



## UVAR IN SUMP

*STRATEGIES & MANAGERIAL APPROACHES FOR IMPROVING LOW-CARBON MOBILITY PLANNING IN FUA*

D.T1.1.6 CE SUMP 2.0 topic guide: UVAR in SUMP

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## 1. Introduction



## 2. Functional Urban Area perspective for Urban Vehicle Access Regulations

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1. STEP 1. Identification of core municipalities through gridded population data
2. STEP 2. Connecting non-contiguous cores belonging to the same functional urban area
3. STEP 3. The identification of the urban hinterland



**Figure 1 Kraków's functional area. Source: Krakow Transport Authority.**

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## 2.1.1 Why consider Functional Urban Areas when planning UVARs?

*Geographical and administrative boundaries*



*Polycentric/monocentric concentration*

*Existing transport and climate planning frameworks*

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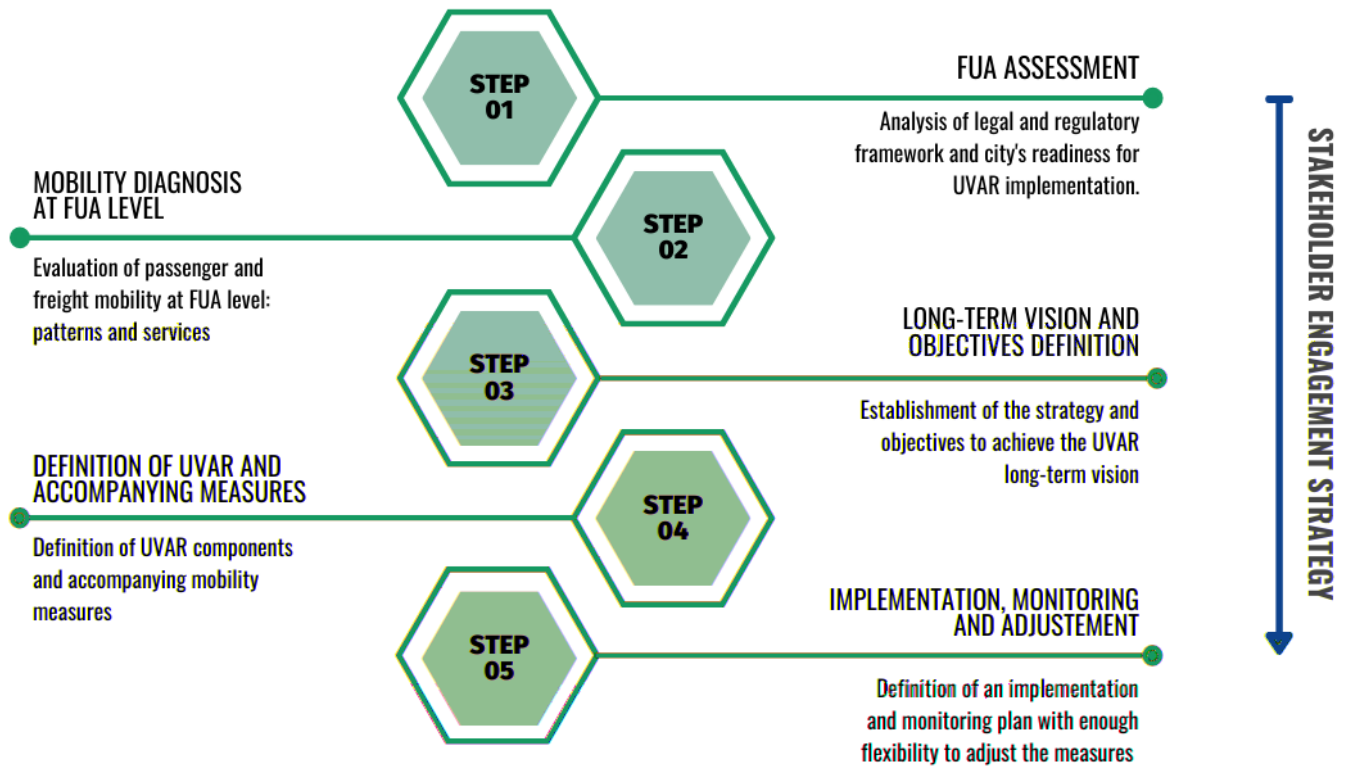
## 2.3 How to consider the FUA perspective: a step-by-step process

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1. FUA Assessment
2. Mobility Diagnosis at the FUA level
3. Strategic Planning and Objective Definition
4. Planning of UVAR and accompanying measures
5. Implementation monitoring and adjusting



**Figure 2 UVAR planning at FUA level: step-by-step process.**



### 2.3.1 Assessment of the Functional Urban Area

transport and mobility planning framework

legislative and regulatory framework  
readiness for implementation.

vision

UVAR organisational and decision-making system

barriers

institutional, legal, and financial



capacity

UVAR champion.

relevant stakeholders

### 2.3.2 Mobility Diagnosis at the FUA level

mobility and transport indicators

traffic and mobility patterns

involving users

collecting data

### 2.3.3 Objectives and long-term vision

a vision for the city

UVAR scenarios



UVAR objectives

## 2.3.4 Planning of UVAR and accompanying measures

building blocks

iterative process

trial period

user needs



enforcement

Definition of accompanying mobility measures



acceptance and ownership

joint indicators

quantified targets

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economy, energy, environment, society, and transport

### 2.3.6 Stakeholder and public engagement (at FUA level)

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Scope and objectives






**Relevant Other Actors**


**Relevant Private Actors**

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Form of cooperation



## Institutional cooperation

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### Level of engagement

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- 
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Steps 1 and 2

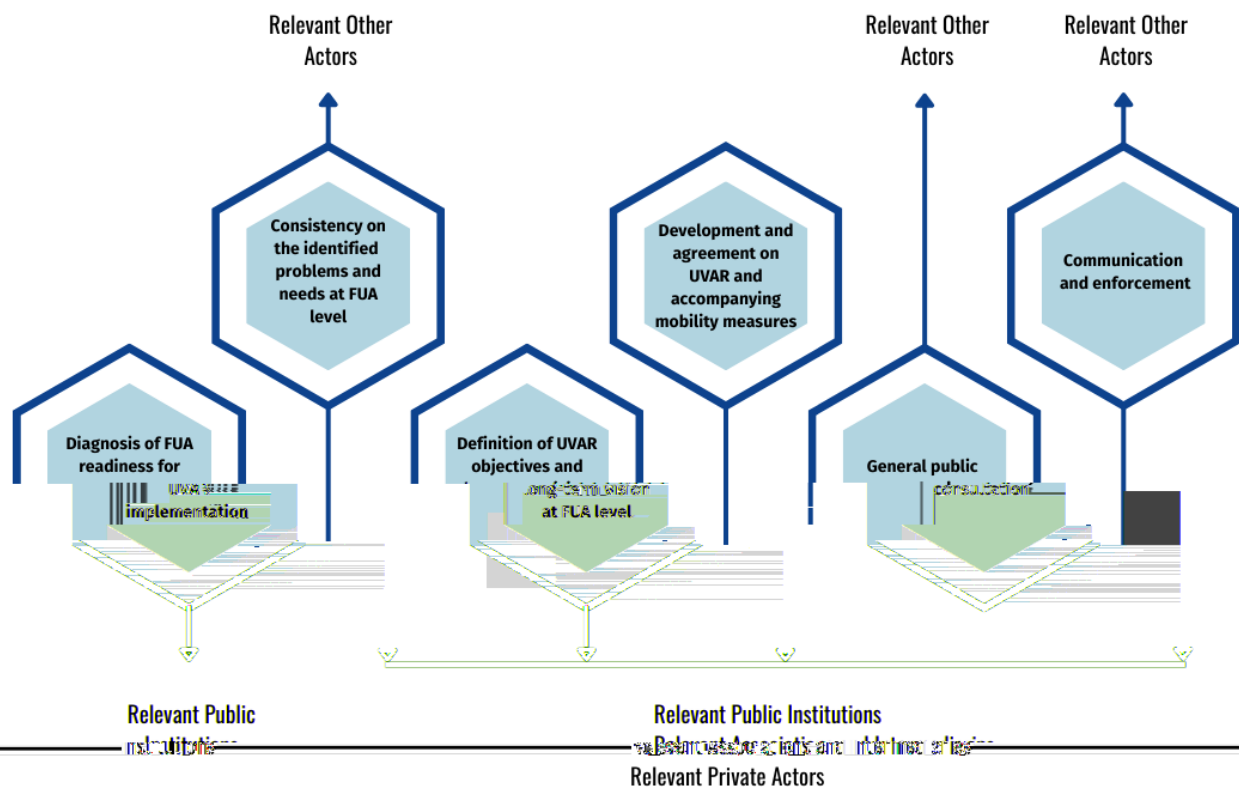
Step 3:

Step 4:

Step 5:

### Timing for stakeholder's involvement

**Figure 3 Suggested checkpoints with relevant stakeholders during the UVAR planning process**



### Engagement methodology



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Resources

### 3. Dynaxibility4CE case-study: Krakow's Low Emission Zone

UVARs in Krakow: not a new thing



## UVAR planning process Krakow

### 1. FUA Assessment

*UVAR readiness in Krakow*

*Review of binding policies and documents*

transport policy of Krakow

Adaption Plan to achieve climate change

by 2030

Low-Emission

Economy Program (PGN)

‘Air Protection

Program for Małopolska Province’.



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*Understanding stakeholders*

## 2. UVAR objectives and scenarios

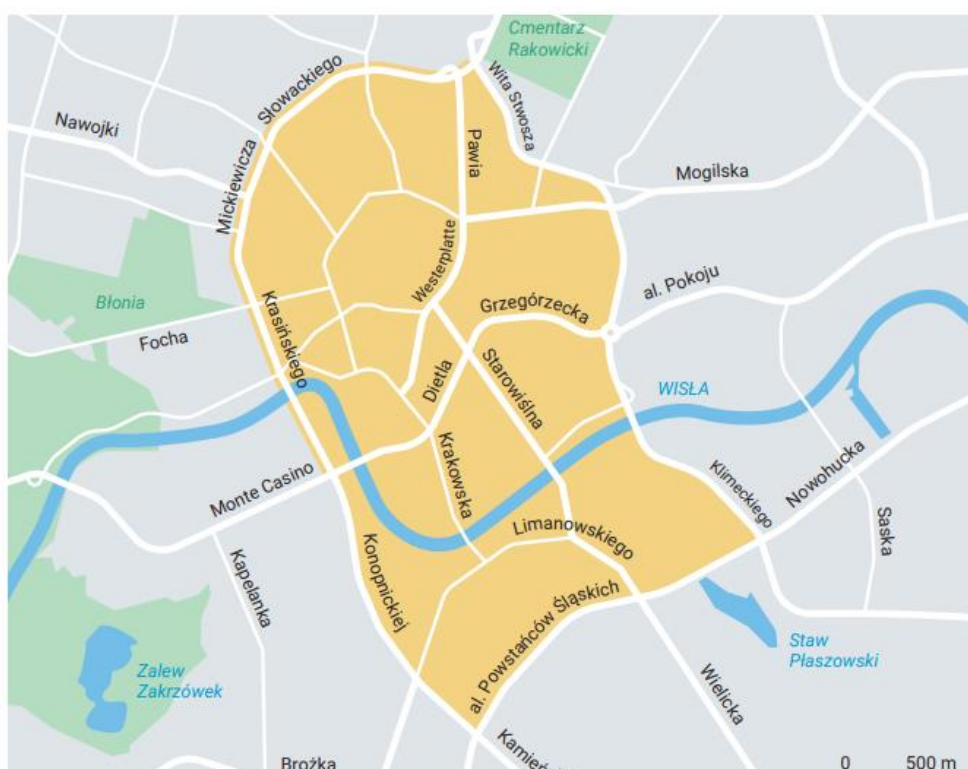
**Table 2 Stakeholder involvement during Krakow's scenario analysis for UVAR.**

Stage		Stakeholders involved
1		Krakow Transport Authority
2		Department of Municipal Traffic Engineer, Police, Municipal Police, Road Authority of Krakow, Public Utilities Department.
3		Residents of Krakow
4		Krakow Transport Authority
5		Public Transport Authority, NGOs active in the field of air quality improvement



6		Krakow Transport Authority
7		Public Transport Authority, NGOs active in the field of air quality improvement
8		Krakow Transport Authority

### 3. LEZ implementation plan definition



**Figure 4 Proposed LEZ area in Krakow. Source: Krakow Transport Authority.**



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Table 3 Public consultation activities for the implementation of a LEZ in Krakow



## 5. Remaining challenges: enforcement

## 4. Best Practices

### 4.1 Milano: Digital integration of UVAR solutions can increase efficiency

Area B



Area C

Digitisation of parking management

## 4.2 Veneto & Baden-Württemberg: Regional UVAR solutions

Veneto, Italy



Baden-Württemberg, Germany

#### 4.3 Ljubljana: UVARs are more than just LEZs

#### 4.4 Salzburg & Zadar: Parking policy is complementary to a UVAR

Salzburg, Austria



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Zadar, Croatia



## 5. UVAR Operational library

	Name and Project/Organization	Brief Description
1.	<a href="#">UVAR SUMP Topic Guide</a>	
2.	How to regulate vehicle access in urban areas. -	- - - - -
3.	UVAR Decision- support Tool -	
4.	<a href="#">UVAR Digitalisation toolbox -</a>	
5.	Guidelines for UVARs VMS -	
6.	Practical aspects of UVAR information provision through signage -	
7.	Recommendations on how to overcome the legal, administrative and technical barriers -	
8.	<a href="#">Support toolbox for the overall design of low-carbon value-added services for freight and people -</a>	
9.	<a href="#">Guidelines for integrated low-carbon mobility planning in FUA -</a>	
10.	<a href="#">Toolkit on stakeholder involvement -</a>	
11.	<a href="#">Guidelines for passengers and freight transport stakeholders'</a>	



	<a href="#"><u>involvement at the FUA level -</u></a>	
12.	<a href="#"><u>How-to guide: Zero Emission Zones, POLIS-C40</u></a>	