

ITS World Congress 2018 København - Norske deltakere i sesjoner

SIS28 COOPERATIVE-ITS STANDARDS GAPS Tuesday 18 September 2018, 15:30–17:00 London (B3 M3-4)

In late 2015, the European Commission, Transport Certification Australia, and the U.S. Department of Transportation came together to collaborate on identifying standards needed for a complete Cooperative-ITS environment. Japan joined the effort in 2017. Together, these Nations and their experts have performed the analysis and identified gaps—gaps that are critical for an interoperable, trusted, and cooperative data exchange via hybrid communications. Priority gaps include (among others): security, data distribution, location and time, authorization, electronic traffic codes. Gaps are due to no standard being available (including from other industries); an incomplete standard or need to update existing standards; or because of standards overlaps which, from a deployer's perspective, can create confusion. The end results are available through on-line tools developed by the international team; and will be provided through a series of final reports. This special interest session will offer the results of this international collaborative effort.

Organiser Suzanne Sloan, U.S. Department of Transportation, USA

Moderator Suzanne Sloan, U.S. Department of Transportation, USA

Speakers **Knut Evensen, Q-Free ASA, Norway** Tom Lusco, Iteris, USA Junichi Hirose, HIDO, Japan Philip Lloyd, Transport Certification Australia, Australia

TS06 – ELECTROMOBILITY

Monday 17 September 2018, 13:30–15:00 Turin (B5 M3)

EU-TP1278 EV charging QoS and power system robustness through ICT applications; NeMo's approach Theodoros Theodoropoulos, ICCS, Greece

EU-TP1373 Designing and Demonstrating a System for Efficient and Sustainable Road Freight based on Dynamic Power Supply Benjamin Wickert, Siemens AG, Germany

EU-TP1417 Geofencing as an enabler for Zero-Emission Zones Ane Dalsnes Storsæter, Norwegian Public Roads Administration, Norway

EU-TP1616 Towards sustainable Autonomous E-Mobility as a Service: lessons learned from a Climate-KIC Pathfinder project. Kelly Pitera, NTNU, Norway

AP-TP1640 Multi-stage charging infrastructure planning for electric buses Yuping Lin, Tsinghua-Berkeley Shenzhen Institute, Tsinghua University, China

EU-TP1654 Perceptions of using electric light vehicles in cities: Survey results from six cities in the ELVITEN project Andrew Winder, ERTICO – ITS Europe, Belgium

TS20 – PUBLIC TRANSIT SYSTEMS Tuesday 18 September 2018, 15:30–17:00 Tokyo (B3 M1-2)

AP-TP1016 Exploitation of Fully Automated Automatic Train Operation (ATO) Schemes for Superior Urban Mobility: Case Studies Koorosh Gharehbaghi, RMIT University, Australia

AP-TP1203 Speed control of automated bus for crossing signalized intersections in a public road test Bo Yang, The University of Tokyo, Japan

EU-TP1363 System Engineering using Model-Approach in Railways Stephane Callet, SNCF, France

AM-TP1365 Rail Transit Connected Vehicles & Ultra-wideband for Communications & Location Robert James, HNTB, United States

EU-TP1423 SmartFeeder – seamless, connected and automated feeder and shuttle services Lone-Eirin Lervåg, SINTEF, Norway

AP-TP1481 Design of an Autonomous Modular Public Transit System Andreas Rau, TUMCREATE, Singapore

TS29 – ITS FOR AGEING POPULATION Wednesday 19 September 2018, 09:00–10:30 Paris (B5 M4)

AP-TP1078 An analysis for reconsidering mobility of elderly people Ryosuke Ando, TTRI (Toyota Transportation Research Institute), Japan

AP-TP1117 Model verification of smartphone-based support system for mobility-impaired Yukiko Hatazaki, UTMS Society of Japan, Japan

AP-TP1237 Study of The Development of High Accuracy Digital Mapping in Automated Driving Setbox Afifah Agoes, Shibaura Institute of Technology, Japan

EU-CP1336 Accelerating Smart City: the Oslo model Silje Bareksten, Oslo Business Region, Norway

EU-TP1470 Smart Mobility Services and Senior Citizens – A Framework for Co-creation and Analysing User Needs Virpi Oksman, VTT Technical Research Centre of Finland, Finland

TS50 – SECURITY Thursday 20 September 2018, 11:00–12:30 Madrid (B5 M2)

AM-TP1033 Engineering Challenges to Deploy V2V Communication Security for Crash Warning Application Satomi Boge, Alpine Electronics Research of America, United States

EU-TP1142 Flexible software processing of the ETSI ITS-G5 security Michał Kaźmierowski, Q-Free ASA, Poland

EU-TP1143 Message dissemination from Central ITS systems to vehicles Ola Martin Lykkja, Q-Free ASA, Norway

AM-TP1340 Application of a cybersecurity framework to a connected vehicle deployment Raymond Resendes, USDOT Volpe Center, United States

AM-TP1566 A Generic Framework for Security Risk Assessment for Intelligent Transportation Systems Paul Bottinelli, ESCRYPT, Canada

TS55 – IMPACT EVALUATION Thursday 20 September 2018, 13:30–15:00 Montreal (B5 M1)

EU-TP1325 Towards an ‘agile’ common evaluation methodology for C-ITS Simon Edwards, Newcastle University, United Kingdom

EU-TP1348 Methodology for evaluation in L3Pilot Satu Innamaa, VTT Technical Research Centre of Finland Ltd., Finland

AM-TP1352 Dedicating Freeway Lanes for Connected and Automated Vehicle for Priority or Exclusive Use Boon Teck Ong, Booz Allen Hamilton, United States

EU-TP1521 How may connected automated driving improve quality of life? Elina Aittoniemi, VTT Technical Research Centre of Finland, Finland

EU-TP1541 Socio-economic impact of safety-related cooperative traffic information service Satu Innamaa, VTT Technical Research Centre of Finland Ltd., Finland

EU-TP1601 Traffic Flow with Various Amount of Autonomous Vehicles – A Field Test Torbjørn Haugen, NTNU Traffic Engineering Research Centre, Norway

TS58 – ENHANCING SAFETY 3 Thursday 20 September 2018, 13:30–15:00 Paris (B5 M4)

EU-TP1119 Sun Glare Detection and Visualization with QGIS Jo Skjeremo, SINTEF, Norway

AP-TP1191 Adoption of An Offset Design Assistant Tool for Deterring Over-speeding Takeshi Abe, Tokyo Metropolitan Police Department, Japan

AP-TP1356 The Hard Numbers needed to deliver a Reliable Journey Richard Young, Beca, New Zealand

EU-TP1567 Direct Enforcement Scenarios for Weigh-In-Motion systems Stefan F.A. Daxberger, Kapsch TrafficCom AG, Austria

EU-TP1641 Digitalisation and Road Weather Forecasts to Help Decision Making for Road Maintenance Janne Miettinen, Finnish Meteorological Institute, Finland

AM-TP1658 Implementing Michigan-specific Safety Performance Functions for Macomb County: Making Use of Available Data Joshua Fink, AECOM, United States

TS59 – IMPROVING FREIGHT FLOWS – LOGISTICS AND SMART DATA Thursday 20 September 2018, 13:30–15:00 Orlando (B3 M5)

AP-TP1105 A field experiment on logistics vehicle management Tatsuyuki Negishi, National Institute for Land and Infrastructure Management, MLIT, Japan,

AP-TP1108 Utilization of ETC2.0 Technology in the Commercial Logistics Business and Construction Business Toru Owada, ITS Technology Enhancement Association, Japan

EU-TP1114 Innovative Use of Speed Enforcement Systems for Weight Data Collection in Norway Maximilian Franz Böhm, Norwegian University of Science and Technology, Norway

EU-TP1612 TM 2.0 – DATEX II for logistics applications Lina Konstantinopoulou, ERTICO – ITS Europe,, Belgium

EU-TP1657 A paperless supply chain supported by blockchain will significantly benefit city logistics Hjalmar van der Schaaf, CargoLedger, the Netherlands

TS67 – DATA AND ITS Thursday 20 September 2018, 17:15–18:45 Madrid (B5 M2)

EU-TP1273 Data collection for Automated and Cooperative Driving Igor Passchier, Tass International, the Netherlands

EU-TP1388 Driving down costs for road authorities Tomas Levin, Norwegian Public Roads Administration, Norway

EU-TP1391 Lessons learned from SPaT and MAP messages in C-ITS pilots Chris Myatt, Q-Free ASA, Australia

AM-TP1466 LiDAR-Enhanced Connected Infrastructure Sensing and Broadcasting All Traffic Trajectories Hao Xu, University of Nevada, United States

EU-TP1509 The Danish National Access Point Thomas Roslyng, Danish Road Directorate, Denmark

EU-TP1570 National Access Points and Municipalities – Best Practices from the German National Access Point MDM Christian Kleine, HERE Technologies, Germany

TS72 – TRAFFIC MANAGEMENT AND CONNECTED INFRASTRUCTURE 4 Friday 21 September 2018, 09:00–10:30 Montreal (B5 M1)

EU-TP1154 Vehicle automation based on Traffic light assistance Ørjan Tveit, NPRA, Norway

EU-TP1287 Development of Cooperative Day-1 Services – Hessian Pilot of C-ROADS Germany
Stephanie Cheung, Hessen, Germany

EU-TP1627 Expected systemic impacts on automated traffic from quantitative complexity rating
Walter Aigner, HiTec, Austria

EU-TP1660 The Mobility Intelligent Cooperative Systems (MOBICS): Towards Open Informatics
System of Systems Lara Moura, A-to-Be, Powered by Brisa, Portugal

EU-TP1667 Personal Virtual Traffic Light Systems Joao Rufino, Instituto de Telecomunicações,
Portugal

TS73 – TESTING NEW APPROACHES 2 Friday 21 September 2018, 09:00–10:30 London (B3 M3-4)

AP-TP1095 Kinetic Energy Management with Surrounding Vehicles Behaviour Prediction Yutaro Itoh,
DENSO CORPORATION, Japan

EU-TP1124 Action plan for road traffic data in the Norwegian Public Roads Administration Snorre Hansen, Norwegian Public Roads Administration, Norway

EU-TP1477 Conducting Studies on Intra-City Bus Travel Experience: Insights and Lessons Learned in
Living Lab Bus Project Elina Hilden, Tampere University of Technology, Finland

EU-TP1546 Experience with Sensory Network Implementation for Determining Environmental
Deviations Tomáš Tichý, ELTODO, Czech Republic

AM-TP1587 Comparison of Bluetooth And Bus GPS Data for Estimating Arterial Travel Time and Trip
Chaining Jijo Mathew, Purdue University, United States EU-TP1651 Hackathons for innovation: case
Living Lab Bus and passenger game Bussig in Junction 2017 Juho Kostianen, VTT Technical Research
Centre of Finland, Finland

TS76 – SMART PARKING Friday 21 September 2018, 09:00–10:30 Berlin (B4 M1-2)

EU-TP1144 Parking sensor with NB-IoT communication Ola Martin Lykkja, Q-Free ASA, Norway

EU-TP1182 Implications and Challenges For The Design Of Intelligent Safe and Secure Truck Parking
Areas in Cross-Border Networks in Hungary and Greece Ádám Nagy, Hungarian Public Roads Non-
profit PLC Department for Traffic Management and Network Operation, Hungary

EU-TP1239 Park and Ride monitoring – Regulation needed for open parking? Kristin Kråkenes, Norwegian Public Roads Administration, Norway

AP-TP1248 Improving Cognition and Judgment with Dynamic Parking Lot Vacancy Information
System for Expressway Rest Areas Kouji Yamamoto, Central Nippon Expressway Co.,Ltd, Japan

EU-TP1380 The Smart Parking initiatives – Helping drivers find a vacant parking space Lise Søderberg, The City of Copenhagen, The Technical and Environmental Administration, Denmark

EU-TP1592 Smart parking supported by predictive analytics to ease city traffic Maxime Bricet, IRISA, France

SP07 – DATA AND INFORMATION Thursday 20 September 2018, 09:00–10:30 Nagoya (B4 M5)

EU-SP1040 Driver's Dashboard – Using Social Media Data as additional Information for Motorway Operators Robert Neuhold, Graz University of Technology, Institute of Highway Engineering and Transport Planning, Austria

EU-SP1360 Towards a ground truth of AADT on using video data and tracking software? Niels Agerholm, Aalborg University, Denmark

AP-SP1428 Vehicle Localization Based on Road Surface Information Using a Smartphone Tomotaka Nagaosa, Kanto Gakuin University, Japan

EU-SP1445 Experiences and challenges with standards for location referencing from the GIS and ITS domains Knut Jetlund, Norwegian Public Roads Administration, Norwegian University of Science and Technology, Norway

AP-SP1461 Estimating Traffic Conditions of the Radial-ring Expressway Network by Assimilating Probe and Detector Data into Traffic Simulation Azusa Goto,, National Institute for Land and Infrastructure Management, MLIT, Japan

EU-SP1607 Evaluating alternative methods to estimate bus running times by archived Automatic Vehicle Location data Francesco Pili, University of Cagliari, Italy

CP1 – URBAN LIVING SERVICES 1 Tuesday 18 September 2018, 13:30–15:00 Theatre

EU-CP1024 Data based planning optimizes public transport capacity utilization; Manfred Bock, T-Systems International GmbH, Germany

EU-CP1049 MaaS for the Segmented Masses Beth Garner, Viaqqio – ESP Group,, United Kingdom

EU-CP1127 The Mulhouse Mobility Account – A unique user account for all transport services Werner Kutil, Cityway, France

EU-CP1241 Bike Citizens Analytics – GPS Data Analysis Tool for Bicycle Traffic Planning Simone Feigl, Bike Citizens, Austria

AP-CP1285 Next Generation Transport Management Centre OperationsPaper Henry Wu, JYW Consulting, Australia

EU-CP1367 Creating more mobility and livability through electric free-float car sharing Anders Wall, GreenMobility A/S, Denmark

EU-CP1486 The Symbiosis between Traffic **Management** and Mobility-as-a-Service Ruud van den Dries, MAP traffic management, the Netherlands

EU-CP1495 Testsite Kongsberg – Technology as a tool in building sustainable cities and quality of life Elisabeth Skuggevik, Norwegian Public Roads Administration, Norway