



# Agency Research Team (ART) workshop on passenger-centred mobility

## Day 1 - Status of Mobility Research in Europe

### Status of SESAR research on multimodality

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Founding Members



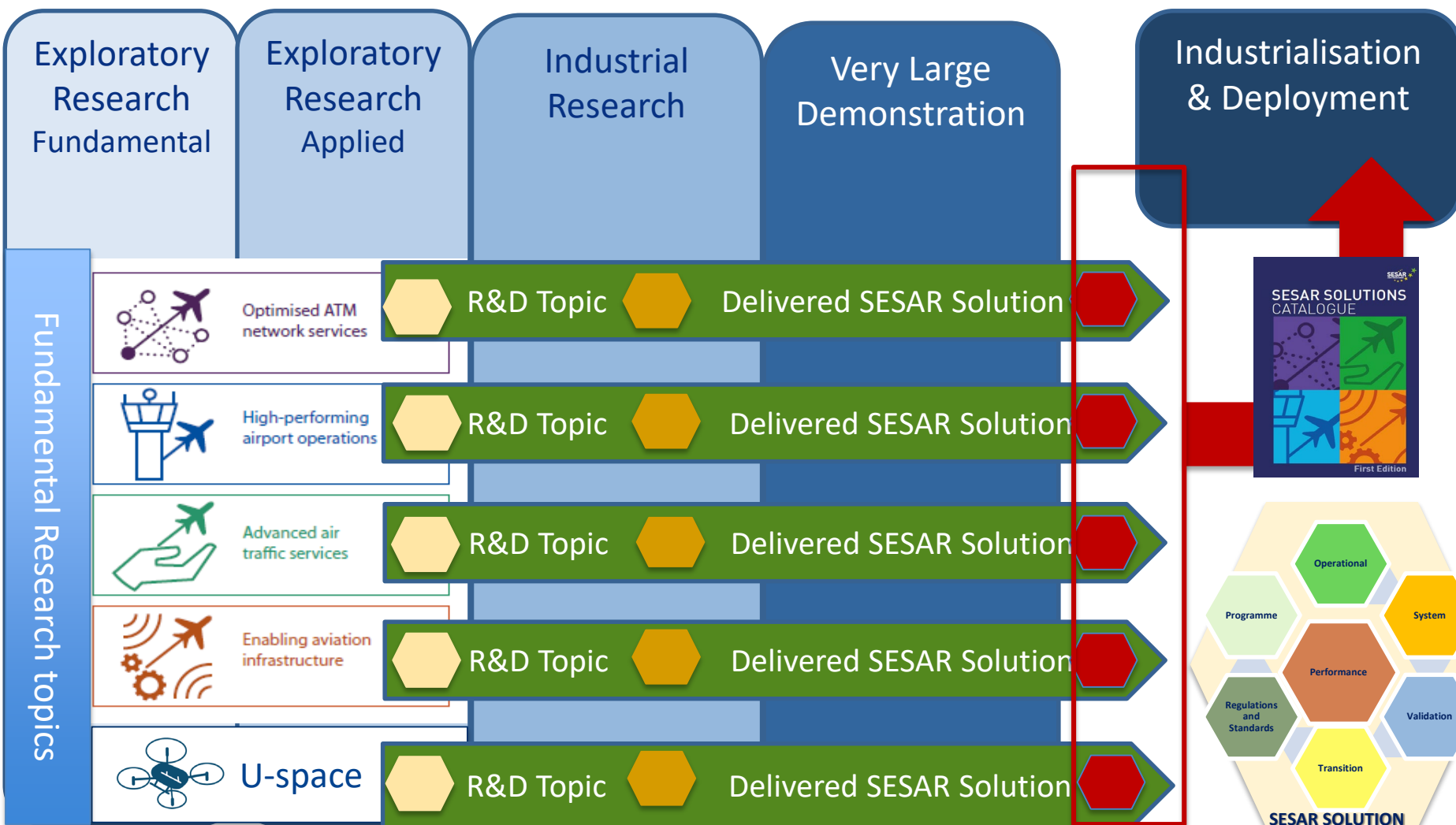
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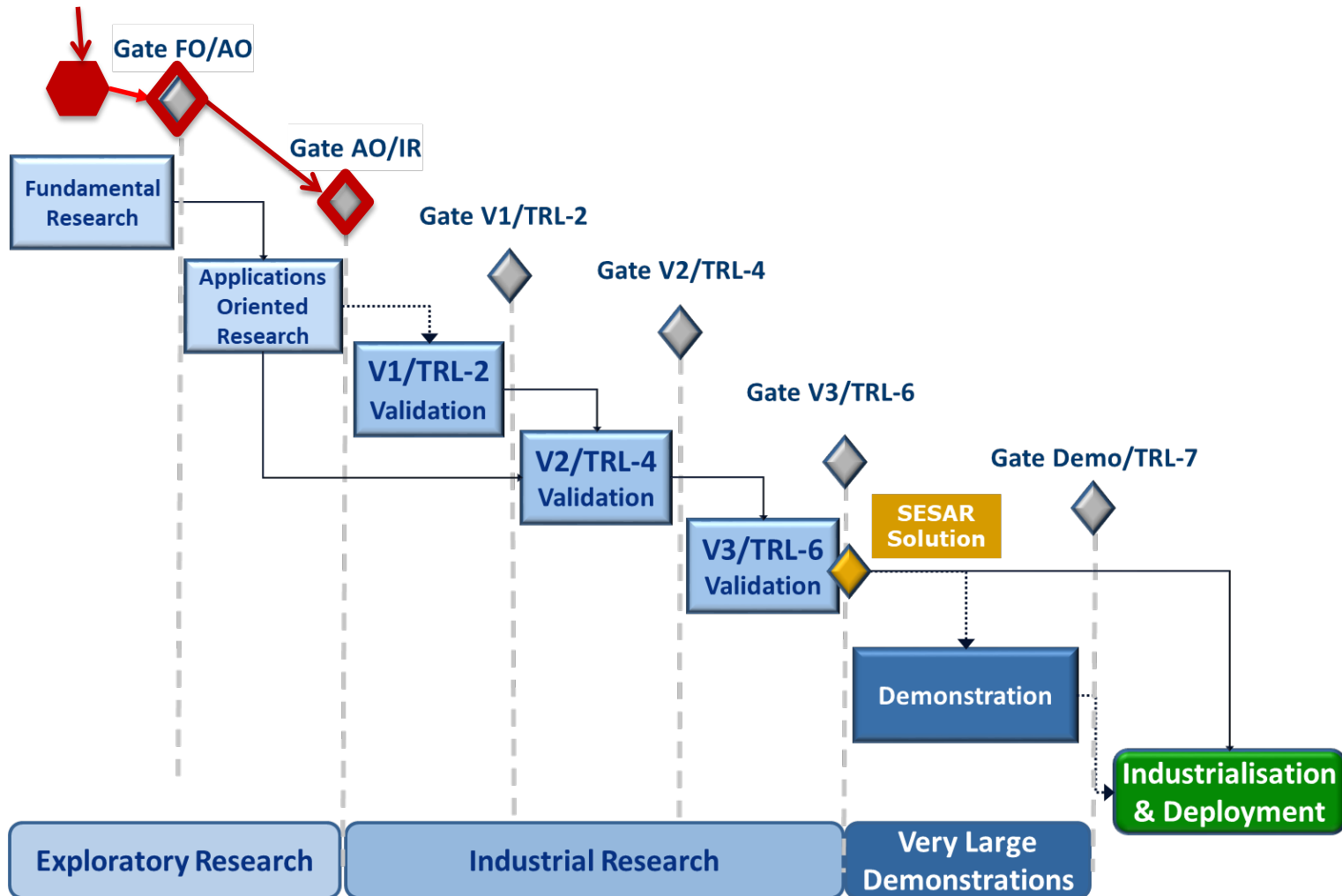
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# SESAR Solutions overall Lifecycle

European ATM Master Plan



# Maturity Gates



# Multimodality in SESAR2020 programme



Background: several Exploratory Research projects are working on multimodality

- **ATM Role in Intermodal Transport - Fundamental Research**
  - Modus (06/2020)
  - TRANSIT (05/2020)
  - X-TEAM D2D (06/2020)
  - SYN AIR (11/2020)
- **High-performing Airport Operations - ATM Application Oriented Research**
  - IMHOTEP (06/2020)

Note: all projects have a duration of 24 months to complete the technical work, plus six months devoted to dissemination and exploitation activities.

Industrial research: Pj04 – Total Airport Management

researching on the landside elements addressing aspects beyond the airport, and considering connectivity and multimodality aspects; as the airport is often at the centre of a multi-modal transport network, multimodality aspects have to ensure that the **performance monitoring and management processes incorporate interacting transport modes**. The aim is to consider how airports can make use of data available from other transport modes and how to integrate them in order to provide a full picture to the passengers for their door-to-door journey.

# SESAR 2020 Multimodality projects



<p><b>Modus</b> - Modelling and assessing the role of air transport in an integrated, intermodal transport system</p>	<p>Modus aims to analyse the performance of the overall transport system by considering the entire door-to-door journey holistically. The project identifies (future) drivers for passenger demand and supply and assesses the impact on airside and landside processes and capacities. Based on these analyses, potential solutions to meet high-level European transport objectives are proposed.</p>
<p><b>TRANSIT</b> - Travel Information Management for Seamless Intermodal Transport.</p>	<p>TRANSIT aims to develop a set of multimodal key performance indicators (KPIs), mobility data analysis methods and transport simulation tools, allowing the evaluation of the impact of innovative intermodal transport solutions on the quality, efficiency and resilience of the door-to-door passenger journey.</p>
<p><b>SYN AIR</b> - Synergies between transport modes and Air transportation</p>	<p>SYN+AIR aims to generate common goals for TSPs that will justify data sharing, facilitating the user to execute a seamless D2D journey. SYN+AIR will analyse how passengers journeys can be facilitated through improved planning and operations activities powered by data sharing. Consequently, a “Smart Contracts Framework” will be generated based on a Business Process Model.</p>
<p><b>X-TEAM D2D</b> - eXTENDED AtM for Door2Door travel</p>	<p>X-TEAM D2D aims to define, develop and initially validate a Concept of Operations for the seamless integration of ATM and Air Transport into an overall intermodal network, including other available transportation means (surface, water), to enable the door-to-door connectivity, in up to 4 hours, between any location in Europe.</p>
<p><b>IMHOTEP</b> - Integrated Multimodal Airport Operations for Efficient Passenger Flow Management</p>	<p>IMHOTEP aims to develop a concept of operations and a set of data analysis methods, predictive models and decision support tools that allow information sharing, common situational awareness and real-time collaborative decision-making between airports and ground transport stakeholders.</p>

# Multimodality in SESAR 3



- In the SRIA there is a Challenge Area dedicated to Multimodality and Passengers Experience
- The Challenge Area includes four Research & Innovation needs:
  1. Access to /exit from the airport: Airports are obvious multimodal nodes for aviation
  2. Passenger experience at the airport
  3. An integrated transport network performance cockpit
  4. An integrated transport network crisis management process
- Work is ongoing to identify research topics for the SESAR3 Calls

# Useful links

- Modus <https://modus-project.eu/>
- TRANSIT <https://www.transit-h2020.eu/>
- SYN AIR <http://syn-air.eu/>
- X-TEAM D2D <http://xteamd2d.eu/>
- IMHOTEP <https://www.imhotep-h2020.eu/>



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Thank you very much  
for your attention!



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