Lessons from Vital Nodes

ScanMed Observatory
Technical Workshop

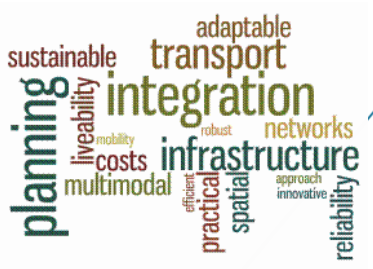
Wednesday 23 November, 09:30 – 12:30 CET

Giacomo Lozzi

VITAL NODES

Challenges

- Integrating freight logistics of urban nodes into TEN-T network corridors
- Need for more (cost-)efficient and sustainable integration
- Need to address multi-dimensional character when addressing TEN-T-related issues



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 769458

VITAL NODES

Vital Nodes main objectives

Vital Nodes' work programme is designed to meet the following two main objectives:

- to deliver *recommendations* for integration of urban nodes into the TEN-T corridors – focusing on freight logistics
- to address *network issues* of the transport and mobility system; socio-economic development, spatial and environmental quality and liveability.
- to establish a *long-lasting European expert network* based on existing (inter)national and regional networks

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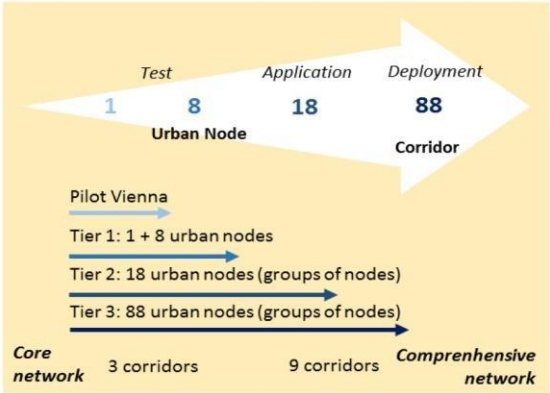
VITAL NODES

Approach



- Discussing challenges, solutions, impacts, good practices and added value for Europe
- ‘Fingerprint’ of the urban node – trends, facts and figures
- Maps on three levels (local, region / Functional Urban Area, TEN-T corridor)
- Mind-set: thinking on different **scales** (city, metropolitan area, cross-border, corridor) and **dimensions**
- Linking different scales and topics (spatial planning, infrastructure, passenger and freight transport)

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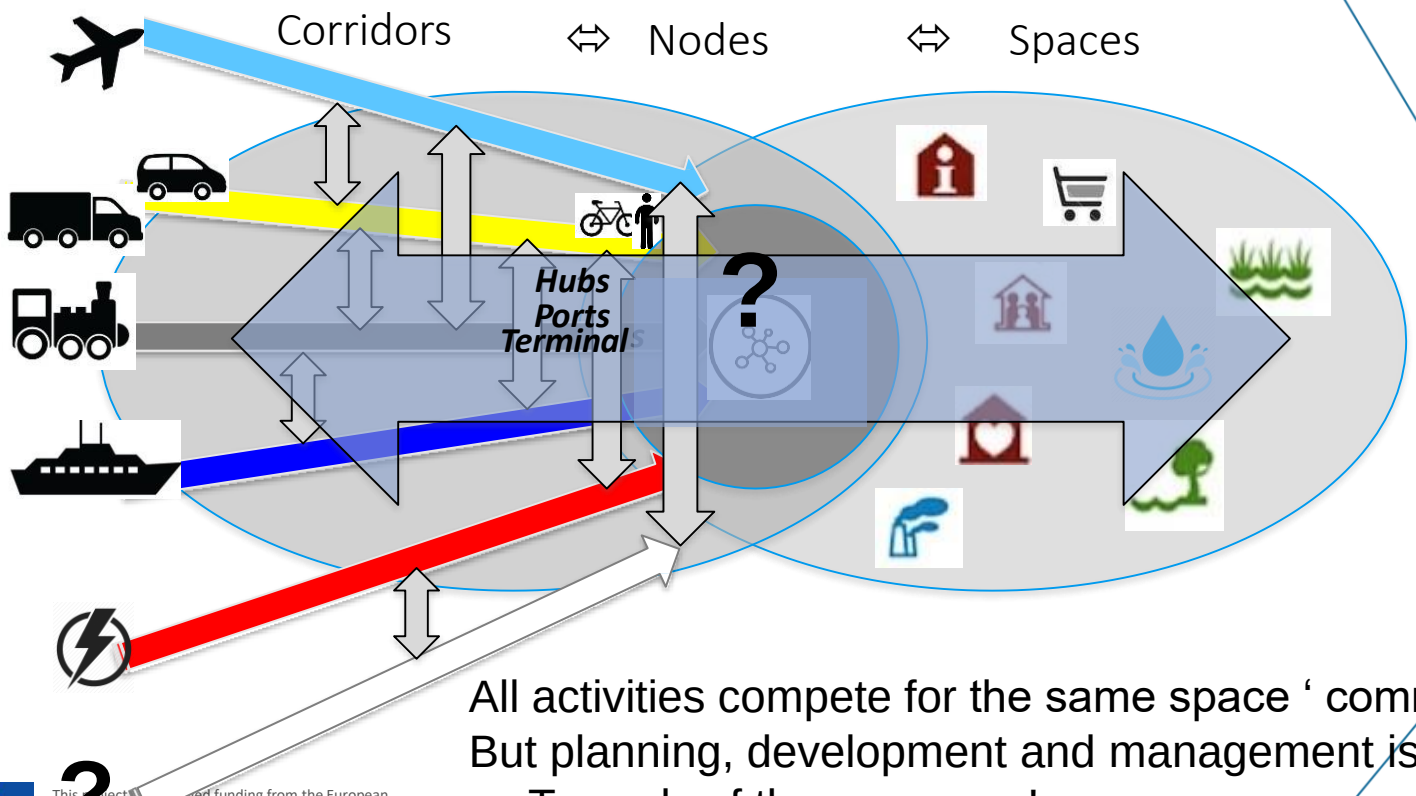
VITAL NODES

Connecting different worlds…



All activities compete for the same space ‘ common ground’
But planning, development and management is in silos
⇒ Tragedy of the commons!
⇒ Need for ‘common sense’

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VITAL NODES

Typology of urban nodes

	Cross-border function	Sea port	Inland function	Relation of the node and the Corridor	Developed / cohesion region	Centric / poly-centric
Vienna	Multi-modal		Inland, big	Inbound/ consumption	Developed	Centric
Rotterdam		Gateway		Outbound/ production and transit	Developed	Polycentric

Rotterdam

Figure 3 - The indicative functional urban area of Rotterdam

Vienna

Figure 4 - the indicative functional urban area of Vienna

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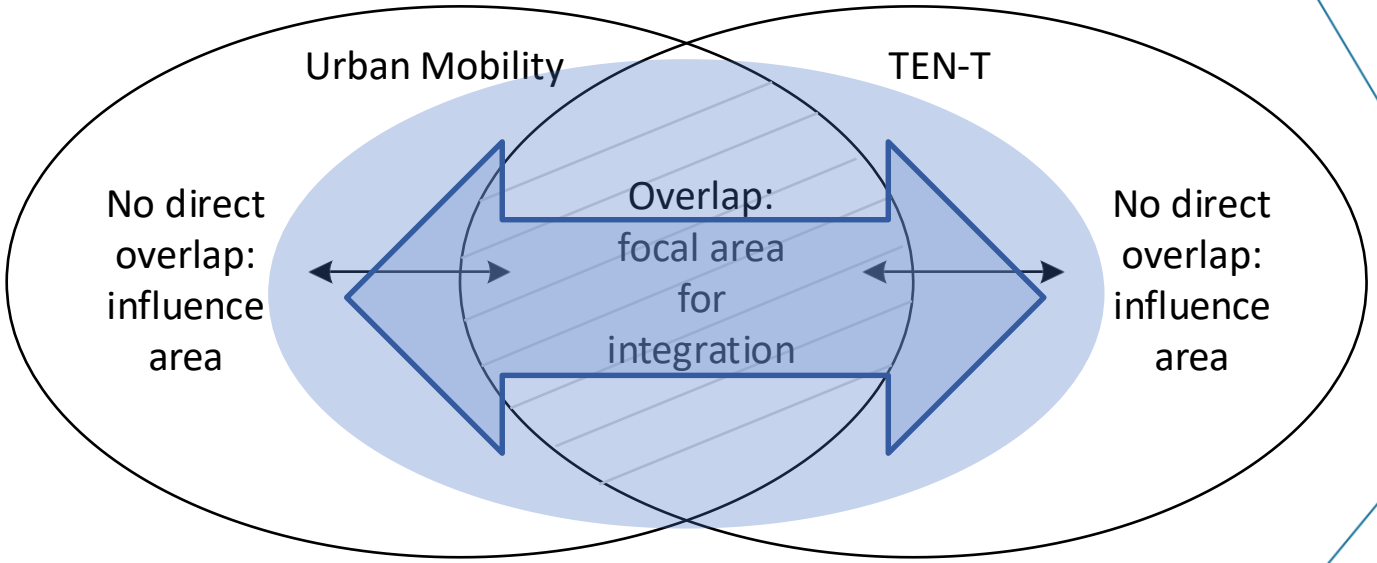
Focus area of Vital Nodes recommendations

Integrating policy domains:



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VITAL NODES

Validation

- 25 recommendations,
  based on urban nodes workshops, meetings
- Workshops and expert meetings
- Survey
- All 88 urban nodes

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VITAL NODES

Structure of policy recommendations

- The policy recommendations are categorized in different clusters
  - Strategy + Value
  - Network + Space
  - Governance + Time
  - Finance + Funding
  - Research + Data

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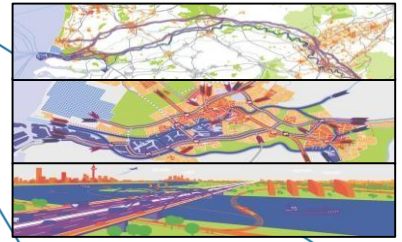
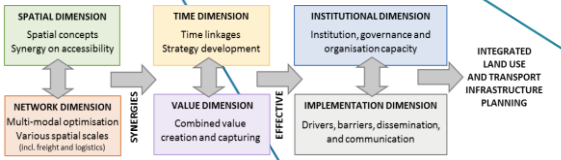
VITAL NODES

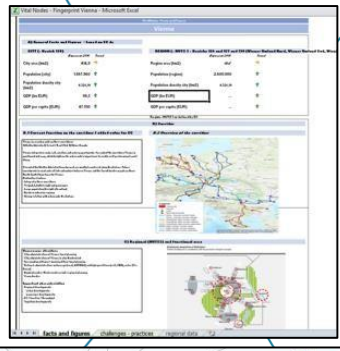
Conclusions: highlights

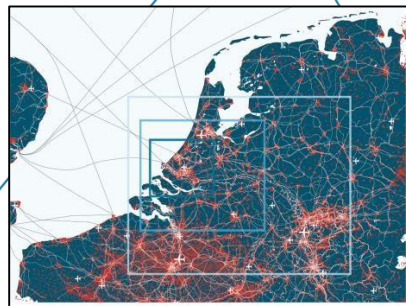
- Linking different scales (local, urban-regional, (inter)national corridor)
- Linkages between multiple dimensions
- Importance of Functional Urban Area (> Urban Node)
- Need for an integrated, multi-governance approach (FUA as starting point)
- Importance of fact-based planning:
  strategy-action programme-implementation-monitoring
- Funding focused on integration, combining funds
- Need for urban nodes coordinator, working group, and community

=> Requires cross-boundary approaches both hardware, software and orgware
(boundary spanners, in-between space)









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Sustainable Urban Mobility Indicators

to measure progress and the impact of a SUMP

Scan Med Observatory
MOVE21 – technical webinar 23-11-2022

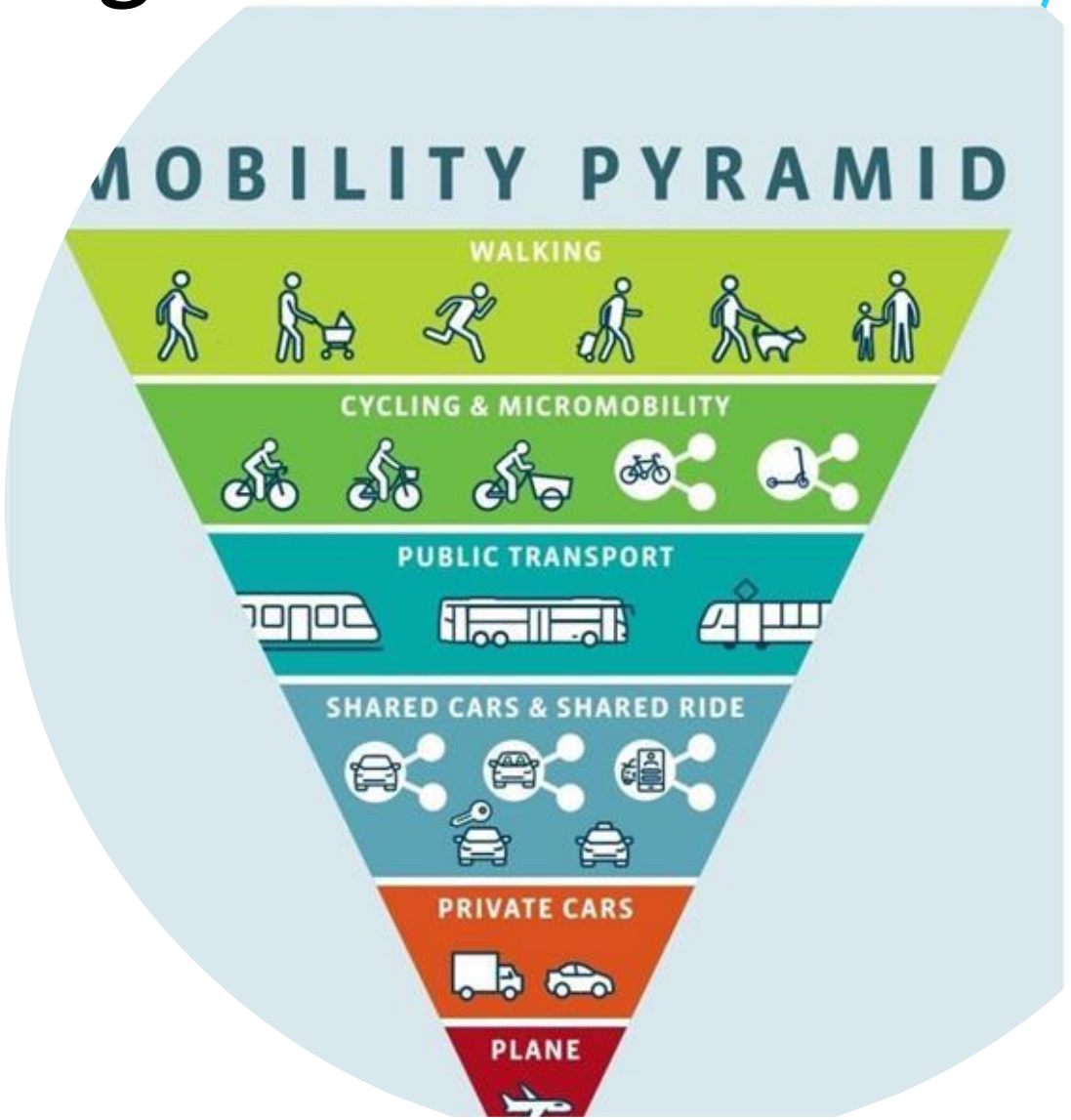
Dirk Engels Transport&Mobility Leuven

SUMI

Funded by the
European Union

Good mobility planning for multiple urban mobility challenges

- Need for **integrated policies** to
  - **solve persistent** and **interconnected** mobility problems
  - **decarbonise** transport activities
  - **tackle crisis** for the urban mobility system like Covid-19, climate change and demographic change
  - **respond to** fundamental **disruptions** through 'game changers' like electrification, data economy and automation
- **SUMP**
  - is the **standard for integrated mobility planning** in Europe strongly promoted by EU for our cities and Functional Urban Areas
  - will be a **pre-condition for receiving funding** from EU and EIB
- The **SUMI set** is a tool to support high-quality SUMP development and implementation and to accelerate deployment of mobility policies



SUMP as framework

- SUMP is a **central concept of the EU's Urban Mobility Policy** and part of the New EU Urban Mobility Framework (2021)

- EC TEN-T regulation proposal: **Compulsory SUMP development** by end of 2025 for the 424 urban nodes of the Trans-European Transport Network (**TEN-T**)

- The European Investment Bank (EIB) **recommends SUMP** for infrastructure financing proposals

„Guidelines for developing and implementing a Sustainable Urban Mobility Plan (2nd edition)" available from: https://www.eltis.org/mobility-plans/sump-guidelines

What is an indicator? Why we use it ?

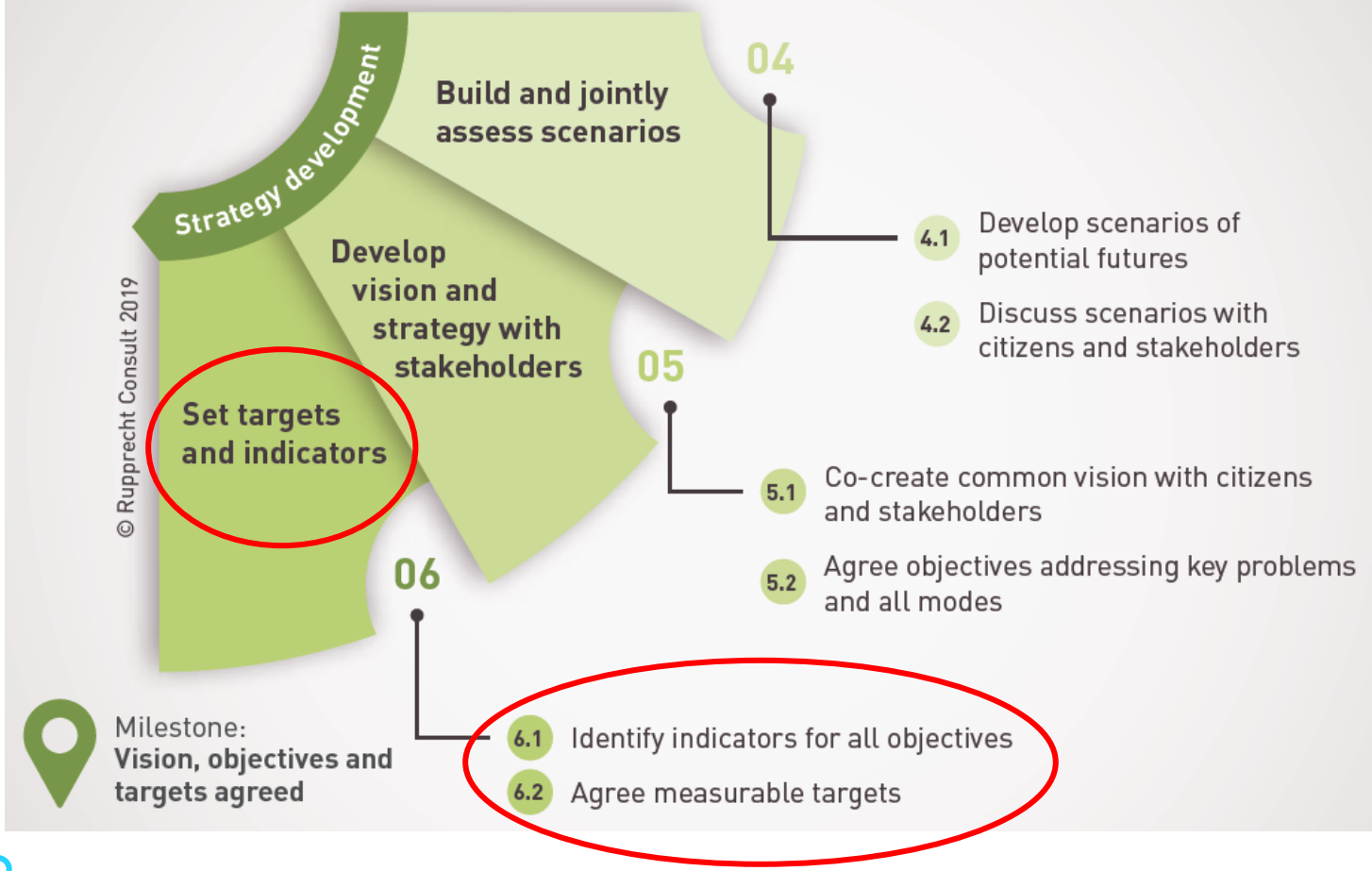
- An indicator is a **clearly-defined data set** used to **monitor progress** in achieving a particular objective or target.

- Strategic indicators enable transparent **measurement of the overall performance of a SUMP** and therefore provide a **basis for its evaluation**.

- On a more detailed level, measure indicators allow for monitoring the **performance and effectiveness** of local policies and individual measures part of it.

- On a European level, the SUMI indicators help to understand how cities contribute to achieve the European objectives (see e.g. the Urban Mobility Framework)

Indicators in the SUMP guidelines



How to determine success?

"Define a set of **strategic indicators** and targets that allows you to **monitor progress in all objectives** without requiring unrealistic amounts of new data collection. Decision makers should ensure that the targets are ambitious, feasible, mutually consistent, widely supported by stakeholders, and aligned with other policy areas."

An overview of the SUMI1 project

SUMI provided technical support on **sustainable urban mobility indicators** (EC-funded, Dec 2017-Aug 2020)

Key activities

- **Review and "Europeanisation"** of indicator set originally developed by the World Business Council for Sustainable Development (**WBCSD**)
- Provision of **technical support** to 46 European urban areas to test the indicator set
- Collection of **learnings** from the cooperating urban areas
- Preparation of **recommendations** for the EC
- Development of **benchmarking tool**

https://ec.europa.eu/transport/themes/urban/urban_mobility/sumi_en

Indicators as in SUMI1

Core Indicators

#1: **Affordability** of public transport for the poorest group
#2: **Accessibility** for mobility impaired groups
#3: **Air pollutant** emissions
#4: **Noise** hindrance
#5: **Road deaths**
#6: **Access** to mobility services
#7: Emissions of **greenhouse gases**
#8: **Congestion** and delays
#9: **Energy** efficiency
#10: Opportunity for **active mobility**
#11: **Multimodal** integration
#12: Satisfaction with **public transport**
#13: Traffic **safety** active modes

Modal Split (not an indicator but parameter for several indicators)

Non-Core Indicators

#14: Quality of **public spaces**
#15: Urban functional **diversity**
#16: Commuting **travel time**
#17: Mobility **space** usage
#18: **Security**

Concerns from the SUMI1 project and additional reactions from cities

1) For some SUMI indicators **obtaining the necessary data** has been perceived as **difficult**

2) A large number of indicators require **data from different institutions/ organisations**, e.g. different departments of the city administration, the public transport operator(s) and national statistics offices which requires a strong internal effort

3) External support for the calculation is helpful for many cities

4) Cities need **simple indicators also useful to monitor own objectives**

5) Cities are in favour of a bottom-up development of indicators using existing data sources

The SUMI2 project

EC funded, Dec 2021-Dec 2023

1) **Revise the indicators** based on the recommendations from the SUMI1 project and additional reactions of the cities
2) Redefinition of the **scaling** of some indicators in view of relevant EU policy objectives
3) Support the **100 Mission cities** to calculate the indicators, incl. SUMI Secretariat, bilateral assistance, Data Acquisition Fund, webinars, e-course
4) **Update the benchmarking tool** on DG MOVE's SUMI webpage to easy the submission and management of the datasheets
5) Develop a **SUMP Topic Guide** on the SUMI indicators

New restructured list of Indicators

- Decision taken on **redefinition of core indicators** based on SUMP relevance and importance to monitor the evolutions towards Urban Mobility Framework goals
    1) Greenhouse gas emissions
    2) Air pollutant emissions
    3) Road deaths and seriously injured
    4) Access to mobility services
    5) Noise hindrance
    6) Congestion and delays
    7) Modal Split
- Redefinition of remaining 12 indicators underway; differentiation into **2nd level and optional indicators** anticipated

Elements in the revision

- Data preferential for Functional Urban Area level data but alternatively for city level and ideally both using **FUA level and city level data**.
- Consistent **list of modes** to be taking into account with different level of detail
- Indicators result in a score but the sheets are a container of the underlying data and will be clearly present the **sub-indicators** (e.g. values per mode or motive)
- **Revision options for further indicators** will be discussed with **DG MOVE, within the European Commission** and thereafter **with cities**

PERSONS

option 1	*option 2*	*additional info (when option 2)*
walking	walking	
bike - micromobility	bike	private / sharing
	e-bike	private / sharing
	speedbike	private / sharing
	scooter	private / sharing
	powered scooter	private / sharing
	other	private / sharing
	powered other	private / sharing
PTW - motorcycle - 3-wheelers	PTW	
	motorcycle	
	3-wheelers	
car	car	private / sharing / taxi
bus	urban bus services	
	non-urban bus services (coach)	
	employers, ..)	
metro - tram - lightrail	tram	
	metro	
	lightrail	
train	train	
ferry	ferry	

GOODS

option 1	*option 2*
cargobike	cargobike
LDV (Light duty vehicle (<3.5t)	LDV (Light duty vehicle (<3.5t)
Truck (>3.5 t)	Light truck (> 3.5t< 12t)
	Heavy truck (>12t)
Inland shipping	Inland shipping

Example : Road deaths and seriously injured

- Revision of the indicator **Road deaths**
- Updated list of modes
- Including seriously injured

Fatalities	
Parameter value	10.33
Indicator value	3.11

Min	Max
15	0

Transport mode	Ki	Cap	FR	Fatality rate [# per 100,000 urban area population per year]
Pedestrian	4	300 000	**10.33**	
Bicycle (including regular bicycle, e-bike, etc.)	8			
Moped	3			
Motorcycles	5			
Cars	8			
LGV (<3.5 tons)	2			
HGV - Trucks (≥3.5 tons)	1			
Bus	0			
Tram - Lightrail - ...	0			
Other	0			
Unknown	0			

Thank you!

SUMI 2
Dirk Engels
dirk.engels@tmleuven.be

Satisfaction with public transport

Best scoring cities

The top-scoring cities are shown below, listed alphabetically and marked with a green dot on the map. This is the 90th percentile, but with a minimum of 2 and a maximum of 5 cities. The 90th percentile is the group of cities that score better than 90% of cities for which a score is calculated (all dots on the map). All scores are out of 10. Select the city population category on the right to get information on cities with a similar population size (deselect to get information on all cities again).

City population

All | Small | Medium | Bigger | Large

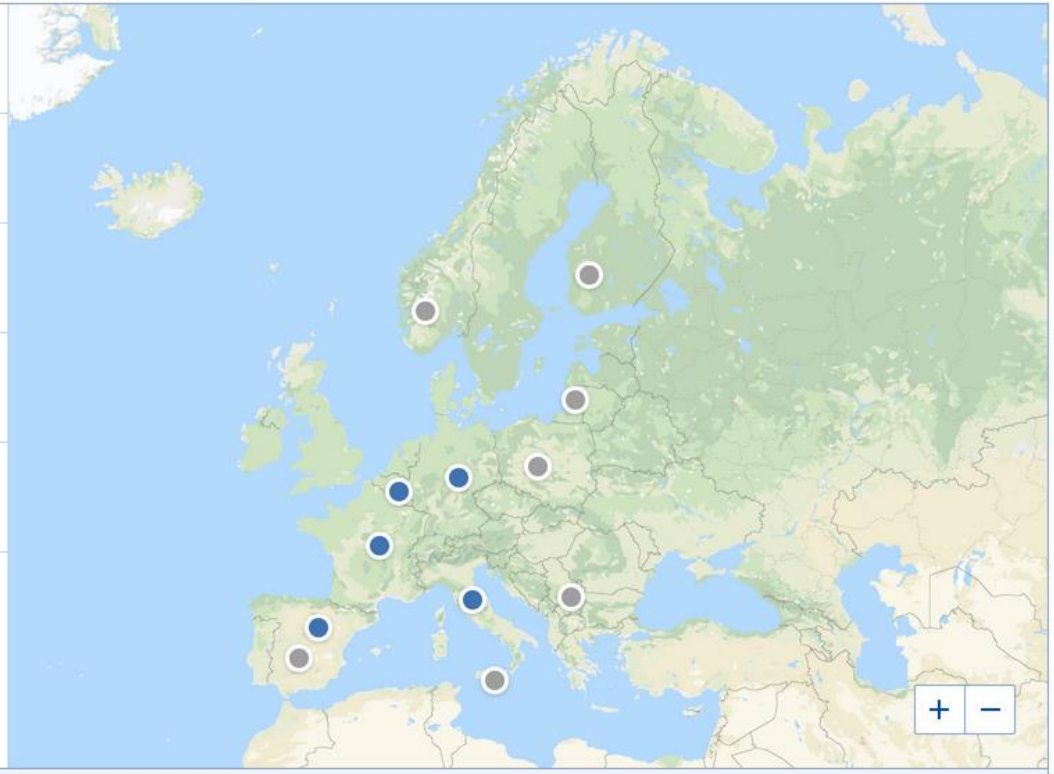
Ghent
Belgium

Madrid
Spain

Berlin
Germany

Paris
France

San Marino
Italy



0	6.5	8	10
Minumum	Average	Median	Maximum

The Scan – Med Observatory

23 November 2022

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 953939

Contents

- The policy context
- What the Observatory will look like
- What has been done so far
- Next steps

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 953939

The policy context

- December 2021 the European Commission (EC) released the new Trans-European transport Network (TEN-T) Guidelines and the new Urban Mobility Framework (UMF)
- **Urban nodes** on the TEN-T network increased from 88 to **424**
- More importance to European cities in the TEN-T network
- Cities expected to develop **SUMPs by 2025**
- At least **one** multimodal passenger **hub** and one multimodal freight **terminal by 2040**.

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Urban nodes as integral part of the TEN-T network

As defined by the EC, urban nodes are:

- major-**socio-economic centres** and generators of the largest part of Europe's GDP
- the **origin** and / or **destination** of most long-distance trips for passengers, but also for freight
- locations of **major transport nodes** (maritime and inland ports, airports, other terminals)
- **Interfaces** of long-distance and local/regional transport; calling for innovative, sustainable, efficient and high-quality solutions

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TEN-T policy and urban nodes

- Closing gaps between transport modes of the TEN-T
- Closing gaps within modes (e.g. several TEN-T railway stations)
- Ensuring seamless connections between TEN-T infrastructure and infrastructure for regional and local traffic (link with urban mobility plans)
- Alleviating the negative effects on inhabitants and the urban environment
- Boosting innovative mobility solutions (clean fuel, smart transport chains etc.)

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About MOVE21

- Integrated approach to passenger and freight transport
- Combining technological and non-technological innovations
- Testing different types of mobility hubs for both passengers and freight in 6 important urban nodes of the Scan-Med TEN-T corridor
  - Oslo, Gothenburg, Hamburg, Munich, Bologna, Rome
- Establish the Scan-Med Observatory

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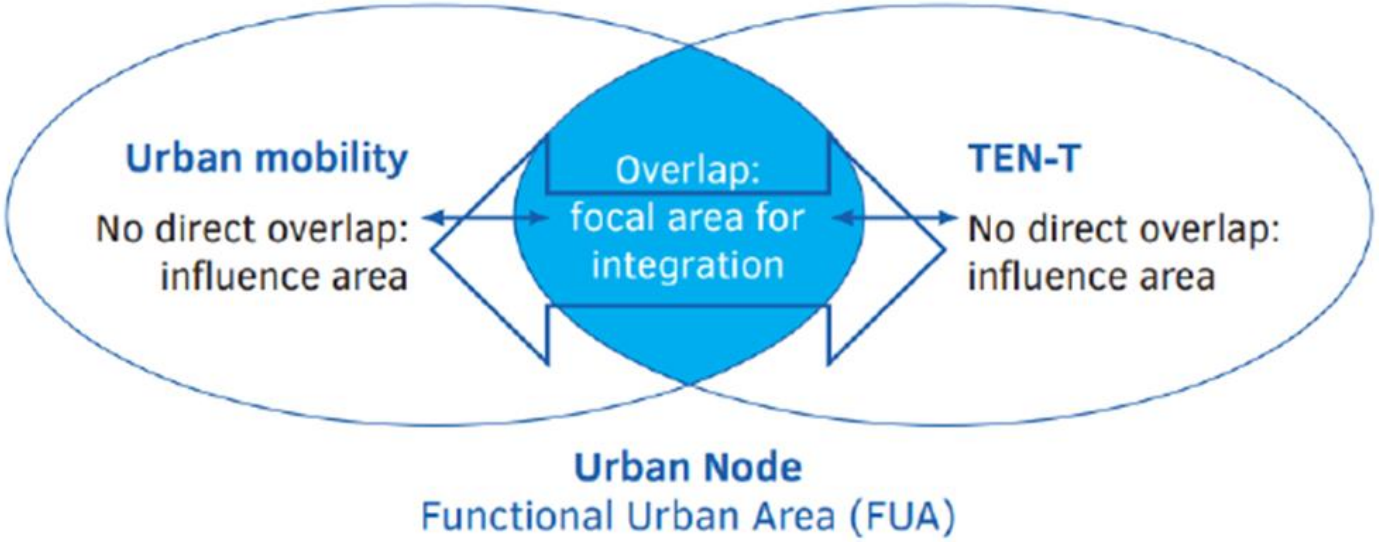
MOVE21 and its Scan-Med Observatory at the crossing point



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What the Observatory will look like?

A tentative approach

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Why this Observatory?

- Major discussions on TEN-T mostly driven by national stakeholders
- Focus so far on major infrastructure works, missing links, cross-border bottlenecks & interoperability issues
- New TEN-T regulation: more focus on urban nodes and their role
- Integrate local and regional perspectives in decision-making process

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Overview of the Scan-Med Observatory

- Ecosystem for governance coordination and data and knowledge sharing in the TEN-T Scan-Med corridor, reaching out to cities, regions and other relevant stakeholders
- Test bed to identify and promote new forms of governance cooperation and innovation on TEN-T corridor level for urban nodes
- Insights, updates and other relevant from urban nodes and the local level to the attention of the Scan-Med corridor coordinator and national representatives

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The structure

- The Scan-Med Observatory will be structured around a set of 5 action lines that encourage dialogue at the TEN-T corridor level:
  - Governance coordination & advocacy
  - Capacity Building
  - Data sharing principles and framework
  - Exploiting blended funding & financing (CEF and other Programmes)
  - Networking and outreach

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Targeted stakeholders

- Cities, local authorities, regions and other relevant stakeholders
- Main EU institutions (DG MOVE, DG REGIO, CoR, …)
- Coordinators of the TEN-T corridors
- All urban nodes along the Scan-Med corridor (almost 80)
- Collaboration and synergies at the corridor – macro-regional level (e.g. STRIA, Scandria Alliance, BRT Access, etc.)
- Other EU-funded projects and initiatives

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How participants will interact - ideas

- Both in person meetings and / or online gatherings (number of events to be defined).
- Back – to – back with MOVE21 consortium meetings, future site visits, or relevant events / conferences taking place across Europe.
- Regular mail echanges / discussion on specific policy topics, related to TEN-T, urban nodes, SUMPs, etc.
- Potential participation / organisation of exchanges with TEN-T coordinators, starting from Scan-Med corridor.

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TOWARDS THE LAUNCH OF THE SCAN – MED OBSERVATORY

WHAT HAS BEEN DONE SO FAR

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Connecting Europe Days 2022 (CED)

- The CED – formerly known as TEN-T Days – bring together politicians, industry representatives and the EC to discuss transport and mobility, and their role in achieving the goals set out in the EU Green Deal and the Sustainable and Smart Mobility Strategy.
- They took place in Lyon (28 – 30 June 2022)
- A pitch focused on the launch of the Scan-Med Observatory, presented at the Marketplace organised in the CED.

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European Week of Regions and Cities 2022 (EWRC)

- The EWRC is an annual 4-day event during which cities and regions showcase their capacity to create growth and jobs, implement EU cohesion policy, and prove the importance of the local and regional level for good European governance.
- Our proposal has been accepted by DG REGIO and the Committee of Regions (CoR), as a high-level session.
- The Scan-Med Observatory has been officially launched on 12 October 2022 in Brussels.
- It will be followed by a technical workshop, not part of the official programme of the EWRC.

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EWRC 2022 - The high level session

Speakers
Pat Cox, Coordinator of the TEN-T Scandinavian – Mediterranean
Isabelle Vandoorne, Deputy-Head of Unit, EU Commission's DG MOVE
Sirin Stav, Vice Mayor for Environment and Transport, City of Oslo **Georg Műller**, Head of Mobility Department, City of Munich
Anjes Tjarks, State Minister (Senator) for Transport and Mobility Transition of the Free and Hanseatic City of Hamburg **Toni Orsulic**, Deputy Mayor on Transport, City of Gothenburg
Moderated by **Karen Vancluysen**, Secretary-General of POLIS Network

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Next steps

- Gather the input collected during the technical workshop and take them into account in view of the définition of the Scan-Med Observatory Framework Plan.
- The Framework Plan that will further structure priority topics, the structure of the Scan-Med Observatory, provide more details about its activities and joint synergies / cooperation.
- Kick start activities in 2023

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ANY QUESTIONS?

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POLIS Network

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@MOVE21eu

LinkedIn/MOVE21: Zero Emission 21st Century

www.move21.eu

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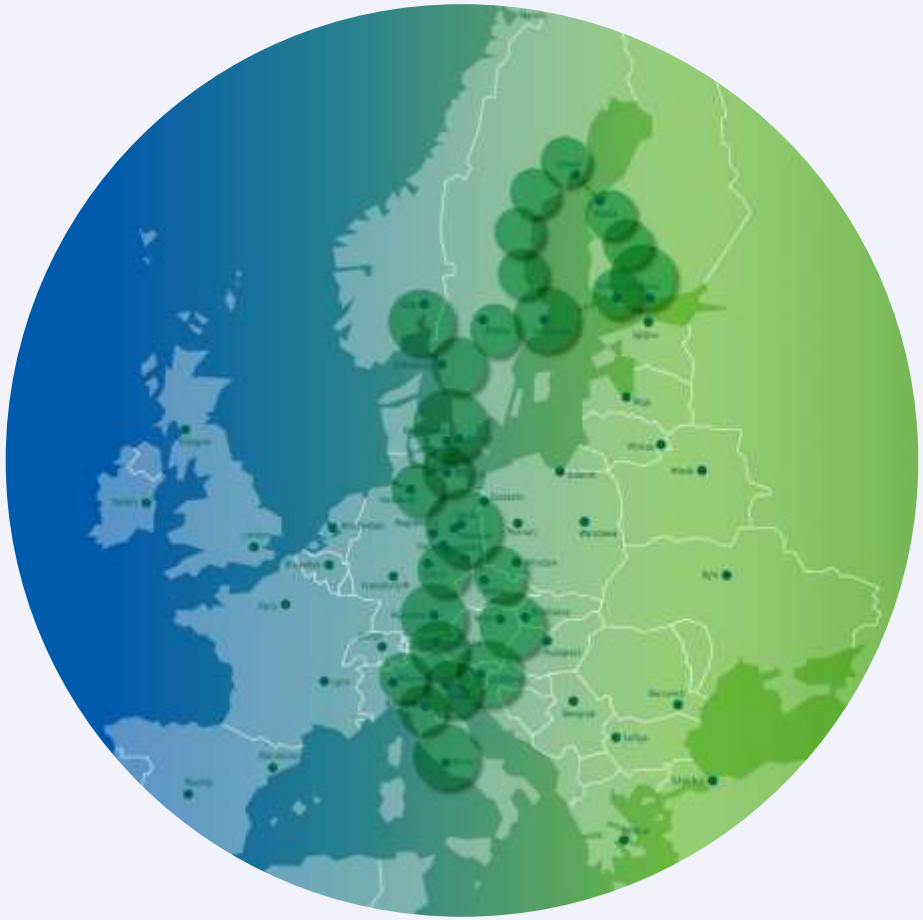
CIVITAS 2030
Sustainable and smart mobility for all

The Scandria® Alliance



MOVE21
Scan-Med Observatory technical workshop

Tommi Vollmann
Scandria Alliance Secretariat

scandria-alliance.eu

Follow us on

Connecting regions, communities and economies through clean and smart transportation

The Scandria®Alliance provides an **arena for cities and regions** to collaborate on **climate-smart multimodal transport connectivity** at the interface to **sustainable regional development between Scandinavia and the Adriatic Sea**.

scandria alliance

Full members:

Eastern Norway County Network

KVARKENRÅDET
MERENKURKUN
NEUVOSTO

Region Örebro County

Hamburg | Ministry of Transport and Mobility Transition

LAND BRANDENBURG

BERLIN

Helsinki-Uusimaa Regional Council

RegioneEmilia-Romagna

CITY OF TURKU

Associated members:

Logistik-Initiative Hamburg

Port of Hamburg MARKETING

UNIONCAMERE VENETO

Open ENLOCC
European Network of Logistics Competence Centers

Technische Hochschule Wildau
Technical University of Applied Sciences
WILDAU

Our TEN-T position paper

- Joint position of our members regarding
  - Urban nodes – first and last mile connections
  - Multimodal transport chains
  - Strengthening the multi-fuels approach
  - Cross-border transport and highlighted sections of the corridor
  - Governance

Recent events on urban nodes

Examples of recently finished projects

BSR ACCESS

Clean, efficient and multimodal transport corridors in the Baltic Sea Region

Interreg Baltic Sea Region

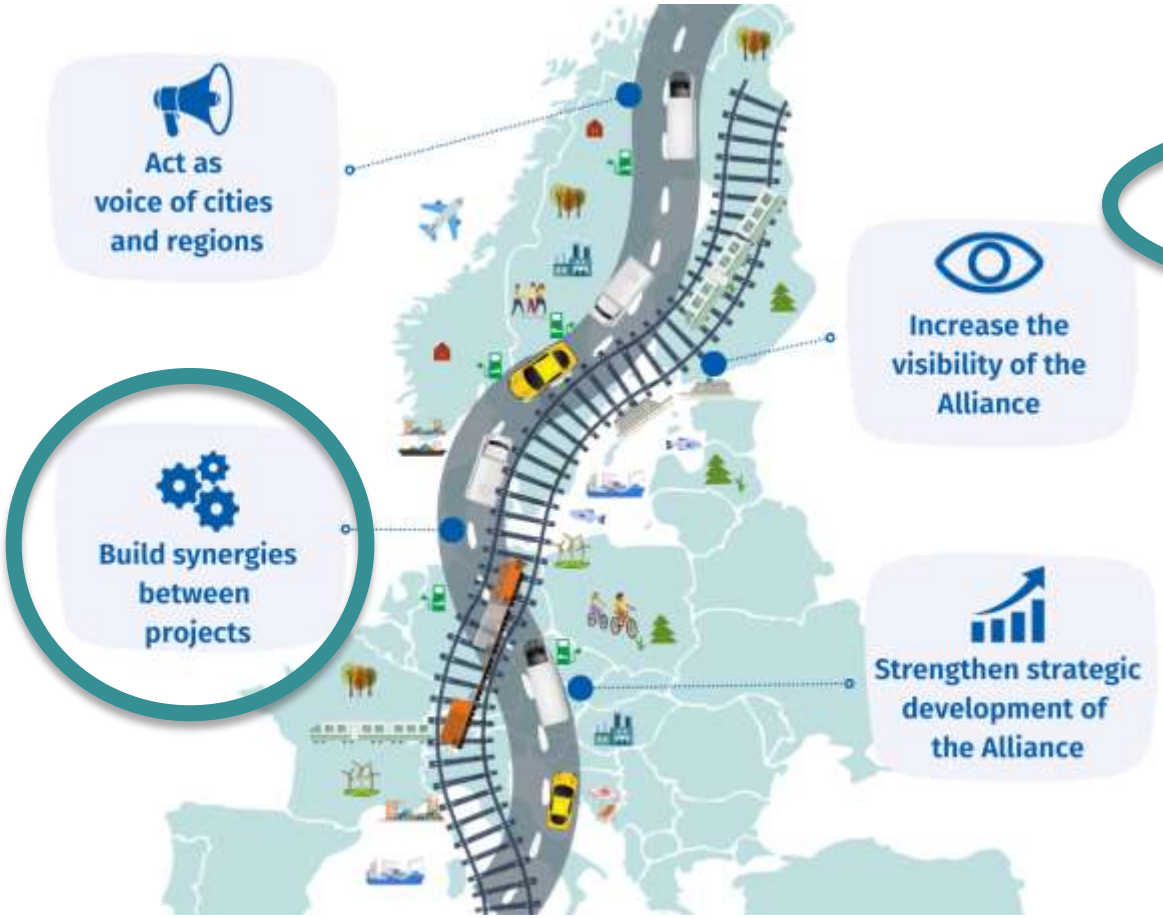
Co-funded by the European Union

InterGreen Nodes

Green, Intermodal Last Mile Freight Transport in Urban Areas of Central Europe

Interreg CENTRAL EUROPE

Outlook on our 2023 work programme



- Urban nodes
- Clean fuel deployment
- Resilient transport system

We look forward to working together with you!

Tommi Vollmann
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scandria-alliance.eu

Follow us on

SCALE-UP
User-Centric & Data Driven Solutions for Connected Urban Poles

Urban Nodes Forum

Engaging Urban Nodes in TEN-T Knowledge Exchange & Policy Dialogues

Anne-Charlotte Trapp & Lucian Zagan

EUROCITIES

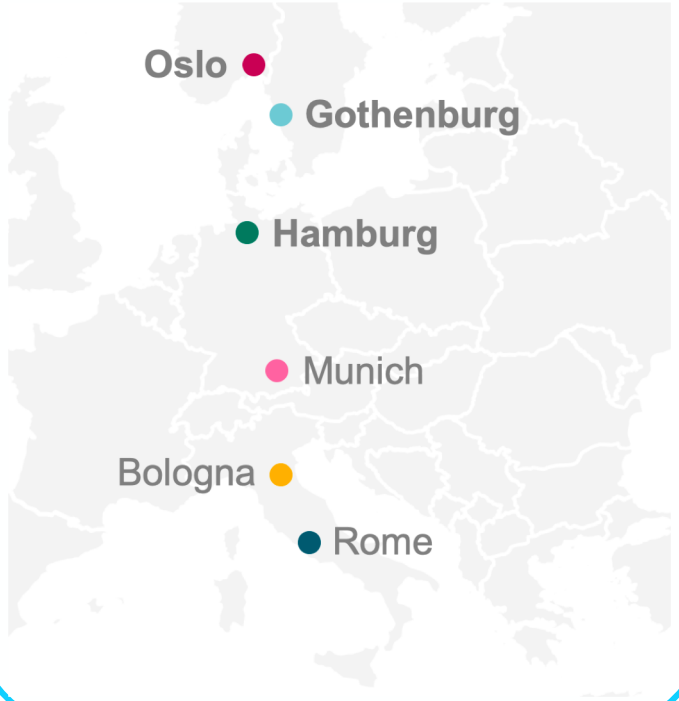
MOVE21 and SCALE-UP are Horizon 2020 Innovation Actions focusing on multimodal mobility in urban nodes.

SCALE-UP: Three advanced urban nodes team up around one main goal: to develop data-driven and user-centric strategies to accelerate the take up of smart, clean, and inclusive mobility, by means of well-connected and multi-usage urban nodes and to the level needed to meet EU climate and transport objectives.

MOVE21: A swift transition to zero-emissions and climate-resilient transport systems requires that passenger and freight transport no longer are addressed separately and in isolation from one another. Passenger and freight transport must be addressed together so that policies, infrastructure (physical and digital), vehicles, energy sources serve both.

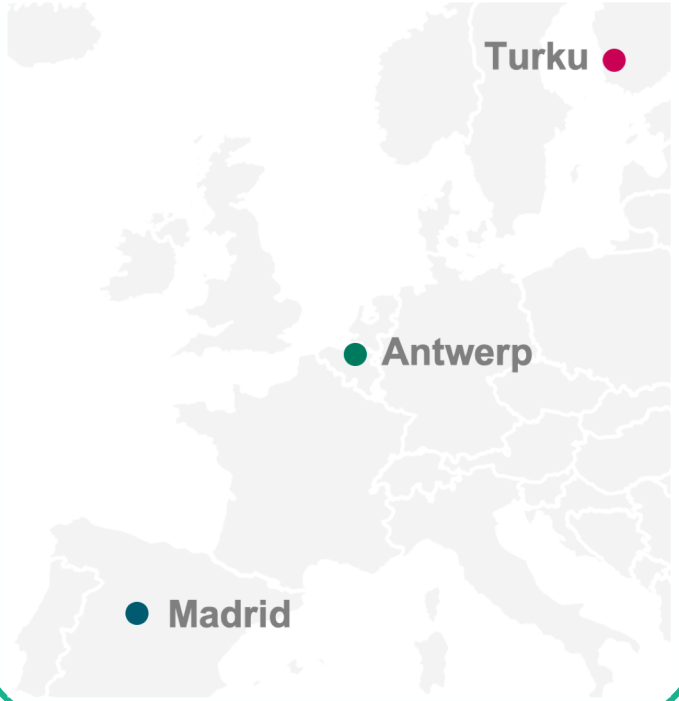
EUROCITIES

MOVE 21



SCALE-UP

User-Centric & Data Driven Solutions for Connected Urban Poles



EUROCITIES

What is the Urban Nodes Forum?

Objective

- Provide a **platform of discussion for urban nodes & other policymakers** to further integrate urban node into the TEN-T corridors governance
- Create a **culture of collaboration between urban nodes** to exchange on governance, policies and planning matters
- **Raise awareness** among local authorities on the implication of the urban node status

Timing

- Next meeting of the Urban Nodes Forum: **31 May 2023, Porto**
- Meetings will be organized in various cities across Europe as a separate event or ideally **alongside major transport and mobility-related events** (Connecting Europe Days, CIVITAS Forum, Urban Mobility Days, Eurocities Mobility Forum, etc.)

Participation

- **Local and regional** authorities
- **National & European** policymakers (EC, CoR, EP)
- **TEN-T corridor coordinators**
- Relevant **European networks**
- **Researchers & academics**
- Other relevant stakeholders

EUROCITIES

MOVE 21

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Thank you for your attention!

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