

# POLIS

CITIES AND REGIONS FOR TRANSPORT INNOVATION

ANNUAL  
CONFERENCE

# 2023

LEUVEN, BELGIUM • 29-30 NOVEMBER 2023



leuven



# The role of airports in TEN-T urban nodes

Air-rail integration and novel airport access options

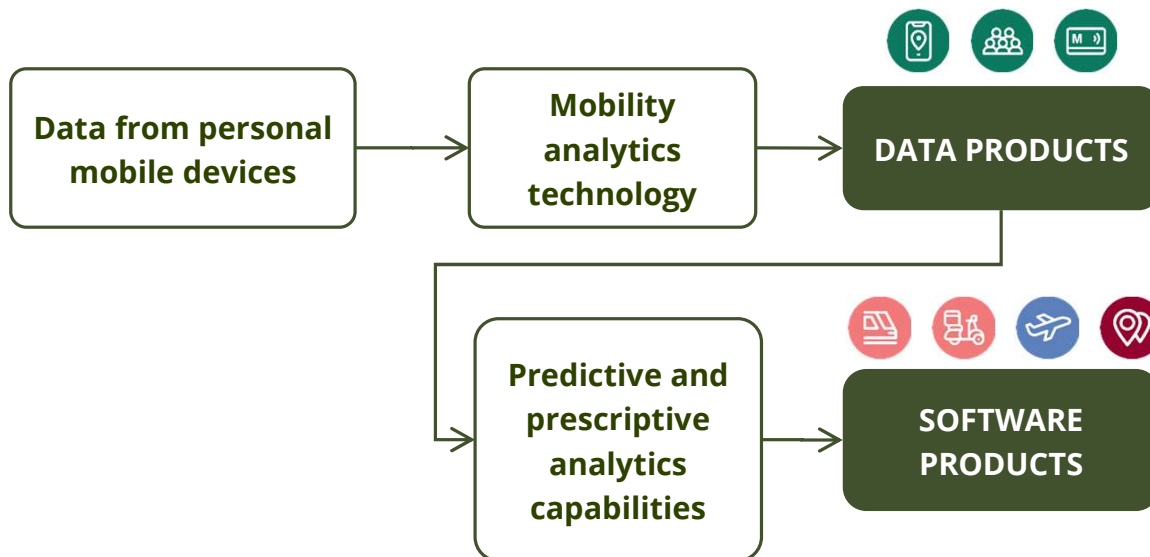
Javier Burrieza Galán

**Nommon**



# Nommon?

**Nommon** is a research-intensive technology company that **develops decision support tools** based on **big data and artificial intelligence**, with focus on the transport & mobility sector



# Airports and TEN-T nodes

- Sources of **connectivity** – and of **environmental impact**
- **Air-rail multimodality**: not only a matter of infrastructure, but of synchronisation + policy and regulations
- **Surface access**: ongoing efforts... but what about mobility innovations?





# Two projects



Co-funded by  
the European Union

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

2023-2025

- A **multimodal evaluation framework** that enables a comprehensive analysis of the impact of **multimodal transport solutions** for a range of stakeholders
- Focus on air-rail complementarity (strategic + tactical)



## MAIA Multimodal Access for Intelligent Airports

2023-2025

- A **set of data analytics and modelling tools** to support the evidence-based design and implementation of **multimodal airport access solutions based on CCAM and UAM**
- Focus on catchment area: Brussels & Madrid case studies

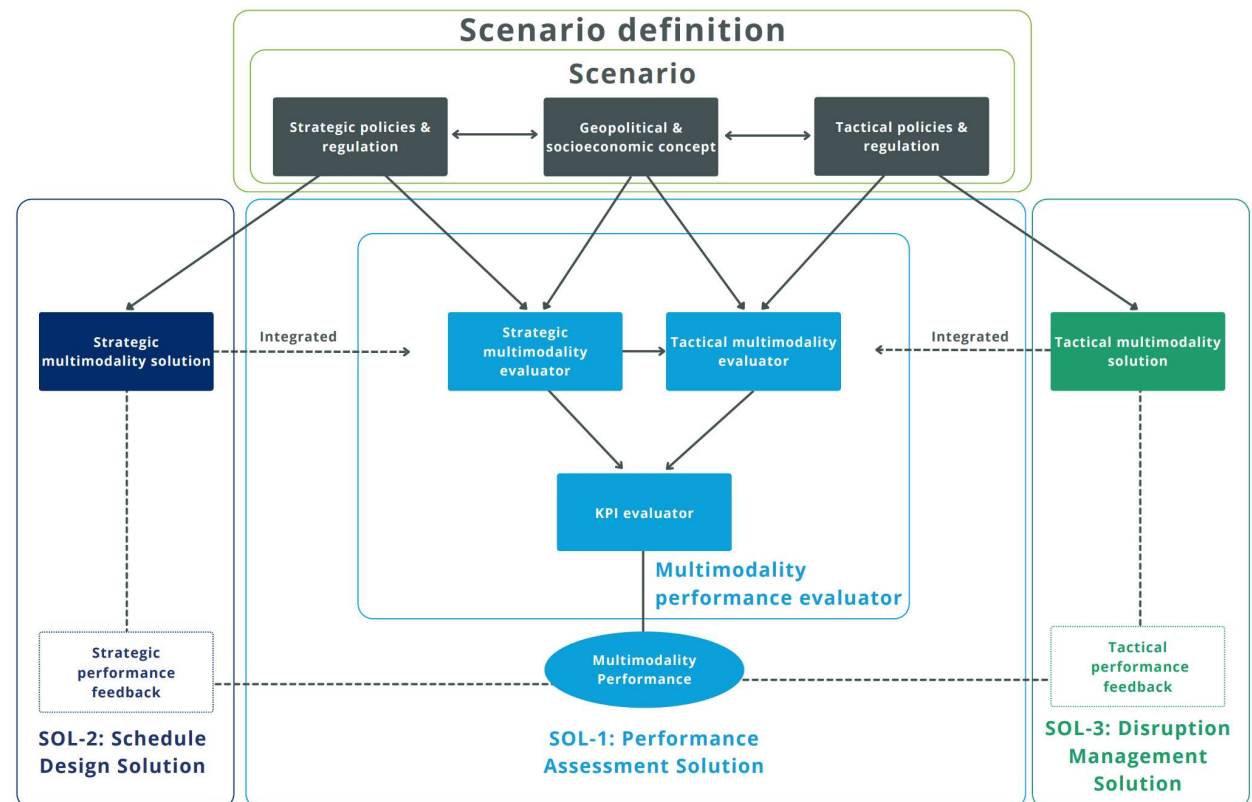






## Three solutions

- Performance Assessment Framework
- Schedule Design: strategic air-rail synchronisation
- Disruption Management: enhancing resilience through multimodal coordination





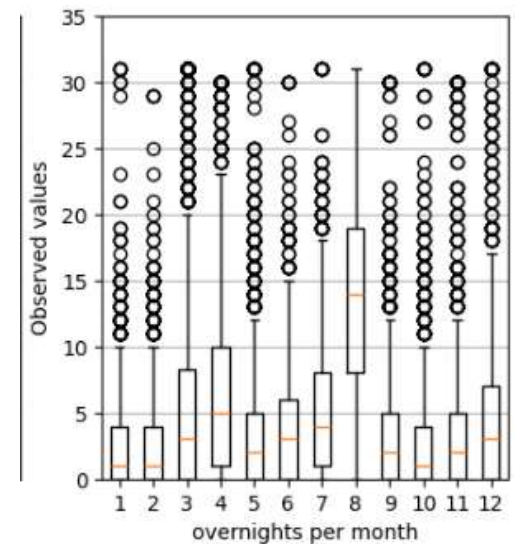
# MultiModX

Integrated Passenger-Centric Planning of Multimodal Transport Networks



## Ongoing work

- **Scenarios** for long-distance travel demand and policy intervention
- **Regional archetypes:** a classification of European regions according to their demand and supply conditions for multimodal strategies
- **Passenger archetypes:** combined qualitative-quantitative profiling of long-distance travel demand in Europe



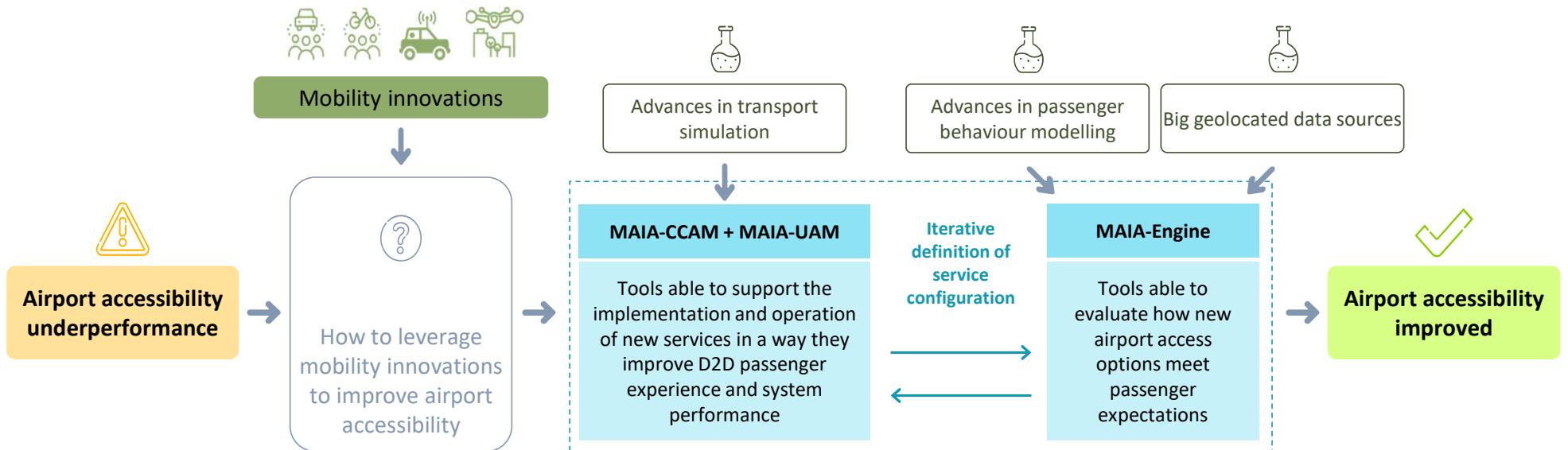
Evolving SESAR  
MODUS archetypes





# MAIA

Multimodal Access for Intelligent Airports

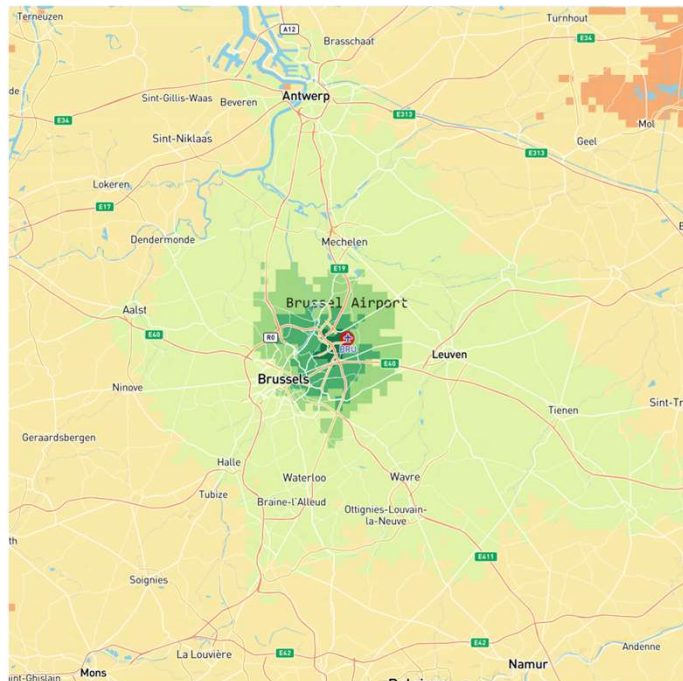




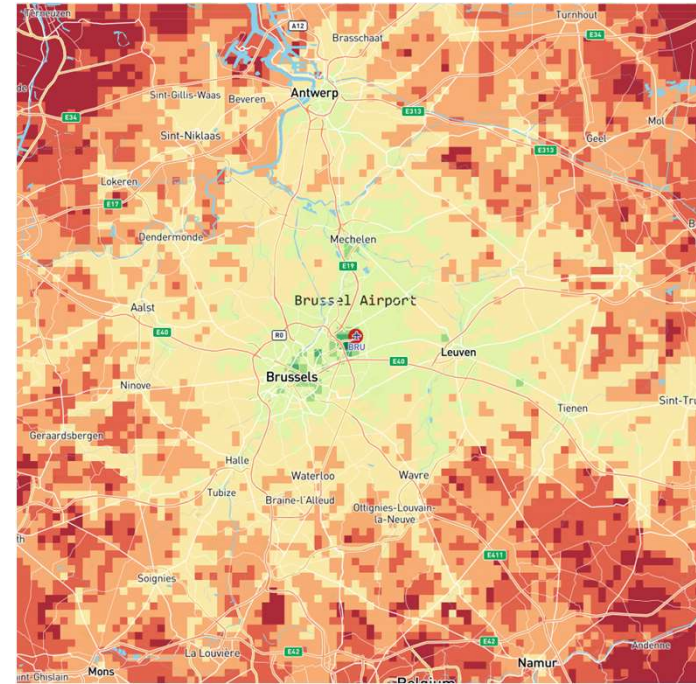


## First steps: accessibility gaps in catchment areas

Brussels  
National



Driving



Public



minutes



## Key takeaways

- Cities and regions make continuous efforts to better integrate airports in the TEN-T networks, but there is still a lot to do
- Airport access should keep up with mobility innovations
- Multimodality is already happening in some places – let's look at them
- Synchronisation can make the most from existing infrastructure
- Data fusion is key to understanding passenger needs
- [MAIA + MultiModX: opportunities to enhance airport integration in urban nodes](#)



# Thank you for your attention!

Do you want to learn more?

Join us next Monday for the 1<sup>st</sup> MAIA Stakeholder Workshop



**DECEMBER 4**



**POLIS Network Offices,  
Brussels**

Help us define **airport access challenges** and the role of mobility innovations in solving them:  
Can **CCAM & UAVs** help? HOW?



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