


# MultiModX

## *Integrated Passenger-Centric Planning of Multimodal Transport Networks*



**Acronym:** MultiModX  
**Project budget:** 1 750 380 € combined grant amount  
**Duration:** 30 months  
**Project start date:** 01/07/2023  
**Project end date:** 31/12/2025  
**Partners:** 6 partners from 5 countries  
**Project coordinator:** Bauhaus Luftfahrt EV  
**Work programme:** HORIZON-SESAR-2022-DES-ER-01  
**Grant agreement:** n° 101114815

**The vision of MultiModX is that of a multimodal European transport system in which air and rail networks are planned and managed in a coordinated manner to maximise the efficiency, predictability, environmental sustainability and resilience of the door-to-door passenger journey.**

### **MULTIMODX PRIMARY GOAL**

The primary goal of MultiModX is to deliver a set of innovative multimodal solutions and decision support tools for the coordinated planning and management of multimodal transport networks.



Co-funded by  
the European Union

SUPPORTED BY  
**sesar**  
JOINT UNDERTAKING

MultiModX has received funding from the SESAR 3 Joint Undertaking (JU) under grant agreement No. 101114815. The JU receives support from the European Union's Horizon Europe research and innovation programme and the SESAR 3 JU members other than the Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union nor of the SESAR 3 JU. Neither the European Union nor the SESAR JU can be held responsible for them.

The project is supported by the SESAR Joint Undertaking and its members

## MULTIMODX OBJECTIVES

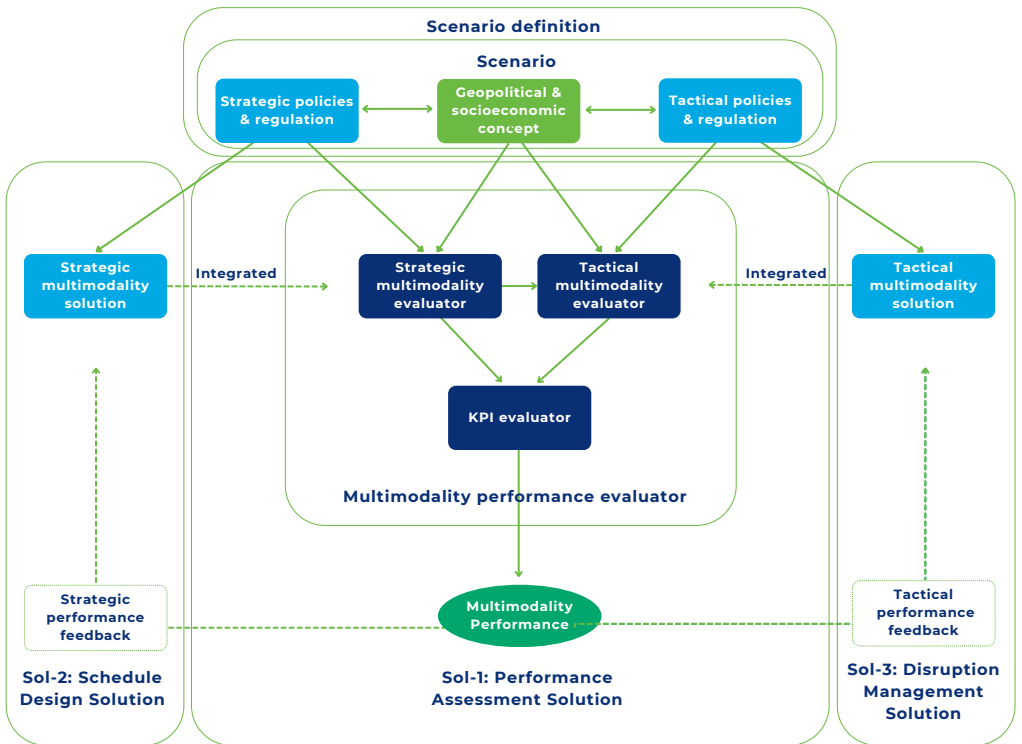
- **Identify and characterise current and future scenarios** for long-distance passenger multimodal transport in Europe, including an analysis of societal trends and their impact on passenger behaviour, existing and future policies and regulations, and the emergence of future multimodal concepts, with particular focus on describing specific European regional archetypes.
- **Improve existing indicators and metrics and complements current frameworks** by more meaningful passenger-centric metrics for better measures of significant disruption (e.g., longer delays, missed connections, denied boarding, cancellations).
- **Develop 3 multimodal solutions** for efficient, predictable, sustainable and resilient door-to-door passenger journey.
- **Develop a multimodal performance framework**, including a set of key performance indicators (KPIs) and the associated measurement mechanisms that enable the comprehensive and rigorous assessment of the performance of multimodal transport systems and multimodal solutions.
- **Nurture the conditions for the transfer of the MultiModX Solutions** to the subsequent stages of the R&I cycle, by engaging relevant stakeholders throughout the full project lifecycle and disseminating the project outcomes to potential adopters and ensuring that the components developed contain a clear definition of integration and datasets requirements.

## MULTIMODX SOLUTIONS

- **Performance Assessment Solution:** supports the design, development and assessment of strategic and tactical multimodal solutions, with focus on scheduling and disruption management. It enables ex-ante assessment and ex-post monitoring of their impact on a comprehensive set of KPIs.
- **Schedule Design Solution:** for the integrated planning of air and rail networks that optimises the waiting times at transfer nodes in order to offer more and better options for multimodal passengers. It enables the coordinated design of air and rail schedules according to the expected demand behaviour.
- **Disruption Management Solution:** based on coordinated air and rail tactical schedule adjustments and passenger reallocation. The solution will support decision-makers response to disruptive events in real time, in order to minimise the impact on the passengers.



# MULTIMODX CONCEPT



# MultiModX

-  **Germany**  
BHL  
TUD
-  **France**  
UIC
-  **Spain**  
NOMMON
-  **UK**  
UoW
-  **Belgium**  
ARC



## CONSORTIUM



**NOMMON**



**UNIVERSITY OF WESTMINSTER**



MultiModX official website: <https://multimodx.eu/>  
MultiModX on official SESAR website: <https://sesarju.eu/projects/>



MultiModX



info@MultiModX.eu



MultiModX\_eu



Co-funded by  
the European Union



MultiModX has received funding from the SESAR 3 Joint Undertaking (JU) under grant agreement No. 101114815. The JU receives support from the European Union's Horizon Europe research and innovation programme and the SESAR 3 JU members other than the Union.

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union nor of the SESAR 3 JU. Neither the European Union nor the SESAR JU can be held responsible for them.

The project is supported by the SESAR Joint Undertaking and its members