



Orchestra



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*ORCHESTRA Project*

# Abstract for 29. SafeTRANS Industrial Day



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## Abstract

Bei der Entwicklung einer dezentralen multimodalen Verkehrslenkungsarchitektur (Polycentric Multimodal Architecture) wird die virtuelle Absicherung durch Simulationen verwendet, bevor die Konzepte dann in Living Labs getestet werden.

Einige Stichworte sind: SysML Entwicklung, Aimsun Verkehrsflusssimulation, MATLAB, python  
CertX ist Spezialist für Funktionale Sicherheit, Cybersecurity in mehreren Anwendungsfeldern.  
<https://certx.com/de/domains/>

The Presentation can be held in English, French or German.

Further information on the whole project in the following chapter.

### Kontakt:

**Samuel Rieder**

Automotive Functional Safety Engineer

Tel: +41 26 309 29 93

Mob: +41 79 710 20 26

[samuel.rieder@certx.com](mailto:samuel.rieder@certx.com)



[www.certx.com](http://www.certx.com)

**CertX AG**

Route de l'Ancienne Papeterie 460

1723 Marly, Switzerland

## About H2020 ORCHESTRA

The long-term vision of the ORCHESTRA is a future where it is easy to coordinate and synchronise the traffic management of all modes to cope with diverse demands and situations. Also, to facilitate optimal utilisation of transport networks and efficient multimodal transport services, both in rural and urban areas.

The project will:

- Establish a common understanding of multimodal traffic management concepts and solutions, within and across different modes, for various stakeholders and multiple contexts
- Define a Multimodal Traffic Management Ecosystem (MTME) where traffic managements in different modes and areas (rural and urban) are coordinated to contribute to a more balanced and resilient transport system, bridging current barriers and silos
- Support MTME realisation and deployments, through the provision of tools, models, and guidelines – including support for connected and automated vehicles and vessels (CAVs)
- Validate and adjust MTME for organisational issues, functionality, capability, and usability
- Maximise outreach and uptake of project results through strong stakeholder involvement

The project will provide a Polycentric Multimodal Architecture (PMA) that specify how diverse system components collaborate and interact, taking into account smart infrastructures, technical and organisational aspects and polycentric governance. The PMA will be supported by: 1) Enabling toolkit, 2) Deployment toolkit, 3) Documented lessons learned.

The project will validate the PMA and related tools and toolkits in two Living labs (in Norway and Italy), collectively covering both road, rail, water, and air transport. The Italian Living lab is focusing on traffic orchestration for the mobility of people, while the Norwegian Living lab is focusing on traffic orchestration for freight. The Living labs will be supported by simulations to enhance evaluations.

### Legal disclaimer

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