



# 2G. Next generation SUMPs

02:30 PM - 04:00 PM



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# Scenarios in EU SUMP Guidelines • Well on the one hand (Page)



Well on the one hand (Rupprecht Consult (2019, p 82) says a scenario is:

Description of... the future... relevant to urban mobility, including likely ... external factors (e.g. demographic and economic...), as well as ... strategic policy priorities (e.g. strong active mobility or electromobility focus).

- But on the other, examples in Guidelines are like these, from Leipzig (ibid, p 84)
- Scenario 1. Continuation of the current mobility strategy;
- **\$2.** Sustainability scenario;
- **\$3.** Bicycle City scenario;
- **S4.** Public transport priority scenario; and
- **\$5.** Community scenario.
- Typically, what most SUMPs call scenarios are better called policy packages





## Other kinds of scenarios – and why use them?

- Predictive what we predict the future will be like (often quantitative model; often extrapolates current trends)
- 2. Explorative what the future *could* be like
- 3. Normative what we **want** the future to be like (a vision)
- 2, 3 Not focused on policies or measures
- Much more focused on external factors
- Often more qualitative (but don't have to be)
- 2, 3 Should help **take into account future uncertainties** e.g. wars, pandemics, changing preferences, Elon Musk etc.

## Our project, with obligatory map



- Guidance on consistent use of explorative and normative scenarios in SUMPs to help plan for uncertainty
- (Also focuses on accessibility resulting from physical mobility, spatial proximity and digital connectivity working together)

#### Academic partners

University of the West of England, UK Radboud University, Netherlands Urban Planning Institute, Slovenia KTH, Sweden University of Cagliari, Italy

#### Case study city partners

Bristol City Council
Aberdeen City Council
Nijmegen City Council
City of Utrecht
City Municipality of Nova Gorica
Norrköping Municipality
Cagliari Metropolitan Council

Funded as part of the ERA-NET Urban Accessibility and Connectivity (ENUAC) initiative by JPI Urban Europe, Grant Agreement



#### National transport authority partners

Transport Scotland Swedish Transport Administration

#### Consultancy partners

Mott MacDonald

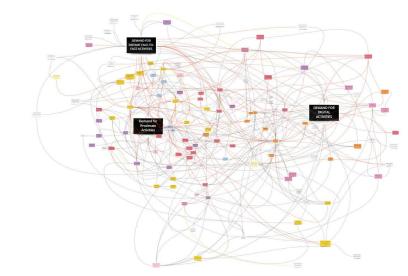
Panteia

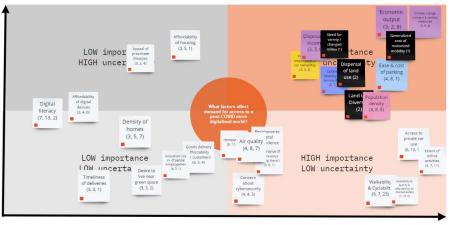




### How we generated scenarios

- Use Causal Loop
   Diagrams to identify factors affecting future mobility and accessibility and relationship between them
- From this, most important and uncertain factors identified
- From this, qualitative explorative scenarios
- Source of graphics to the right: Paddeu and Lyons, 2022 (TAP WP2 Working Paper).





## Examples of scenarios generated for Uncertain Futures



Scenarios (to the right)  Critical factors in scenarios (below)	Too Slowly Greener	Uneconomically Net-Zero	In a Fix	Bye Bye Car	Happy Green Dispersal	Tech Innovation Bonanza
Climate Change Concern	①	Û	仓	仓	Û	Û
<b>Economic Performance</b>	①	Û	Û	仓	仓	仓
Perceived Importance of Car Ownership	Û	Û	Û	Û	仓	Û
Need for Variety / Changed Milieu	仓	Û	仓	Û	Û	Û
Cost of Motorised Transport Relative to Income	Û	Û	仓	仓	仓	Û
Urban Land Use Diversity	矿	Û	$\hat{\mathbb{T}}$	仓	$\hat{\mathbb{T}}$	①
Population Density	仓	Û	仓	仓	Û	①
Utility of Online Activities	仓	仓	仓	仓	仓	仓
Attractiveness of Walking and Cycling	仓	仓	仓	仓	仓	仓





## Example text of a scenario – a <u>possible</u> future

#### Scenario 4 - Bye Bye Car

There has been a marked shift in attitudes and lifestyles since the 2020s with a high level of environmental consciousness. Climate change remains a serious threat although the transition to a green economy is underway with appetite for local living, and 'responsible' access fulfilment, with car use moving into the shadows.

Source: Paddeu and Lyons, 2022 (TAP WP2 Working Paper).



#### What to do with these scenarios?

"Stress-test" measures – check <u>how robust are selected</u> measures in relation to different scenarios

Modify, or abandon, measures, if not robust enough against

several scenarios

Also - explore how **possible futures** might look <u>without</u> certain measures

Partnership for Change					
Option 1	Improved SG/ Remove false geo-connected services and language accessible	Option 5	Accounting power of transverse, to the comment of Cottschoolad Somes, polymeror, city desiring an induce studyl- desiring control of the Cottschool Feedby.		
Option 2	Active travel schemes to enable 90% of short trips to be made by active modes	Option 6	Implementing priority measures to improve public transport networks		
Option 3	Position will be transferred square for period and downing squared professing and period garding states and public square.	Option 7	Spatial plan review trough nebzero and other current policies		
Option 4	2 minutes villages, 10 minutes cities	Option 8	Network of public spaces shaded and well designed, all over the dity		

# this way

## **EChallenges of scenario planning in**



- Each partner country tried scenario planning. We found:
- Developing scenarios is not straightforward
- Needs expertise, is time-consuming
- Causal loop diagrams (CLDs) complex, but at same time some planners e.g. in Sweden found them too vague
- Isolating key variables from CLDs and testing measures against scenarios – not obvious
- Political issues:
  - Politicians want certainty, not uncertainty
  - Rejection/modification of measures on basis of scenarios problematic

#### And now onto the topic I really wanted to present at POLIS 2023: what happens to traffic levels when you reduce roadspace? (Source of photos: Ajuntament de Barcelona)





## I was told that this topic was not innovative enough for the conference... So I'll just finish with this slide

On what is innovation...

"If the idea seems new to the individual, it is an innovation" (Rogers and Shoemaker, 1971)

Reminder of things we've heard before is still helpful – as many of us face this situation as we work on roadspace transformation in SUMPs

- On whether reducing roadspace makes congestion worse by squeezing more traffic into less space...
- Cairns, Atkins and Goodwin (2002) Disappearing Traffic? The Story So Far reviewed 70 cases of roadspace reduction and found:
- 11% average reduction in traffic in <u>area</u> of scheme
   And...
- "It is rare that schemes result in a significant deterioration of traffic conditions."
- New 2024 Urban Europe project will repeat this work and also check – what did the model say?





#### Conclusions...

- Many definitions of "scenario" in SUMP but most typically policy package mistaken for scenario
- **Explorative scenarios** of different futures can help to deal with uncertainties
- Test measures against different scenarios and adapt or abandon those performing badly
- *Challenging* to do in practice
- SUMP is political; and politicians want certainty





## Thank you for your attention!

## www.tapforuncertainty.eu











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# Planning sustainable urban mobility transitions at the metropolitan scale

Juliana Carvalho and Jorge Pinho de Sousa Faculty of Engineering - University of Porto | INESC TEC

















## **Agenda**

01	Context
02	Metropolitan SUMPs
03	Collaborative Design Framework
04	Discussion



ANDREW KOLB 🏻

### Context

#### **Context**

▷ SUMPs | Functional Urban Area | Commuting zones

A SUSTAINABLE URBAN MOBILITY PLAN has as its central goal improving accessibility of urban areas and providing high-quality and sustainable mobility and transport to, through and within the urban area. It regards the needs of the 'functioning city' and

its hinterland rather than a municipal administrative region.

- SUMP concept 2013, p2 "commuting zone"

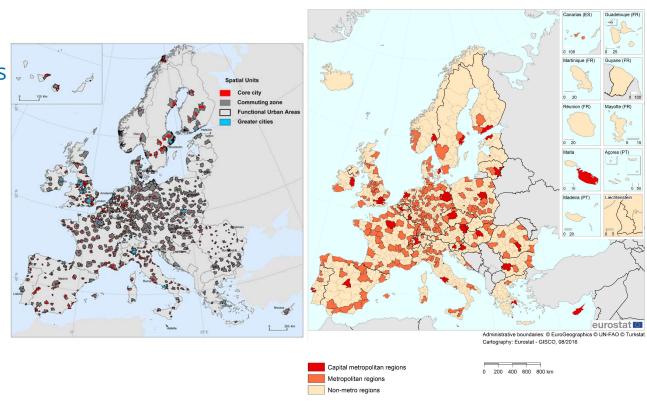


NUMO – Shared mobility principles imag



#### **Context**

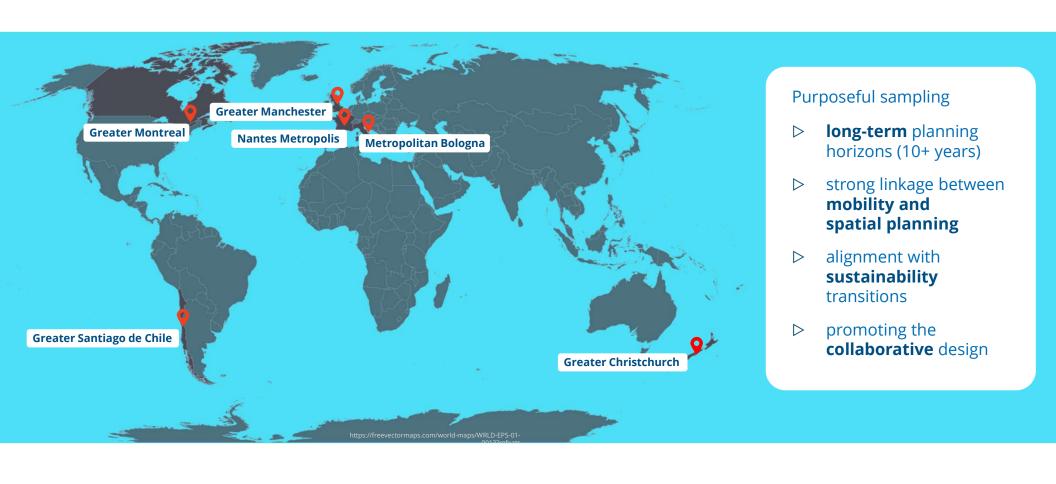
- ▷ SUMPs for Metropolises
- ▶ Few comparative studies



Typology of metrolitan regions (at the level of NUTS 3) (1)

## Metropolitan SUMPs

## **Metropolitan SUMPs**



## **Metropolitan SUMPs**

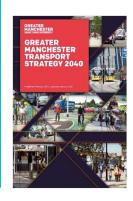
#### Metropolitan Bologna

Sustainable Urban Mobility Plan (SUMP) of metropolitan Bologna (Città Metropolitana di Bologna, 2019)



#### **Greater Manchester**

Greater Manchester Transport Strategy 2040 (Transport for Greater Manchester, 2018)



#### Nantes Metropolis

Plan de déplacements urbains 2018-2027, perspectives 2030 (Nantes Metropole, 2018)



#### Greater Montreal

Plan Stratégique de Développement (PSD) du Transport Collectif (Autorité Régionale de Transport Métropolitain (ARTM), 2021)



#### **Greater Christchurch**

Greater Christchurch Transport Plan (Greater Christchurch Public Transport Joint Committee, 2020)



### **Greater Santiago de Chile**

stchurch an de Movilidad santiago 2030 (Ministerio de Transportes y Telecomunicaciones, 2022)



Design requirements

#### Fostering citizen participation

- Communicating the planning process creatively and consciously
- Promoting inclusiveness and representativeness in participatory processes

#### > Addressing transversal challenges

- Raising awareness about the inevitability of trade-offs
- Fostering collective vision and goals

**Enabling conditions** 



Policy entrepreneurs



**Academic** sector



**Communities of practice** 



Intermediate milestones



Learning and training



**Communication channels** 



Interdisciplinarity

Developing a roadmap 1/2

#### **Drivers**

**TRENDS + Signals of change** 

**Core narrative - Sustainable Transitions** 

#### Starting conditions

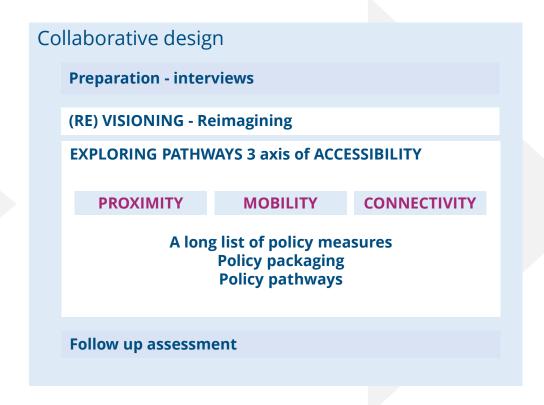
**Diagnosis of LOCAL CONTEXT** 

**Identify existing PLANNING DOCUMENTS** 

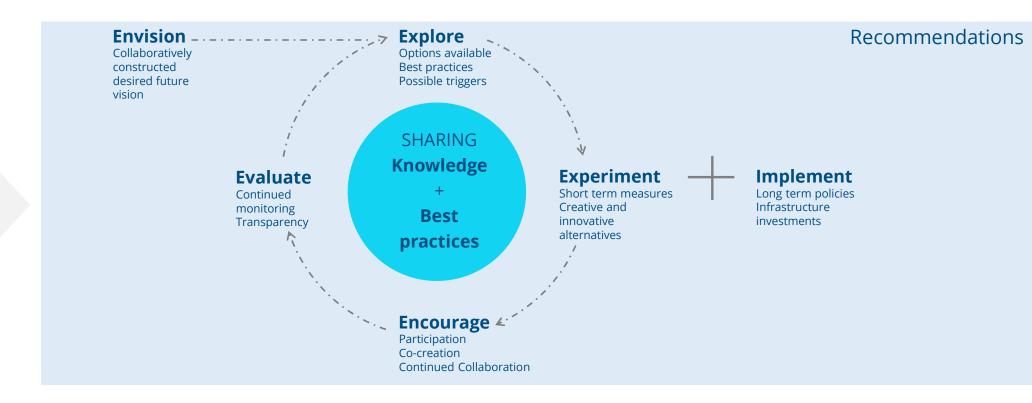
**Assess PLANNING STRUCTURE** 

**Assess PATHWAY DEPENDENCY** 

**References CASES FROM ELSEWHERE** 



Developing a roadmap 2/2



## Discussion

#### **Discussion**

A framework for multi-scalar planning

- Planning mobility for accessibility beyond municipal borders
- Planning mobility beyond transport, breaking silos
  - convergence and harmonization
- ▶ Plans as stepping stones within a broader roadmap to achieve long term vision
- Metropolitan roadmaps that are more than technical, top-down plans
- Metropolitan roadmaps that are more than a collage of municipal plans





## Thank you for your attention!

#### For information:

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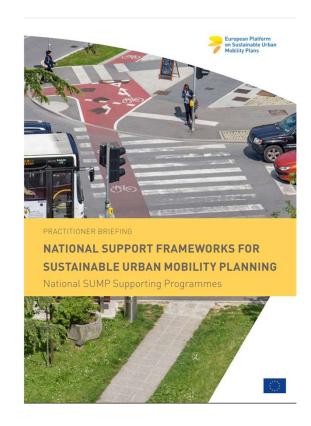
## The 3rd generation of Slovenia's NSSP

How it is already improving SUMPs

Aljaž Plevnik Urban Planning Institute of Slovenia

### **National SUMP supporting programmes**

Run at the national or regional level to encourage, support, require and/or give incentives and disincentives to cities and other local governments to develop and implement SUMPs.



#### Commission guides Member States on sustainable urban mobility planning

On 8 March, the European Commission adopted a Recommendation designed to help Member States support their towns and cities in cutting transport emissions and improving urban mobility. The 430 major cities along the trans-European transport network (TEN-T) will receive support to develop their Sustainable Urban Mobility Plans (SUMPs).

The Commission recommends putting in place national programmes to support urban mobility planning and implementation, managed by a dedicated office. Support for cities should include guidance materials, training programmes and capacity building, as well as technical expertise and financial support. Peer learning and networking between cities and towns will be encouraged through the sharing of good practices. Coordinated awareness-raising campaigns are also envisaged. The Commission will invite representatives from national programme management offices to work with the new Expert Group on Urban Mobility .

As a follow-up to the Commission's <u>Urban Mobility Framework</u> , of 2021, the Recommendation updates the concept of SUMPs to integrate the latest policy developments and strategies to reduce road fatalities in cities, address climate change, and make use of new mobility services.



**Mobility and Transport** 

### **EIB JASPERS:**

# TRAINING AND CAPACITY BUILDING FOR SUSTAINABLE URBAN MOBILITY PLANS

### **Our consortium and Key Experts**













José Viegas (project manager)



Peter Jones



Aljaž Plevnik



Christiaan Kwantes















## **Document structure**

- Vision
- Objectives
- Targets
- Expected impacts
- Indicators
- Topical elements
- Action plan

- Coordination and development
- Legislation
- Financial and other incentives
- Guidelines and methodology
- Quality control, monitoring, evaluation
- Information, education, promotion

## **National task force for SUMPs**







# **SUM planning act**





# Revision of SUMP guidelines

- 3<sup>rd</sup> generation
- 2021, 2023

Potovali bomo udobneje, živeli bomo bolje Nacionalne smernice za pripravo Občinske celostne prometne strategije Sptm SLOVENSKA PLATFORMA ZA TRAJNOSTNO



## **Mandatory SUMP impact indicators**

### COMMON IMPACT INDICATORS

- 1. Modal split on the main roads in the municipality
- 2. Modal split of school children
- 3. Share of school children who come to school unaccompanied by adults
- 4. Modal split of employees
- 5. Length of journey to work

### DATA GATHERING METHODS

Person corridor count at key locations, all modes

Survey on travel habits of primary school children

Survey on travel habits of employees

#### MINIMAL STANDARDS

### 5/3/2/1

locations, primary schools, employers

Municipality size: > 100.000 inh. 16.-100.000 inh. 6-16.000 inh. < 6.000 inh.

### COMMON MEASURE IMPLEMENTATION INDICATOR

Share of implemented measures from SUMP's action plan.

### DATA GATHERING METHOD

Action plan review and calculation



# **SUMP** quality control tool



## **SUMP topical guidelines**





Zelena mestna

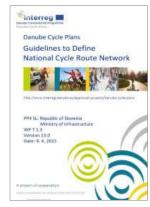
višjo kakovost

logistika za

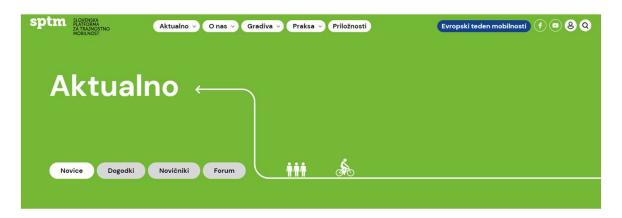
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## **National Platform for sustainable mobility**



#### Vse novice



Odprte so prijave na prvo usposabljanje za presojevalce kakovosti CPS

Vabimo vas na usposabljanje za presojevalce kakovosti vsebine celostnih prometnih strategij, ki bo



2. Nacionalna kolesarska konferenca se je v torek zaključila v Celju

V Narodnem domu Celje je 12. in 13. junija potekala 2. nacionalna kolesarska konferenca v organizaciji Ministrstva za okolje, podnebje in energijo v sodelovanju z Ministrstvom za zdravje in Mestno



- Leto -

Uspešno zaključen pomladni del nacionalne pobude Polni zagona kolesarimo v službo

V sklopu pobude Polni zagona kolesarimo v službo se je v mesecu dni aktiviralo 1218 posameznikov iz 50,5

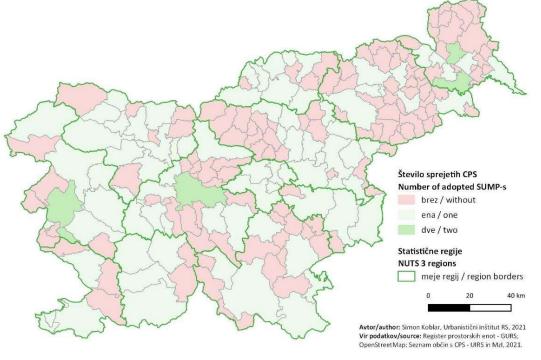
## National conference on SUM planning





# **SUMP development status**

- Mostly 1<sup>st</sup> generation
- Cca. 50 % of municipalities
- Cca. 80 % of inhabitants
- 6 SUMPs in 2014 >> 94 in 2022



# **SUMP** implementation



## **Future plans**

- 2<sup>nd</sup> generation of local-municipal SUMPs.
- Regional SUMP guidelines, SUMPs and coordinators.
- National SUMP.
- National SUMP observatory.
- SUMP quality control system and evaluators.
- Establishment of topical subgroups.
- NSSP update.



# Thank you for your attention!







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# From fragmentation to integration: The role of Transition Super-Labs in accelerating the transformation of regions towards climate neutrality

**Session: Next Generations SUMPs** 

Morgane Juliat, Rupprecht Consult Forschung und Beratung GmbH

**Thomas Meister, Ruhr Universität Bochum** 









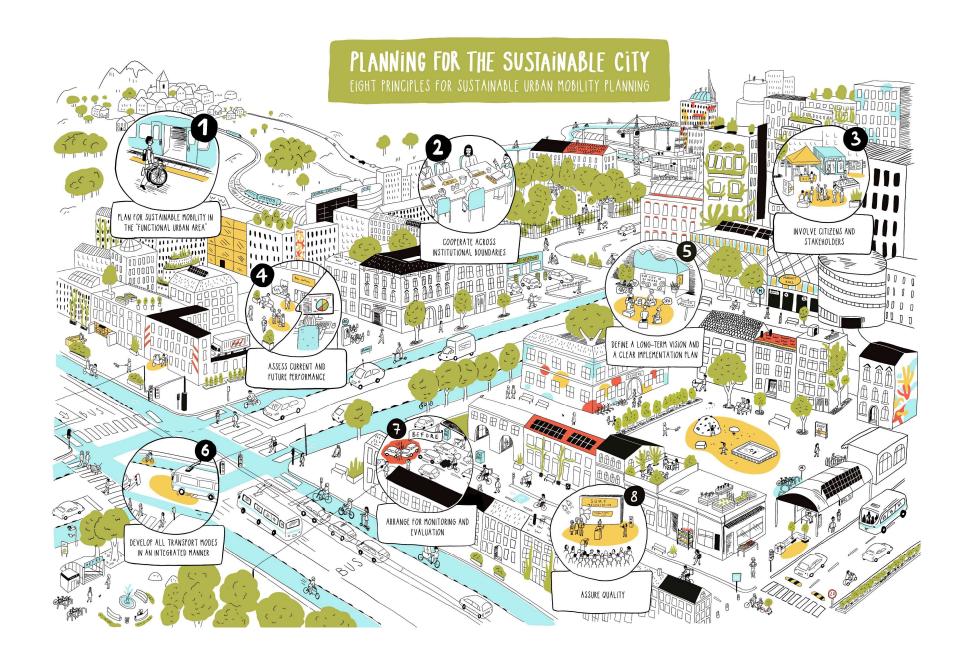
### From fragmentation to integration...



How to accelerate the transition towards climate neutrality and sustainability?

How to support SUMPs in the regional context?







### **Transition Super-Lab (TSL)**

# **SUMP SYMBIOSIS** PLANNING FOR THE SUSTAINABLE CITY EIGHT PRINCIPLES FOR SUSTAINABLE URBAN MOBILITY PLANNING





## **SUMP** in a nutshell





**Sustainable**: focus on **mobility needs** of present and future generations at the municipal and regional level.



**Integrated**: establishes a **variety of links** between transport policies, with other departments and neighbouring communities,



**Strategic**: establishes a **process** on the local level within the administration, not just a plan.





## **Transition Super-Labs in a nutshell**





**Sustainable**: we focus on the **just climate transition needs** of present and future generations at the **regional level**.



**Integrated**: we establish a variety of links between **different sectors** and policies, with other departments, neighbouring communities and national planning



**Strategic**: we establish a process on the **regional level** with **key regional actors** of the climate transition





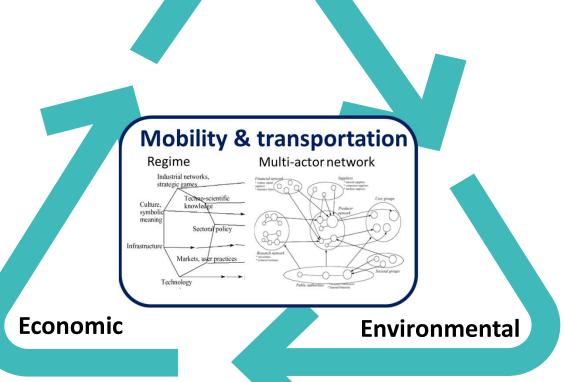
### Focussing on the regional scale in the transition





Going beyond the local scale for a holistic sustainability transition

 Balanced solutions for sustainable systemic transformation



Social













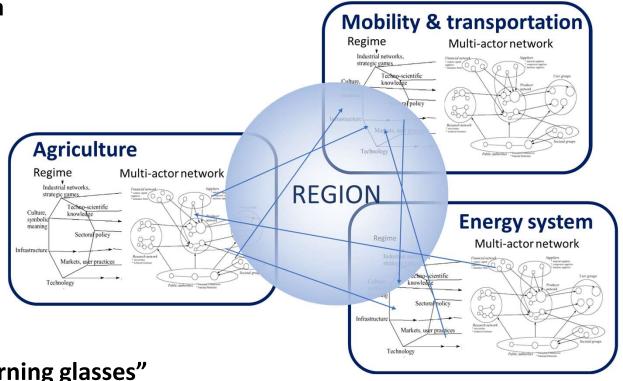


# Focussing on the regional scale in the transition to climate neutrality and sustainability



# Going beyond the local scale for a holistic sustainability transition

- Balanced and coordinated solutions for sustainable systemic transformation
- Portfolio of innovative solutions for cross-sectorial transformation
  - Achieving synergy effects & accelerating the transition









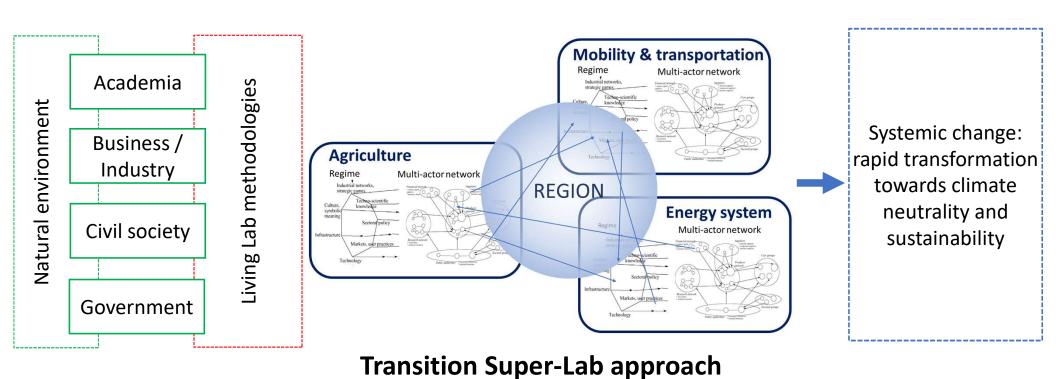






# **Integrated process across sectors and stakeholders**















# **Integrated and strategic approach for systemic transition**



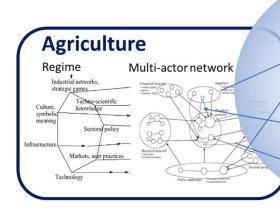
Regions as "burning glasses" & arenas of collaborative innovation

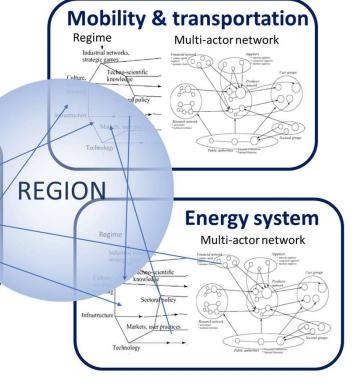
Scaling up living labs from the local to the regional level

Portfolio approach for cross-sectorial synergy effects

### **Challenges**

- Stakeholder engagement and coalition building
- Developing a common vision
- Integrating existing networks
- Implementing feasible governance arrangements for regional transition









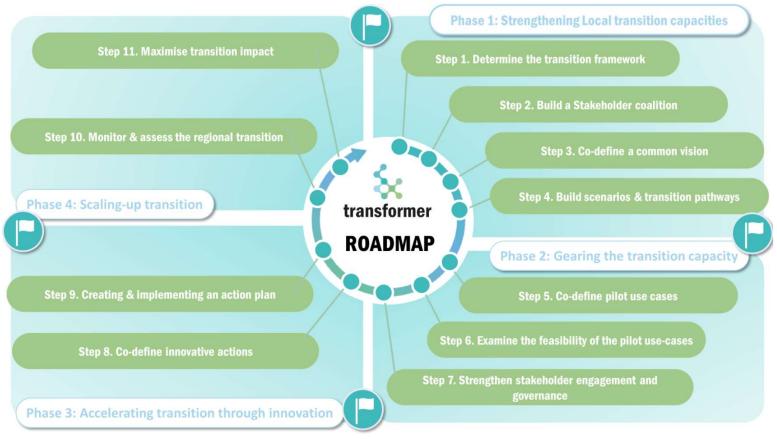






## **A strategic Transition Super-Lab process**





**4 PHASES** 





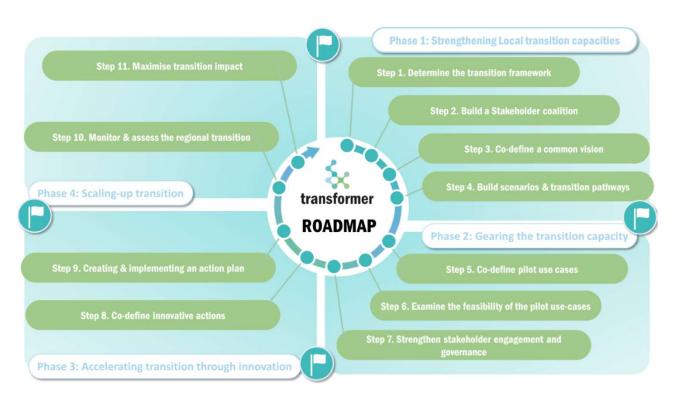






### **A strategic Transition Super-Lab process**





- Enhanced & adapted Living Labs methodologies
- Collaborative governance framework
- Developing connectable solutions for systemic transition











ransformer

ROADMAP

**Transition Super-Lab put into practice** 



**The case of Western Macedonia** 

**Phase 1: Strengthening Local transition capacities** 

Step 1. Determine the transition framework

Step 2. Build a Stakeholder coalition

Step 3. Co-define a common vision

Step 4. Build scenarios & transition pathways

Phase 2: Gearing the transition capacity

Step 5. Co-define pilot use cases

Step 6. Examine the feasibility of the pilot use-cases

Step 7. Strengthen stakeholder engagement and

PV in buses

4 pilot use-cases

ember 2023

RE production, storage, transportation & consumption

Diversification of the economy through climate-neutral energy

Hydrogen Innovation Hub (H2HUB)

Hydrogen buses

Annual POLIS Conference 2023 | Leuven, Belgium





### **Conclusion**



How to accelerate the transition towards climate neutrality and sustainability?

- Scaling up living labs from the local to the regional level to facilitate an inclusive and just transition
- Developing a portfolio of innovative solutions to harness cross-sectorial synergy effects and drive systemic transformation
- Supporting the implementation of SUMPs at the regional scale by creating synergies with other sectors
- Strengthen stakeholder cooperation beyond the scale of the SUMP towards achieving climate neutrality

How to support SUMPs in the regional context?







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European Network of Living Labs



















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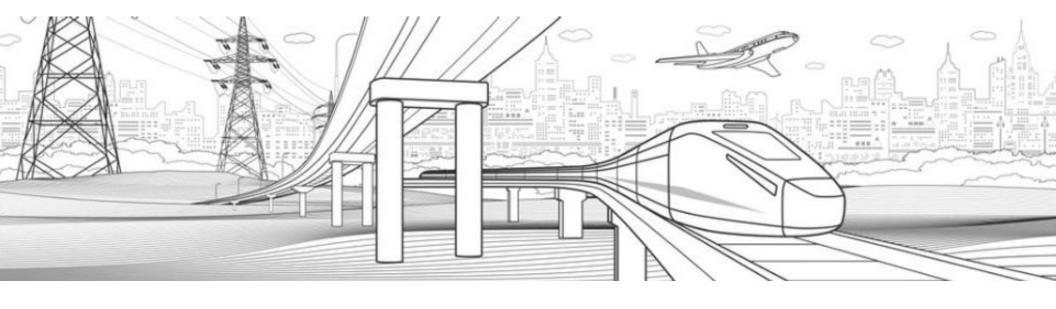
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# SUMP and NSSP training programme 2023-2025

29th November 2023







### **DETAILS AND TIMING**



- ✓ Several SUMP training in the past, including one large programme of training back in 2017/18 by JASPERS in cooperation with DG MOVE. Much has changed since, new areas of knowledge and approaches to urban transport issues
- ✓ JASPERS in collaboration and with the support of DG MOVE, is preparing a capacity building programme for delivering several trainings/workshops in the area of SUMP (Sustainable Urban Mobility Plans), NSSP (National SUMP Support Programmes) and SUMI (Sustainable Urban Mobility Indicators)
- ✓ This training programme will be delivered by JASPERS with the support of consultants experienced in the field
- ✓ Country tailored; the approach is to prepare a 'menu' of relevant topics that can be adapted to each audience
- ✓ The actual delivery of the capacity building programme is currently scheduled to start in late Q1 2024 and last until Q2 2025

### **DETAILS AND NEXT STEPS**



- ✓ **SUMP trainings**: delivered both in presence (over 2 days) and on-line (over 4 days), with simultaneous translation if necessary; on-line sessions are likely to be multi-country
- ✓ NSSP workshops: delivered in presence (multi country and with a networking event organised) & on-line ad-hoc consultation for specific issues raised by individual countries

### **ONGOING ACTIVITIES**

- ✓ Consultation with Member States following the SUMP training country survey, to establish contacts, plan delivery, agree on contents >>> build training programme
- ✓ Preparation of trainings and workshops material (until February 2024)



### PRELIMINARY CONTENTS



### **SUMP trainings**

- ✓ 3 core modules of training to be delivered to all countries, focusing on: (1) Basics of SUMP methodology and practice, (2) The link between Strategic Plans, Programming, Pipeline and Project Preparation, (3) Urban nodes and the interface between local and strategic transport
- ✓ Set of 16 **elective modules** to select from for each training session (6 modules to choose), to tailor delivery to knowledge preferences/needs of country and participants

### **NSSP** workshops

- ✓ Introduction on NSSP concepts / best practice including current EC guidance / recommendations
- ✓ Facilitated group discussions / presentations on key elements of NSSP: (1) Systemic barriers at national level to be addressed by NSSPs, (2) National legislation and financial support for SUMPs (3) National SUMP platforms structure and organisation, (4) SUMP guidance and training at national level, (5) Monitoring and evaluation of SUMPS (national level)

### PRELIMINARY LIST OF SUMP TRAINING MODULES



	TRAINING MODULE / KNOWLEDGE AREA	ТҮРЕ	SHORT DESCRIPTION
1	Basics of SUMP methodology and practice	Core	This modules will include all the basic elements of SUMPs, including public and stakeholder engagement, starting points and analysis (strategic context and diagnosis of current and future issues), objectives, definition of scenarios, selection of measures, procuring good external support implementation and monitoring.
	The link between Strategic Plans, Programming, Pipeline and project preparation	Core	Focus on key terminology (planning, programming, measures, projects), link between SUMP and investment priorities, programming and funding allocation, incorporation of existing measures, and interface with other plans.
3	Urban nodes and the interface between local and strategic transport	Core	Interface between local and strategic transport (both passenger and freight), and relation between SUMPs and TEN-T urban nodes.
4	Organisational and institutional aspects	Elective Process	Interface between SUMPs and planning instruments for cities in a region, Regional/Metropolitan/ Functional Urban Areas (FUAs), relation with public transport organisation structure, good SUMP quality and acceptance through an effective set-up governance and organisational aspects.
5	Multi-Modal Plan Scenario Building in SUMPs	Elective Process	Ways to approach the integrated mobility system in a comprehensive manner and working with scenarios that include integrated multimodal scenarios (all modes included) with due consideration of spatial planning, demand management and O&M aspects.
6	Indicators, Targets and Monitoring	Elective Process	Selecting the right set of indicators (including reference to SUMI), setting targets, estimating ex-ante impacts, and measuring and monitoring indicators
7	Citizen/Stakeholder engagement and communication	Elective Process	Ensuring SUMPs are informed by involved parties though various types of engagement and consultation in the process. Also, ensuring that strategy is widely understood through promotion.
8	SUMPs for small and medium sized cities	Elective Process	Main features and challenges including a proportionate planning approach, especially focusing on the links between urban, peri-urban, and rural areas. Should also include polycentric cities.
	Demand and Accessibility analysis through the SUMP	Elective Process	Analysis and forecasting travel behaviour and demand through data collection, transport demand assessment (passengers and freight), GIS supported analysis.
10	Transport decarbonisation		Methodological support to identify measures aimed at reducing GHG emissions from transport. Integration of climate change mitigation in SUMP from identification and definition of relevant SUMP objectives (and targets) through its considerations in identification and analysis of options.
11	Environmental aspects	Elective Thematic	Environmental aspects in the SUMP process, mainly focusing on air quality, noise, congestion. This also includes strategic environmental aspects.
12	Climate change adaptation and resilience	Elective Thematic	Methodological support to integrate/enhance climate resilience in SUMPs. It starts from the analysis and definition of objectives. The assessment of climate change vulnerabilities and identification of (potential) risks for the SUMP represent a basis to identify/inform measures definition.
13	Collective passenger transport	LEIECTIVE INEMATIC	How to design an attractive collective passenger transport system to ensure sustainability. Elaboration on how to operate, maintain, finance transport services and integration with new types of services (e.g. Demand-Resposive Transport).
14	Active modes and micromobility	Elective Thematic	Further bring cycling and pedestrian planning into a SUMP. Focus also on the integration of micromobility devices, including associated safety matters.
15	Freight and logistics	Elective Thematic	Understanding the dynamics and evolution of urban freight transport and city logistics: demand, logistic chains, operations, trends, impacts. Also, focus on SULPs.
16	Demand Management	r recuve memanc	Bringing demand management into a SUMP, including behavioural, restrictive, and economic measures, such as parking management, circulation plans, road pricing, low emission zones, etc.
17	Spatial planning	Elective Thematic	Spatial, land use, urban planning and road space allocation as key factors to enhance accessibility, inclusivity, safety and promote sustainable modes of transport.
18	Road safety and street design	Elective Thematic	Bringing Vision Zero into a SUMP with assessment techniques for safety and security, also focusing on street design elements (e.g. pedestrian area, cycling, etc.)
19	Inclusive and accessible mobility	r recuve memanc	Bringing social inclusion goals and measures into a SUMP by considering vulnerable groups, gender issues, poverty. Also granting universal access by removing all barriers.

