

co-organisers











CONFERENCE Results from road transport research

5th to 7th February 2024 BluePoint Brussels Blvd Auguste Revers 80, 1030 Brussels

PROGRAMME





12.00 – 13.20 Welcome lunch Visit the RTR exhibition area

OPENING SESSION



13.20 - 13.50 (EINSTEIN)

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

Stephan Neugebauer, Director Global Research Cooperation, BMW Group, ERTRAC & EGVIAfor2Zero Chairman Armin Gräter, Director Public Affairs EU for Digital and Automation, BMW Group, CCAM Association Chairman Rosalinde van der Vlies, Director Clean Planet, DG Research and Innovation (DG RTD), European Commission Torsten Klimke, Head of the Innovation and Research Unit, 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 (Einstein)

Moderators: Thiago Tavares (CINEA)

Serge van Dam (Rijkswaterstaat)

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 (Newton)

Moderators: Maurizio Maggiore (DG RTD)

Michael Weissner (Volkswagen)

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

LEON-T - Low particle Emissions and IOw Noise Tyres

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

(Archimedes)

Moderators: Monica Giannini (CINEA)

Burak Dermenci (VUB)

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 (Newton)

Moderators: Paola Chiarini (DG MOVE) Fernando Liesa (ALICE)

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 (Archimedes)

Moderators: Guido Sacchetto (DG RTD) **Christof Schernus (FEV)**

INCIT-EV - Large demonstration of user Centrlc 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 (Einstein)

Moderators: Andrea Arcelli (CINEA) Anna Larsson (RISE)

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 (Einstein)

Moderators: Salima Abu Jeriban (CINEA) lan Faye (Bosch)

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

> 10.30 - 10.50 Coffee break Visit the RTR exhibition area

10.50 - 11.50

7B. Next generation electrified vehicles for urban and suburban use (Einstein)

Moderators: Salima Abu Jeriban (CINEA) lan Faye (Bosch)

URBANIZED - modUlaR and flexible solutions for urBAN-sIzed 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 (Archimedes)

Moderators: Pedro Perez-Losa (CINEA) Hamid Zarghampour (Trafikverket)

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)

(Newton)

Moderators: Pietro Caloprisco (Clean Hydrogen Partnership) Roland Uerlich (RWTH Ika)

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) (Archimedes)

Moderators: Jorge Pereira (DG CNECT) Hamid Zarghampour (Trafikverket)

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

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

9B. Fuel cells applications in HDV (FCH)

(Newton)

Moderators: Georgios Tzamalis (DG MOVE) Roland Uerlich (RWTH Ika)

PRHYDE - Protocol for heavy duty hydrogen

H2Haul - Hydrogen fuel cell trucks for heavyduty, zero emission logistics



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PARALLEL SESSIONS

12.00 - 13.00

10. Virtual modelling of batteries (Newton)

Moderators: Alexandru Ghiurca (CINEA)
Paul Schiffbaenker (AVL List)

DEFACTO - Battery DEsign and manuFACTuring Optimization through multiphysic modelling

MODALIS2 - MODelling of Advanced LI Storage Systems

11. Medium and heavy-duty vehicles developments (Einstein)

Moderators: Eric Cerneaz (CINEA)

Mats Rosenquist (Volvo Group)

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

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

Moderators: Jorge Pereira (DG CNECT) Horst Pflügl (AVL List)

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 (Archimedes)

Moderators: Johan Blondelle (DG RTD)
Silvia Bodoardo (POLITO)

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

14. Crash protection and collision avoidance

(Newton)

Moderators: Claudia Ciuca (CINEA)

Peter Urban (RWTH Ika)

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

15. Trustworthy CCAM

(Einstein)

Moderators: Georgios Sarros (CINEA) Oihana Otaegui (Vicomtech)

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 (Einstein)

(LIIISTEII)

Moderators: Yannick Bousse (CINEA)

Ivo Cré (POLIS)

connEcted Urban Poles

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

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

(Archimedes)

Moderators: Suzanna Kraak (DG RTD)

Margriet van Schijndel (TUe Eindhoven)

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













SOFTWARE DEFINED VEHICLES: ACCELERATING INNOVATION AND DIGITALISING AUTOMOTIVE



18.20 - 19.20 (EINSTEIN)

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

More than ever, software and hardware developments are going hand in hand, and the road mobility sector is no exception. Can "Software Defined Vehicle" be a next big evolution in the automotive industry? Can we take further action to support Europeanbased solutions? Join our panellists - Max Lemke (DG CNECT), Armin Gräter (BMW Group, CCAM Association Chairman), Jean-Baptiste Burtscher (Valeo) and Margriet van Schijndel (TUe Eindhoven) to learn more and discover some of the most recent ongoing EU activities in this field.

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.



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PARALLEL SESSIONS



9.30 - 11.00

18A. Next generation of power electronics

(Archimedes)

Moderators: Joao Carrilho Miranda (CINEA) Roland Uerlich (RWTH Ika)

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

(Einstein)

Moderators: Ancuta Pasca (CINEA) Magnus Granström (SAFER)

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

(Newton)

Moderators: Eric Cerneaz (CINEA) Thilo Bein (Fraunhofer)

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

(Archimedes)

Moderators: Joao Carrilho Miranda (CINEA) Roland Uerlich (RWTH Ika)

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

(Einstein)

Moderators: Patrick Mercier-Handisyde (DG RTD)

Magnus Granström (SAFER)

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 (Newton)

Moderators: Georgios Tzamalis (DG MOVE) Bert Pluymers (KU Leuven)

NEMO - Noise and Emissions Monitoring and radical mitigation

LENS - L-vehicles Emissions and Noise mitigation Solutions



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CLOSING DISCUSSION



12.45 - 13.15 (EINSTEIN)

Moderator: Lucie Beaumel, EGVIAfor2Zero

Jane Amilhat, Head of Unit, Clean Transport Transitions, DG Research and Innovation (DG RTD), European Commission and **Simon Edwards**, Global Director, Technology, 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 National Contact Points)

TRA2024 Dublin Transport Research
Arena Conference 2024

Projects

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