



Keynote Speaker



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“TUSS – The Ultimate Sharing Service and its disruptive potentials for urban transport Result of Sesto Fiorentino demonstration”

The main mobility problems of urban areas are the outer peripheries where private transport is unsustainable and conventional public transport not effective.

TUSS combines car-sharing and ride-sharing to bring people to (and from) main transport hubs and to move locally in any outer periphery. One customer drives a shared car and picks the driver of the next ride before alighting allowing the vehicle to never (almost) be parked or being in need of repositioning.

The service can then cost less than a public transport ticket and yet be operated without any subsidies.

A first demonstration has been made in Sesto Fiorentino (north periphery of Florence in Italy) proving the feasibility of the service and the appreciation of users; it also highlighted, as the main initial market, the business market which allows workers to reach their workplace from the local train station. The unexpected social value of the service has also been assessed with service requests for elderly and people with disabilities.

BIO

Mechanical Engineer (MSc in 1998) and PhD in Energy Technologies (2003 – both awarded by the University of Rome La Sapienza) Adriano is associate professor of Transport at the Civil Engineering Department of the University of Florence (DICEA – since 2015) of Transport Technologies and Economics and Innovative Transportation Systems. Since 2000 (EC project CyberCars) he researches on vehicle automation technologies. He participated with growing responsibilities in a stream of international research projects on road vehicle automation CyberMove, EDICT, NetMobil, CityMobil, CityNetMobil, CATS, VRA, CARTRE, Co-Exist and coordinated the largest of them to date CityMobil2 which deployed the first fleets or automated shuttles in seven European cities carrying almost a hundred thousand passengers overall. For his vision of a new society



generated by automated transport he was shortlisted twice 2014 and 2016 for the EU Champion of Transport Research prize. His main research interests are the environmental impact of vehicles (and drivers) and automated transport systems. He published two books on road vehicle automation; one (on the CityMobil2 outcomes) in 2018 *Implementing Automated Road Transport Systems in Urban Settings* and the second *The Role of Infrastructure for a Safe Transition to Automated Driving* (with Lorenzo Domenichini and Valentina Branzi 1st Edition - August 10, 2021) with the scientific publisher Elsevier. In 2019 he led his research team at UNIFI to deposit a patent on technologies to create convoys of automated vehicles. Since 2022 he leads the participation of an interdepartmental team of UNIFI to the national centre on sustainable mobility (MOST) and since 2023 he is the scientific director of the joint laboratory of UNIFI and the Italian State Railways MORE – Mobility hOlistic Research