

Be focused!

A multi stakeholder proposal for future research collaboration.

Dr.-Ing. Stephan Neugebauer.

Chairman of European Road Transport Research Advisory Council (ERTRAC) Director Global Research Cooperation, BMW.











Alliance of the main stakeholders for Road Transport Research

European Technology Platforms:

- ERTRAC (Road Transport System)
- EPOSS (Smart Systems Integration of Electronic Components)
- ETIP-SNET (Energy Networks)
- ALICE (Logistics)

EGVIA European Green Vehicles Initiative Association

European associations:

- EUCAR (Automotive manufacturers)
- CLEPA (Supply Industry)
- EARPA (Automotive Research Providers)
- POLIS (Cities and regions)
- ERTICO (ITS)
- ECTRI (Transport Research Institutes)











Key messages for Horizon Europe for Road Transport research

We have a consortium with a common vision: (extract from ERTRAC SRA)

- People and goods can reach their destination in cities in a way that is healthy, safe, affordable, reliable and comfortable
- CO2-neutral road transport with minimal environmental impact including circular economy for vehicles and infrastructure
- Infrastructure and traffic management provide high efficiency road network services at competitive cost with minimized congestion
- Digitalization enables people to get the best service at highest level of comfort and safety
- Safe and secure at any time
- Europe as a world leader in innovation, production and services











Key messages for Horizon Europe for Road Transport research

Our Vision means in particular: (extract from ERTRAC SRA)

- Emission free in urban areas, negligible or near zero emissions in rural areas
- 100% renewable energy for transport
- Fully multimodal mobility
- Connectivity everywhere
- Nearly zero accidents and injuries
- Excellence in education, research and training
- Energy efficient and sustainable production in Europe
- •

Conclusion for Horizon EUROPE:

"**Decarbonization**" and "**Digitalization**" are the focus areas for road transport research!











System Challenge Road Transport

ROAD TRANSPORT LANDSCAPE



Jobs & Growth for Europe











Key messages for Horizon Europe for Road Transport research

Boundary Conditions for Road Transport Research:

Competition:

In both areas, Decarbonization and Digitalization, the automotive industry (OEMs and suppliers) are under full competition. Therefore, any research cooperation has to be limited to <u>pre-competitive</u> activities.

Instrument:

The development of future technologies, especially in the field of digitalization, is highly dynamic and has a lot of uncertainties. It is not possible to define a fixed research program for the next years up to 2027. Therefore, we need a research instrument that is flexible, dynamic, transparent and agile, and with a low level of administration:

-> "Co-Programmed Partnership", similar to today Contractual PPP (cPPP)











=> 3 instruments for 3 different innovation steps with links between them

Enabling Technologies: addressed by ECSEL, HPC, 5G, etc.

- Instruments: the most appropriate one for each enabling technology
- Activities: development of components, subsystems and networks

Research in the areas of "Green" and "Digital" Road Transport

- Instrument: Co-Programmed Partnership funded by Horizon Europe
- Activities:
 - All vehicle development topics
 - Testing, validation and technical input for standardization and regulation
 - New services, user perspective, societal acceptance and impacts
 - Physical and digital infrastructures needs to enable automation (pre-competitive only)

Deployment initiative for "Connected Automated Mobility"

- **Instrument:** to be discussed decision according to activities and EU rules
- **Activities:** Infrastructures for CAM (physical and digital), Harmonization at EU level and cross-border deployment, Deployment of Hubs and Services supporting Intermodality













