











# 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**, 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**



# 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

# 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**



#### 4. Digitalisation of logistics

**PLANET** - Progress towards Federated Logistics Through The Integration Of TEN-T into A Global Trade Network

**ePIcenter** - 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

SINFONICA - Social Innovation to FOsto 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

#### 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





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

**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

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

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

**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 Flectric TRUCKS 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

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 **SALIENT** - Novel Concepts for Safer, Lighter, Circular and Smarter Vehicle Structure Design for Enhanced Crashworthiness and Higher Compatibility

**V4SAFETY** - Vehicles and VRU Virtual eValuation of Road Safety

**SAFE-UP -** proactive SAFEty systems and tools for a constantly UPgrading road environment

**CONNECT** - Continuous and Efficient Cooperative Trust Management for Resilient CCAM **SELFY** - SELF assessment, protection & healing tools for a trustworthY and resilient CCAM

**EVENTS** - 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**

18.20 – 19.20

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

### **COCKTAIL**

19.20 – 20.30

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















## **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 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

**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



## 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

# 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

**Philippe Froissard**, Head of Unit, Future Urban & Mobility Systems, DG Research and Innovation (DG RTD), European Commission and **Simon Edwards**, Ricardo, ERTRAC Vice-Chairman and RTR Conference Chair.

13.15 – 14.00 Farewell lunch
Visit the RTR exhibition area

















2ZERO

**ERTRAC** 

**CCAM** 

### **European Commission**

**Greenet project** 

(network of NCP)

TRA2024 Dublin Transport Research
Arena Conference 2024

### **Projects**

**CIVITAS ELEVATE** - CIVITAS 2020 Coordination and Support Action

**BISON** - BIODIVERSITY AND INFRASTRUCTURE SYNERGIES AND OPPORTUNITIES FOR EUROPE-AN TRANSPORT NETWORKS

**BOOSTLOG** - Boosting impact generation from research and innovation on integrated freight transport and Logistics system

**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