



IMHOTEP

Modus

synair.

TRANSIT

eXTENDED AtM for Door2Door travel
X-TEAM D2D

Shift2Rail

Passenger centeredness as a foundation/base for the Concept of Operation of future integrated multimodal transport systems

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Workshop ‘Passenger-centred Mobility’

ART/ACARE/CAMERA

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Founding Members



IMHOTEP, Modus, SYNAIR, TRANSIT and X-TEAM D2D projects have received funding from the SESAR Joint Undertaking under the European Union's Horizon 2020 research and innovation programme under grant agreements respectively: No 891287, 891166, 894116, 893209, 891061. The Shift2Rail Joint Undertaking (S2R JU) is a new public-private partnership in the rail sector, established under Horizon 2020, to provide a platform for coordinating research activities with a view to driving innovation in the rail sector in the years to come. It was established on 7 July 2014, following the entry into force of Council Regulation (EU) No 642/2014 of 16 June 2014 establishing the Shift2Rail Joint Undertaking

What is passenger centredness?

- **More passenger' needs oriented services**
- Distribution of resources to avoid congestion
- **More passenger-friendly services**
- Inclusive design
- Information for passengers
- Well designed infrastructure
- **More personalised services**
- Mobility as a Service



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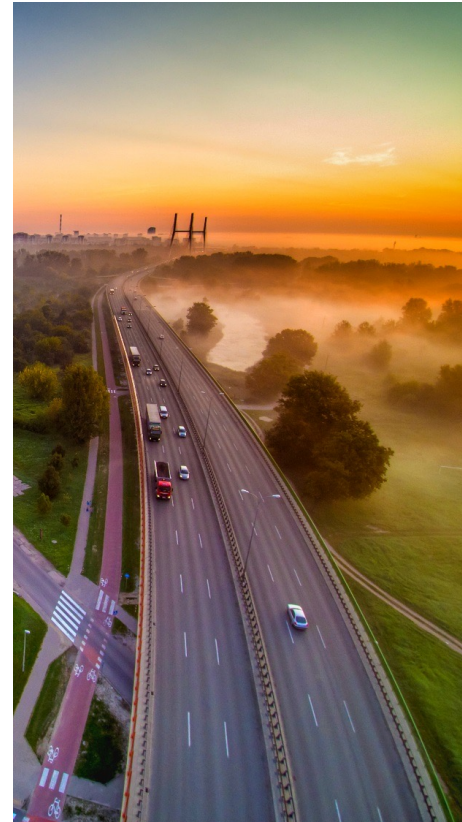
What is genesis of passenger centredness approach?

- **ENAC in 2013** in Meta CDM project pushed the approach of putting the passenger in the center of the decision-making process for the operations. <http://www.meta-cdm.org>
- **MaaS by EC since 2014** by giving the floor to a set of Initiatives funded by the European Commission and allowing to push the concept of putting the passenger in the centre of the decision-making process, <http://www.maas4eu.eu>, <https://maas-alliance.eu>
- **NEXTT initiative** in IATA and ACI set up the NEXTT PASSENGER JOURNEY
- **Sabre publication** Sabre published a The Customer-Centric Airport -Redefining The Airport Customer Experience,



Applications in multimodal transport?

- **Infrastructure and transport planning**
- Convenient change for multimodal passengers
- **Transport providers' services**
- Short waiting time
- Easy accessible and clear information
- **Tools and solutions for passengers**
- (Mobile) applications gathering information about connections
- Mobile application enabling buying and validation of tickets



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Why it should be base for ConOps?

- **Better position of public transport**
- To create a system able to compete with personal transportation
- **Base for sustainable transport development**
- Less unproductive time
- More efficient transportation process
- **Creates base for further future integration of passengers.**
- To take advantage of access to passenger data



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SESAR ER4 Multimodality projects+S2R JU

- **IMHOTEP** - Integrated Multimodal Airport Operations for Efficient Passenger Flow Management
- The goal is to develop a concept of operations and a set of data analysis methods and tools that allow information sharing, common situational awareness and real-time collaborative decision-making between airports and ground transport stakeholders.
- Coordinated by:

NOMMON SOLUTIONS AND TECHNOLOGIES SL



SESAR ER4 Multimodality projects+S2R JU



- **Modus** - Modelling and assessing the role of air transport in an integrated, intermodal transport system
- Modus project will analyse the performance of the transport system as a whole, with a particular focus on the role of aviation. It will identify and assess (future) drivers for passenger demand and supply of mobility. Based on this, the development of multiple scenarios for future mobility paths, covering a time horizon beyond 2030, will be defined.
- Coordinated by:

BAUHAUS LUFTFAHRT EV



SESAR ER4 Multimodality projects+S2R JU

- **SYN+AIR** - Synergies between transport modes and Air transportation
- The main objective of SYN+AIR is to generate common goals for TSPs that will justify data sharing, facilitating the user to execute a seamless D2D journey.
- Coordinated by:

UNIVERSITAT POLITECNICA DE CATALUNYA



SESAR ER4 Multimodality projects+S2R JU

- **TRANSIT** - Travel Information Management for Seamless Intermodal Transport
- The project will design a managing system for seamlessly integrated intermodal transport. This will involve establishing multimodal key performance indicators, analysis of methods of mobility data and tools allowing simulation of transport and control of the efficiency of intermodal transport.
- Coordinated by:

NOMMON SOLUTIONS AND TECHNOLOGIES SL



SESAR ER4 Multimodality projects+S2R JU



- **X-TEAM D2D** - eXTENDED AtM for Door2Door travel
- Aim of the project is developing a concept of operations (ConOps) addressing intermodal transport in urban and suburban environments up to the regional (country-wide) level according to the FlightPath2050 vision.
- Coordinated by:



C.I.R.A. CENTRO ITALIANO RICERCHE AEROSPAZIALI
SCPA



SESAR ER4 Multimodality projects+S2R JU

- **Shift2Rail Joint Undertaking**

- The Shift2Rail Joint Undertaking (S2R JU) is a new public-private partnership in the rail sector, established under Horizon 2020, to provide a platform for coordinating research activities with a view to driving innovation in the rail sector in the years to come.

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Agenda of R&I in multimodality

- **Passenger centredness – airport as a node in multimodal transport systems**

IMOTHEP - Ruben ALCOLEA (Nommon)

TRANSIT - Ruben ALCOLEA (Nommon)

- **Multimodal passengers of the future – passenger needs, expectation**

Modus - Annika PAUL (Bauhaus Luftfahrt)

X-TEAM D2D - Gabriella DUCA (ISSNOVA)

- **Data sharing and access to travelers' data as a facilitators of multimodality**

SYN+AIR – Ismini Stroumpou (Sparsity Technologies)

X-TEAM D2D – Bartosz Dziugiel (ILOT)

- **Shift2Rail – Railway passenger perspective**

S2R – Esther Bravo





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Thank you very much for your attention!



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Founding Members



The opinions expressed herein reflect the author's view only.

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