





Webinar "Advances in Communication Technologies for Transports"

Organized by Università degli Studi Guglielmo Marconi (USGM) within the AB4Rail project (www.ab4rail.eu)

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24-th May 2022 – 9:45 a.m. (CET) to 12:00, Webinar Registration link:

https://us02web.zoom.us/meeting/register/tZlpceGsrTotHd2wqRmizRHE9ZbAeTdlBMKN

After the registration procedure you will receive a confirmation email with the necessary information to attend the Webinar.



According to some analysts, the next three years will see a step-change in the transportation sectors worldwide. This is due to advances in *i*. On-board and road side sensors for collecting data, *ii*. Communications for autonomous, assisted or remote piloted vehicles, and *iii*. Machine learning for traffic management and for supporting the autonomous vehicles. The success of the future mobility model that meets sustainability requirements, emergency and safety services and infotainment will depend on the cooperation of the following four actors: service providers to customers (or mobility operators), automotive and rail vehicle manufacturers, infrastructure industries and Telcos and edge-computing companies. Three areas will be covered in the webinar: new frontiers in satellites, new services through on-board devices and just standardized communications for vehicles.

Invited speakers:

Veronica La Regina, CEO – Europe of Nanoracks Space Outpost Europe. Previously she was Strategy and Business Development officer at RHEA and appointed as Business Innovation Expert in the European Space Agency (ESA).



The Minimum Viable Product (MVP) is an initial critical step of an innovative project; nowadays there are recurrent and affordable rides to space to test and validate innovative systems and/or subsystems in Space before embarking on a satellite mission. This enhances the probability of success of new technologies and speeds up innovation and front-runner solutions available on the market. Nanoracks is leading the In-orbit Demonstration and Validation (IoD/IoV) opportunities on the

International Space Station on board of several diversified facilities. Thus, a comprehensive overview of the current trends of IoV/IoD in the field of communication for mobile platforms is delivered to the audience.

Claudio Ramini, Vice President at NTT DATA Italia Head of Market Unit Travel & Transportation



Services in transportation sectors are usually related to on-board units (OBUs), which exploits the ability to personalize them according to the behavior of the customers and to provide further value-added services. Due to OBU installations on several vehicles (e.g., personal cars, buses, trains, bikes and e-scooters), enables the Mobility as a Service (MaaS). Forthcoming services and successful case studies are delivered in this webinar.

Romeo Giuliano, Professor of Networks and Wireless Systems at USGM. His main research topics are: 5G, B5G and 6G radio systems, IoT systems and C-V2X, and Machine Learning on Communication with about 140 papers. Involved in several EU and National research projects within FP5, FP6, FP7, H2020.

The definition of a common standard in vehicle communications with the Release 16 in June 2020 will allow the diffusion of the Cellular – Vehicle to Everything (C-V2X). The webinar will provide the envisaged scenarios, performances and how the 5G network can support services in transportation.