

# CONFERENCE Results from road transport research

5<sup>th</sup> to 7<sup>th</sup> February 2024 BluePoint Brussels Blvd Auguste Reyers 80, 1030 Brussels

### **DRAFT PROGRAMME**

# 5<sup>th</sup> February



**12.00 – 13.20 Welcome lunch** Visit the RTR exhibition area

# **OPENING SESSION**

#### 🕔 13.20 – 13.50

Moderator: Simon Edwards (Global Director, Technology, Ricardo, ERTRAC Vice-Chairman and RTR Conference Chair)

**Dr.-Ing. Stephan Neugebauer**, Director Global Research Cooperation, BMW and ERTRAC & EGVIAfor2Zero Chairman **Armin Gräter**, BMW Group, CCAM Association Chairman

**Rosalinde van der Vlies**, Director Clean Planet, DG Research and Innovation (DG RTD), European Commission **Herald Ruijters**, Deputy Director-General, Director Investment, Innovative & Sustainable Transport, DG Mobility and Transport (DG MOVE), European Commission

Paloma Aba Garrote, Director, European Climate, Environment and Infrastructure Executive Agency (CINEA)

# **PARALLEL SESSIONS**

### 14.00 - 16.00

#### 1. Network and traffic management for future mobility

**DIT4TraM** - Distributed Intelligence and Technology for Traffic and Mobility Management

**FRONTIER -** Next generation traffic management for empowering CAVs integration, cross-stakeholders collaboration and proactive multi-modal network optimization

**ORCHESTRA** - Coordinating and synchronising multimodal transport improving road, rail, water and air transport through increased automation and user involvement

TANGENT - ENHANCED DATA PROCESSING TECHNIQUES FOR DYNAMIC MANAGEMENT OF MULTIMODAL TRAFFIC

#### () 16.00 – 16.30 Coffee break Visit the RTR exhibition area

#### 2. Understanding and mitigating the effects of particle emission and noise

**nPETS** - NANOPARTICLE EMISSIONS FROM THE TRANSPORT SECTOR: HEALTH AND POLICY IMPACTS

LEON-T - Low particle Emissions and IOw Noise Tyresultimate ICE efficiency ULTRHAS - ULtrafine particles from

TRansportation – Health Assessment of Sources

**AeroSolfd** - Fast track to cleaner, healthier urban Aerosols by market ready Solutions of retrofit Filtration Devices for tailpipe, brake systems and closed environments

**TUBE** - Transport derived Ultrafines and the Brain Effects

#### 3. Advancements in Li-ion batteries Generation 3b

**3beLiEVe** - Delivering the 3b generation of LNMO cells for the xEV market of 2025 and beyond

**SeNSE** - Lithium-ion battery with silicon anode, nickel-rich cathode and in-cell sensor for electric vehicles

**COBRA** - CObalt-free Batteries for FutuRe Automotive Applications

**IntelLiGent** - Innovative and Sustainable High Voltage Li-ion Cells for Next Generation (EV) Batteries



# **PARALLEL SESSIONS**

### 🕓 16.30 – 18.30

#### 4. Digitalisation of logistics

PLANET - Progress towards Federated Logistics Through The Integration Of TEN-T into A Global Trade Network ePlcenter - Enhanced Physical Internet-Compatible Earth-frieNdly freight Transportation answER STORM - Smart freight TranspOrt and logistics Research Methodologies FOR-FREIGHT - Flexible, multi-mOdal and Robust FREIGHt Transport

#### 5. User-centric charging solutions

INCIT-EV - Large demonstration of user
 Centric urban and long-range charging
 solutions to boosT an engaging deployment
 of Electric Vehicles in Europe
 EV4EU - Electric Vehicles Management for
 carbon neutrality in Europe
 SCALE - Smart Charging ALignment for
 Europe

#### 6. CCAM coordination frameworks, inclusiveness and societal impact

 FAME - Framework for coordination of Automated Mobility in Europe
 SUNRISE - Safety assUraNce fRamework for connected, automated mobility SystEms
 SINFONICA - Social INnovation to FOster iNclusive Cooperative, connected and Automated mobility

**Move2CCAM** - MethOds and tools for comprehensive impact Assessment of the CCAM solutions for passengers and goods



### PARALLEL SESSIONS

#### 🕓 9.00 – 10.30

# 7A. Next generation electrified vehicles for urban and suburban use

LEONARDO - MicrovehicLE fOr staNd-Alone and shaReD mObility - LEONARDO REFLECTIVE - RECONFIGURABLE LIGHT ELECTRIC VEHICLE

**SOLUTIONSplus** - Integrated Urban Electric Mobility Solutions in the Context of the Paris Agreement, the Sustainable Development Goals and the New Urban Agenda

# Usit the RTR exhibition area

#### 🕔 10.50 – 11.50

# 7B. Next generation electrified vehicles for urban and suburban use

**URBANIZED** - modUlaR and flexible solutions for urBAN-slzed Zero-Emissions last-mile Delivery and services vehicles **Multi-Moby** - Safe, Secure, High Performing Multi-Passenger and Multi-Commercial Uses Affordable EVs

#### 8A. CCAM and connectivity

**PoDIUM** - PDI connectivity and cooperation enablers building trust and sustainability for CCAM

AUGMENTED CCAM - Augmenting and Evaluating the Physical and Digital Infrastructure for CCAM deployment MobiDataLab - Labs for prototyping future Mobility Data sharing cloud solutions

#### 9A. Fuel cells applications in HDV (FCH)

MORELife - Material, Operating strategy and REliability optimisation for LIFEtime improvements in heavy duty trucks IMMORTAL - IMproved lifetiMe stacks fOR heavy duty Trucks through ultrA-durabLe components

**StasHH -** Standard-Sized Heavy-duty Hydrogen

#### 8B. CCAM and connectivity (5G)

**5GCroCo** - 5G Cross-Border Control (tbc) **5G Carmen** - 5G for Connected and Automated Road Mobility in the European union (tbc)

**5GMOBIX** - 5G for cooperative & connected automated MOBlility on X-border corridors

#### 9B. Fuel cells applications in HDV (FCH)

**PRHYDE -** Protocol for heavy duty hydrogen refuelling

**H2Haul** - Hydrogen fuel cell trucks for heavy-duty, zero emission logistics



# **PARALLEL SESSIONS**

### () 12.00 – 13.00

#### 10. Virtual modelling of batteries

**DEFACTO** - Battery DEsign and manuFACTuring Optimization through multiphysic modelling **MODALIS2** - MODelling of Advanced LI Storage Systems

# 11. Medium and heavy-duty vehicles developments

**LONGRUN** - Development of efficient and environmental friendly LONG distance powertrain for heavy dUty trucks aNd coaches

**NextETRUCK** - Efficient and affordable Zero Emission logistics through NEXT generation Electric TRUCKs (tbc)

#### 12. Verification and Validation: building trusted systems (ECSEL)

VALU3S - Verification and Validation of Automated Systems' Safety and Security ArchitectECA2030 - Trustable architectures with acceptable residual risk for the electric, connected and automated cars (tbc)

#### 13.00 – 14.15 Lunch, Networking and Exhibition

#### 🕓 14.15 – 15.45

13. Solid state batteries	14. Crash protection and collision avoidance	15. Trustworthy CCAM
ASTRABAT - All Solid-sTate Reliable BATtery for 2025 SAFELiMOVE - advanced all Solid stAte saFE Lithium Metal technology tOwards Vehicle Electrification SOLIDIFY - Liquid-Processed Solid-State Li-metal Battery: development of upscale materials, processes and architectures	<ul> <li>SALIENT - Novel Concepts for Safer, Lighter, Circular and Smarter Vehicle Structure</li> <li>Design for Enhanced Crashworthiness and</li> <li>Higher Compatibility</li> <li>V4SAFETY - Vehicles and VRU Virtual</li> <li>eValuation of Road Safety</li> <li>SAFE-UP - proactive SAFEty systems and tools for a constantly UPgrading road</li> <li>environment</li> </ul>	<b>CONNECT</b> - Continuous and Efficient Cooperative Trust Management for Resilient CCAM <b>SELFY</b> - SELF assessment, protection & healing tools for a trustworthY and resilient CCAM <b>EVENTS</b> - ReliablE in-Vehicle pErception and decisioN-making in complex environmenTal conditionS
15.45 – 16.15 Coffee break Visit the RTR exhibition area		

#### 16.15 - 18.15

# 16. Urban mobility – cities as urban hubs and urban logistics

**MOVE21** - Multimodal and interconnected hubs for freight and passenger transport contributing to a zero emission 21st century **SCALE-UP** - Scale up user-Centric and dAta driven soLutions for connEcted Urban Poles

**LEAD** - Low-Emission Adaptive last mile logistics supporting 'on Demand economy' through digital twins

**ULaaDS** - Urban Logistics as an on Demand Service

17. CCAM on the roads

**SHOW** - SHared automation Operating models for Worldwide adoption

AWARD - All Weather Autonomous Real logistics operations and Demonstrations

**Hi-Drive** - Addressing challenges toward the deployment of higher automation

# **PLENARY SESSION**

#### <u>)</u> 18.20 – 19.20

Join us for an insightful discussion on research and innovation in road transport.

# COCKTAIL

### (<u>)</u> 19.20 – 20.30

Join us for an evening full of conversation, networking & fun - all centred around transforming road transport for a better future.



# 7<sup>th</sup> February

# **PARALLEL SESSIONS**

### 🕓 9.30 – 11.00

#### 18A. Next generation of power electronics

**PowerDrive** - Power electronics optimisation for next generation electric vehicle components

**RHODaS** - Reinventing High-performance pOwer converters for heavy-Duty electric trAnSport

**HiPE** - High Performance Power Electronics Integrations

#### 19A. Human factors in transport safety

HEIDI - Holistic and adaptivE Interface Design for human-technology Interactions MEDIATOR - MEdiating between Driver and Intelligent Automated Transport systems on Our Roads FITDRIVE - Monitoring devices for overall

FITDRIVE - Monitoring devices for overall FITness of Drivers

# 20. Materials and production processes

**REVOLUTION -** Supporting the Electric Vehicle REVOLUTION through maximising EV Range and End-of-Life Vehicle Recovery through optimisation of recycled plastics and advanced light materials (tbc) **ALMA** - Advanced Light MAterials and processes for the eco-design of electric vehicles

Fatigue4Light - Fatigue modelling and fast testing methodologies to optimize part design and to boost lightweight materials deployment in chassis parts

#### 11.00 – 11.30 Coffee break Visit the RTR exhibition area

#### 🕓 11.30 – 12.30

# 18B. Next generation of power electronics

**HighScape** - High efficiency, high power density, cost effective, scalable and modular power electronics and control solutions for electric vehicles

**PROGRESSUS** - Highly efficient and trustworthy electronics, components and systems for the next generation energy supply infrastructure (tbc)

# 19B. Human factors in transport safety

**HADRIAN** - Holistic Approach for Driver Role Integration and Automation Allocation for European Mobility Needs

**NextPerception -** Next generation smart perception sensors and distributed intelligence for proactive human monitoring in health, wellbeing, and automotive systems

#### 21. Noise and emission measurement, assessment and mitigation

**NEMO** - Noise and Emissions Monitoring and radical mitigation **LENS** - L-vehicles Emissions and Noise mitigation Solutions

# **CLOSING DISCUSSION**

### 🕓 12.45 – 13.15

Jane Amilhat, Head of Unit, Clean Transport Transitions, DG Research and Innovation (DG RTD), European Commission and Simon Edwards, Ricardo, ERTRAC Vice-Chairman and RTR Conference Chair.

U 13.15 – 14.00 Farewell lunch Visit the RTR exhibition area







**ENTRANCE** - European matchmaking platform for innovative transport and mobility tools and services

**RECIPROCITY** - Replication of innovative concepts for peri-urban, rural or inner-city mobility

**ASSURED-UAM** - Acceptance, Safety and Sustainability Recommendations for Efficient Deployment of UAM

**FastTrack** - Fostering the Acceleration of Sustainable Transport To Regions and Authorities through Capacity and Knowledge

**WE-TRANSFORM** - WORKFORCE EUROPE - TRANSFORMATION AGENDA FOR TRANSPORT AUTOMATION