- Use the car inspection data in the life cycle of vehicles.





Conclusions Split Session

The Role of Authorities in
Roadworthiness

Yongdal Kim

Panellists:

- ✓ Mr Patrik Andersson, SWEDAC
- ✓ Mr Heens Peeters-Weems, RDW
- ✓ Mr Vitaly Komarov, NIIAT
- ✓ Mr Ismael Herrera, CERTIO



Session outcomes

- ✓ Establishing vehicle inspection monitoring system for quality of PTI (Ex> Undercover Test, Re-inspection etc.)
- ✓ Developing and Supplying Inspection Technique methods for future vehicles (Ex> Cutting-edge vehicles, autonomous cars and EV cars)
- ✓ Establishing and applying data base of vehicle inspection consequence
- ✓ Developing logic and announcing importance of PIT for the public, those who own vehicles (Ex> PIT consequences publication)



Session outcomes

- ✓ Standardization of Vehicle Inspection management for managing PTI quality (Ex> ISO17020 etc.)
- ✓ Collecting and making information such as data base for future vehicles (Self-driving vehicle etc.)
- ✓ Necessity of government's management for Transportation safety obstacle factors, environment pollution such as micro dust, buses and vans which majority of people use, and dangerous goods transport vehicles
- ✓ Necessity of active restriction for the non-PTI Vehicles





Conclusions Split Session

Data Management

Víctor Salvachúa

Panellists:

- ✓ Mr Jörg van Calker, FSD
- ✓ Mr Richard Goebelt, VdTÜV
- ✓ Mr Teemu Toivanen, TRAFICOM
- ✓ Mr Rémy Russotto, CORTE



Session discussion

- ✓ Importance of data for PTI
- ✓ Wide multifaceted topic
 - ✓ Inspection Operators
 - ✓ Enforcement Agencies
 - ✓ Policy Makers
 - ✓ Data preparation/analysis
- ✓ Challenges / Benefits ahead of us



Session outcomes

- ✓ Necessity of a data revolution
- ✓ Fair and undistorted access to data
- ✓ Importance of the role of Authorities
- ✓ Impartiality





Conclusions Split Session

Future vehicle compliance requirements to meet the increasing automatization of vehicles

Gerhard Müller



Panellists:

- ✓ Mr Walter Nissler, UN ECE
- ✓ Mr Anders Gunneriusson,
TRANSPORSTYRELSEN
- ✓ Mr Housseem Abdellatif, TÜV SÜD
- ✓ Mr Marko Gustke, VDA
- ✓ Mr André Rijnders, RDW



1. New technologies of automated vehicles and its impact on road safety
 - ✓ New technologies generally have a very **positive impact on road safety** (crucial for “Vision Zero”)
 - ✓ But there could occur **new risks**, e.g. distracted driver, pedestrians, “crazy driving”, bugs, manipulation; interaction between hardware, electronics and software
 - ✓ **Trust is essential** in the transfer period



2. Technical and legislative requirements to admit and register automated vehicles
 - ✓ Test scenarios will change for type approval (virtual/proving ground/field tests), proposals by Technical Services and member states are needed
 - ✓ Legislation needs keep pace with development
 - ✓ Clear understanding of **safety standards** and responsibilities
 - ✓ **Engineers** not lawyers have to **contribute**



3. Contribution of technical inspection (e. g TA, PTI) to road safety regarding automated vehicles
- ✓ To minimize the risk of new technologies
 - ✓ Important to **guarantee continuous compliance**
 - ✓ **Mobility is owned by society**: need of Third parties
 - ✓ **Collaboration** of Technical Services, OEM and authority as of the first moment for ADAS
 - ✓ Type approval **data base is core element**, second for further inspections





Closing remarks

Byung Yoon Kwon

KOTSA President



Closing remarks

Gerhard Müller

CITA President



THANK YOU FOR COMING!
HAVE A SAFE TRIP HOME!



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