



## 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 Krakow's functional area. Source: Krakow Transport Authority.**



### 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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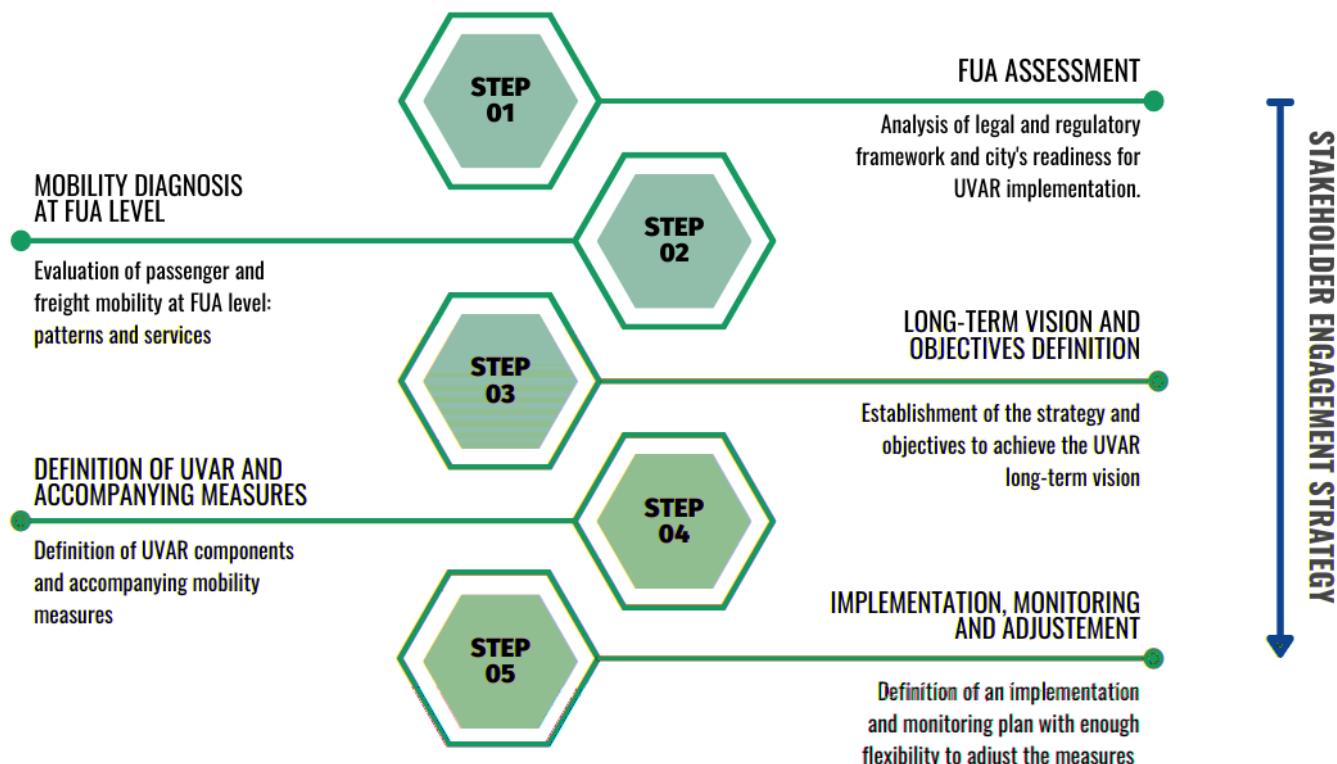


## **2.3 How to consider the FUA perspective: a step-by-step process**

- 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

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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

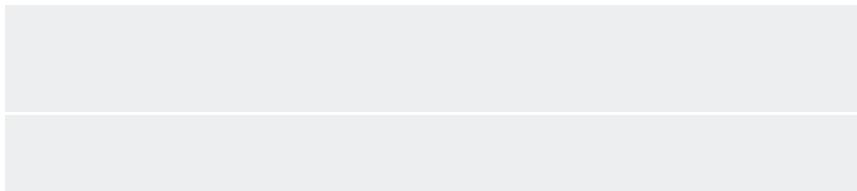


Mapping of UVAR stakeholders at the FUA level

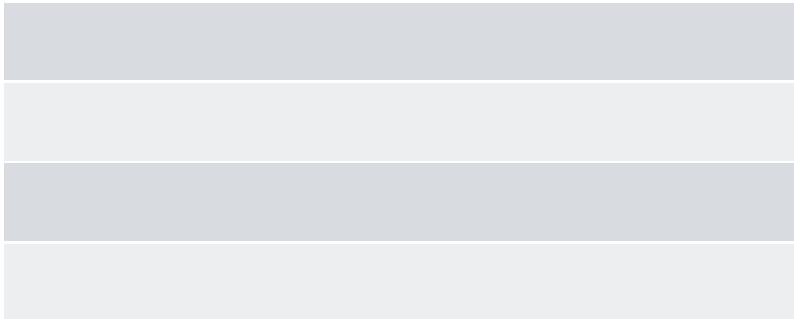
**Table 1 Indicative stakeholder map for UVAR planning. Source: Own elaboration.**

Institutional Organisations

Relevant Associations and Intermediaries



**Relevant Other Actors**



**Relevant Private Actors**

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- 
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**Form of cooperation**



## Institutional cooperation



### Level of engagement

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- 
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**Steps 1 and 2**

**Step 3:**

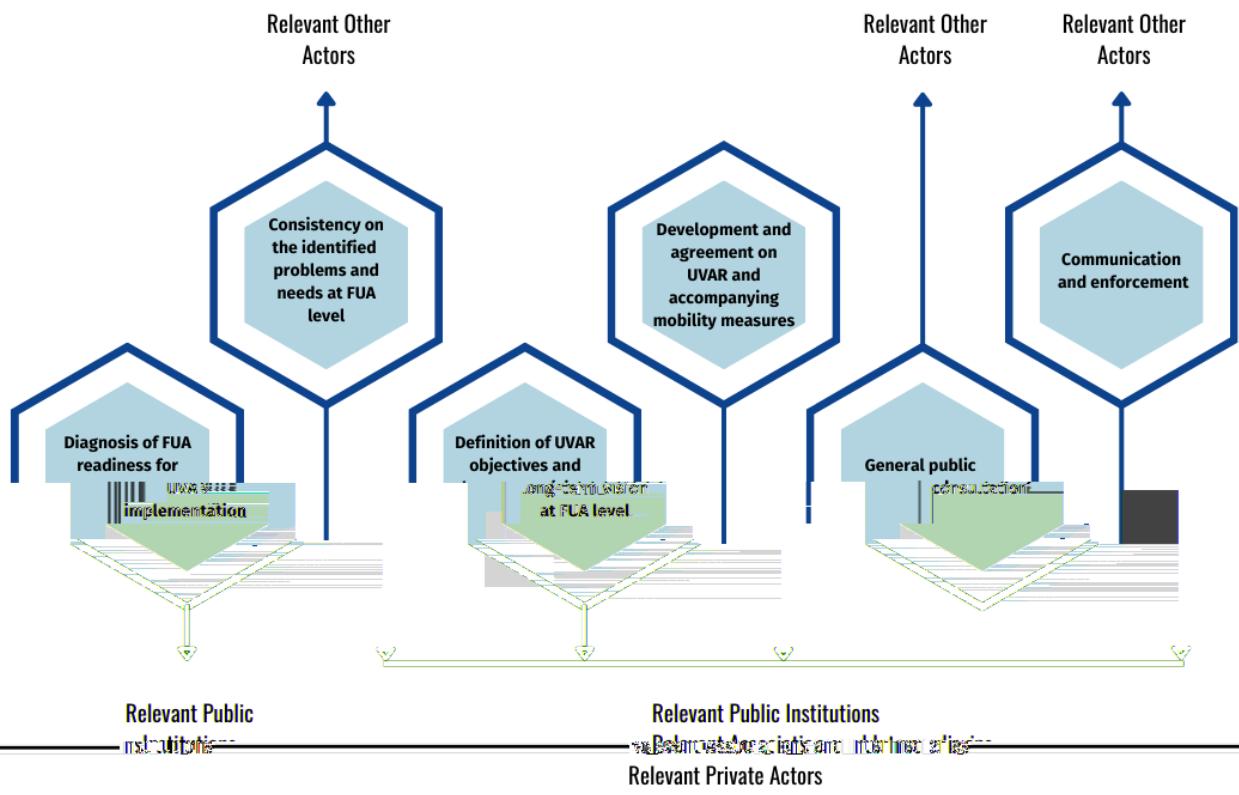
**Step 4:**

**Step 5:**

### Timing for stakeholder's involvement



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



#### Engagement methodology



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*

*by 2030*

*Adaption Plan to achieve climate change*

*Economy Program (PGN)*

*Low-Emission*

*Program for Małopolska Province'.*

*‘Air Protection*



*Understanding stakeholders*

**2. UVAR objectives and scenarios**

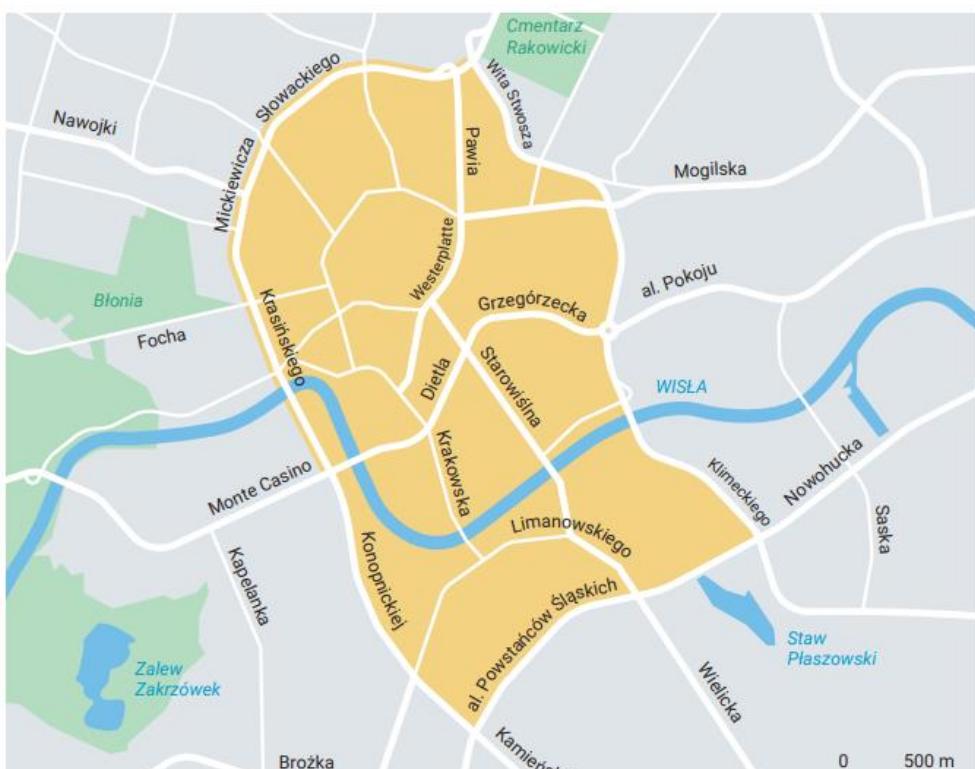
**Table 2 Stakeholder involvement during Krakow's scenario analysis for UVAR.**

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.**

#### 4. Next steps: public consultation and council adoption

Information activity/ form of consultation	Target groups



## 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="#"><u>UVAR SUMP Topic Guide</u></a>	
2.	How to regulate vehicle access in urban areas. -	- - - - -
3.	UVAR Decision- support Tool -	
4.	<a href="#"><u>UVAR Digitalisation toolbox -</u></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="#"><u>Support toolbox for the overall design of low-carbon value- added services for freight and people -</u></a>	
9.	<a href="#"><u>Guidelines for integrated low- carbon mobility planning in FUA -</u></a>	
10.	<a href="#"><u>Toolkit on stakeholder involvement -</u></a>	
11.	<a href="#"><u>Guidelines for passengers and freight transport stakeholders'</u></a>	



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