FNC-2021 DRAFT PROGRAMME Fully virtual, 22-25 March 2021

22 March 2021 (13h00-16h00 CET)

OPENING

Opening addresses from ITU and UNECE

SESSION 1 – Regulatory advances in highly automated driving

The UN World Forum for Harmonization of Vehicle Regulations (WP.29) has approved a new Regulation 157 for highly automated driving up to 60 kph on motorways. Countries and regional authorities are adopting this regulation. Vehicle manufacturers have announced products that conform to this regulation. The WP.29 Working Party on Automated/Autonomous and Connected Vehicles (GRVA) is exploring expanding the regulation to higher speeds and other types of roads through many informal groups. This session will explore the future of highly automated driving regulations around the world and the activities of the GRVA informal groups.

Moderator: TBD

23 March 2021 (13h00-16h00 CET)

SESSION 2: Vehicle cybersecurity framework is ready: It's time for deployment

In June 2020, WP.29 approved two new regulations, one for vehicle cybersecurity (Regulation 155) and another for vehicle software updates (Regulation 156). These regulations provide a framework for the automotive sector to put in place the necessary processes to design and deliver cyber secure, connected vehicles with software and firmware that can be updated remotely. The questions this session will address are:

- What do these regulations mean in concrete terms for vehicle manufacturers and their suppliers?
- Are the regulations enough to ensure that vehicles are fully protected as highly automated driving products are added with ever-increasing operational design domains (ODDs)?
- What steps need to be taken to adopt these regulations in all regions?

Subject experts from all the world's regions, including members of the WP.29 committees that developed the regulations, will seek to answer these questions and discuss the next steps to deployment.

Moderator: Michael L. Sena, Publisher and Editor of "The Dispatcher"

24 March 2021 (13h00-16h00 CET)

SESSION 3: Highly automated driving – how we get there

Some vehicle manufacturers have announced vehicles with SAE Level 3, eyes-off products in which drivers do not need to keep their hands on the steering wheel or pay attention, but must be able to take back control within a defined period of time if prompted to do so. These products with limited operational design domains (ODD) are the first steps on the path to highly automated driving. Much more is needed to reach all roads and all conditions, including:

- perception and recognition need to improve,
- decision-making needs to be validated,
- information availability, localization, and situational awareness need to be extended,
- testing and certification needs major breakthroughs,
- the specific areas where AI will be most useful require definition.

This session will gather experts from all relevant fields to present and discuss their views on the progress made thus far and the prospects for vehicles that drive themselves.

Moderator: Roger Lanctot, Director, Automotive Connected Mobility, Strategy Analytics

25 March 2021 (13h00-16h00 CET)

SESSION 4: Communications for highly automated driving

Highly automated driving needs wireless vehicle communication for many reasons, including:

- software updates,
- road data updates,
- road works information,
- dynamic situations (slippery roads, end of traffic queue, etc.),
- direct interactions with vehicles (collision avoidance, braking notifications, merging assistance, priority at stop signs, etc.),
- identifying vulnerable road users (pedestrians, emergency responders, workers, cyclists, etc.),
- signal phase and timing.

Regarding these applications, the session will discuss:

- Which applications are needed to achieve highly automated driving on all roads in all conditions?
- How will these applications be accomplished and when?
- What other communication-related elements are needed?

Global experts on the subjects of communications and highly automated driving will gather in this session to discuss their views on the progress and the prospects for communications for vehicles that drive themselves. These experts will explore what progress must be made and when it will happen to enable vehicles with highly automated driving products with extensive operational design domains (ODDs).

Moderator: T. Russell Shields, President and CEO, RoadDB LLC