

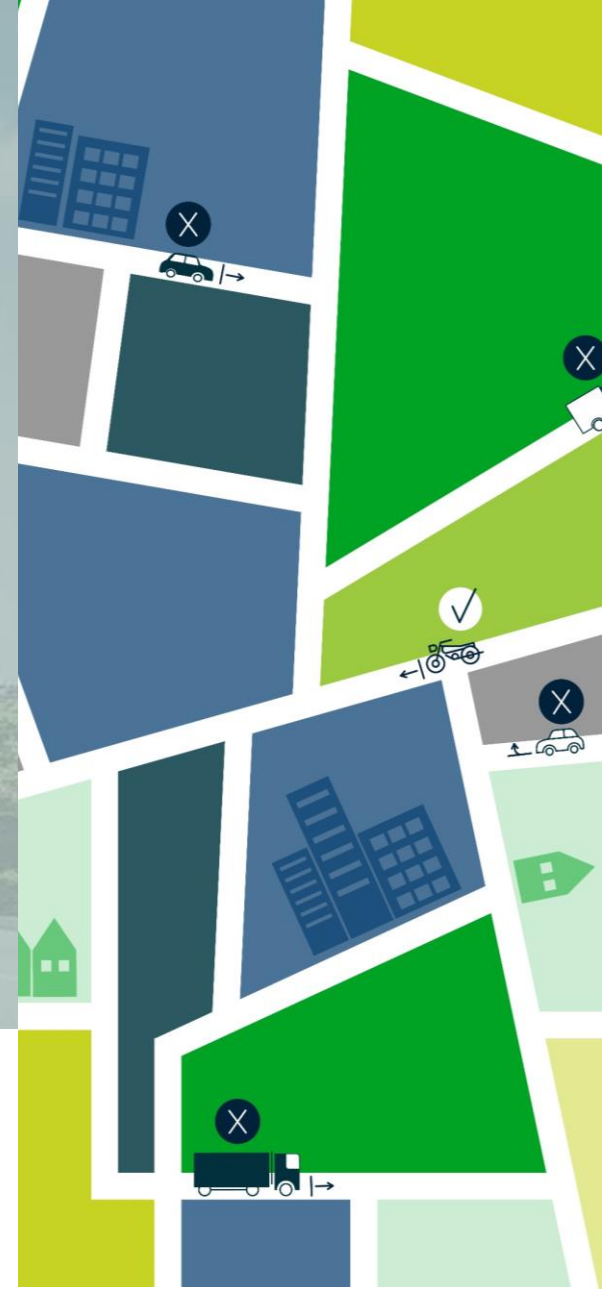


# UVAR Box Status update

# UVAR BOX Status update



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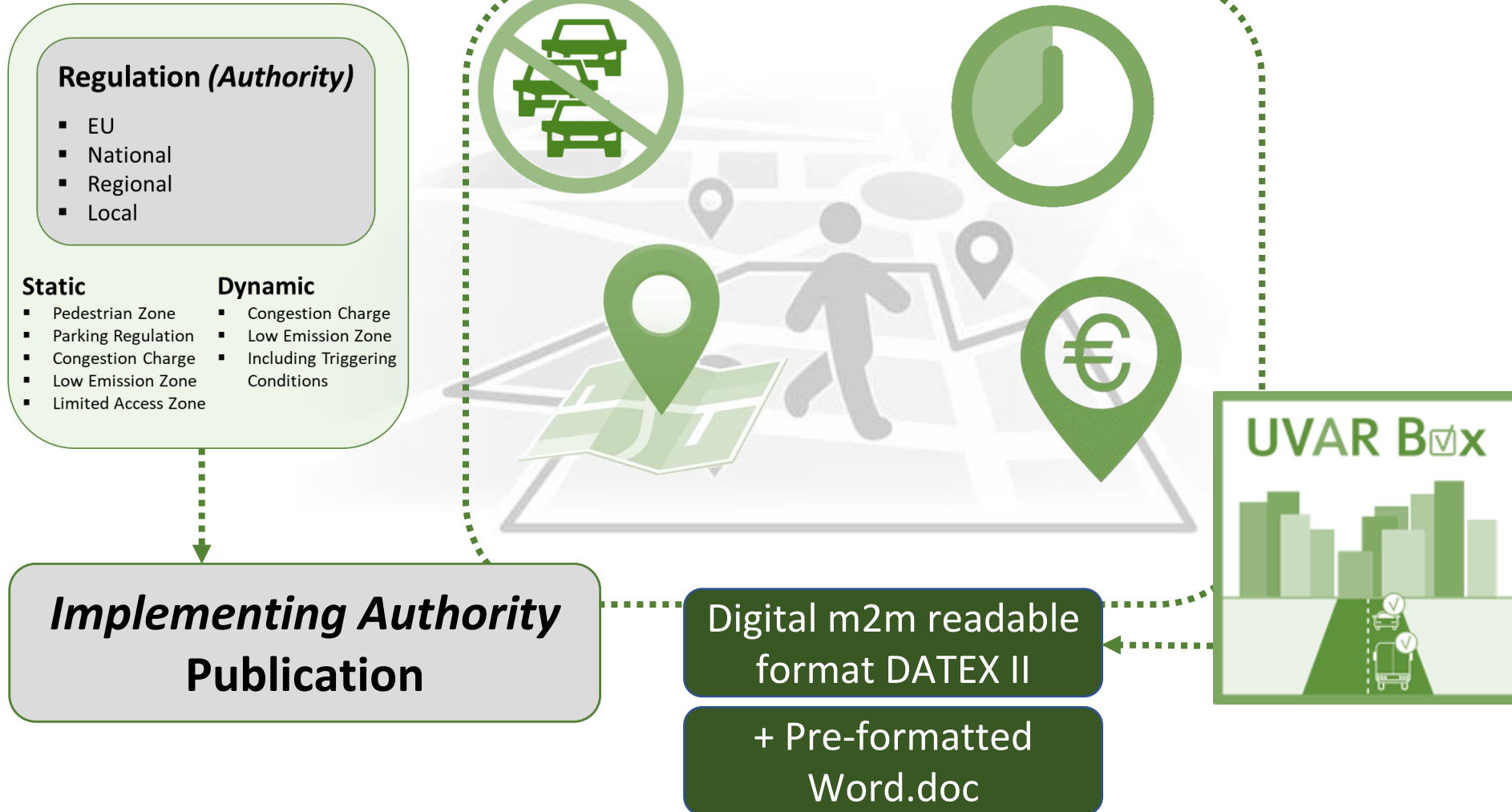


# UVAR Schemes TODAY





# UVAR Tool Box concept design





# UVARBox Schemes in the near FUTURE

## Regulation (Authority)

- EU
- National
- Regional
- Local

### Static

- Pedestrian Zone
- Parking Regulation
- Congestion Charge
- Low Emission Zone
- Limited Access Zone

### Dynamic

- Congestion Charge
- Low Emission Zone
- Including Triggering Conditions



Digital m2m readable  
format DATEX II

+ Pre-formatted  
Word.doc



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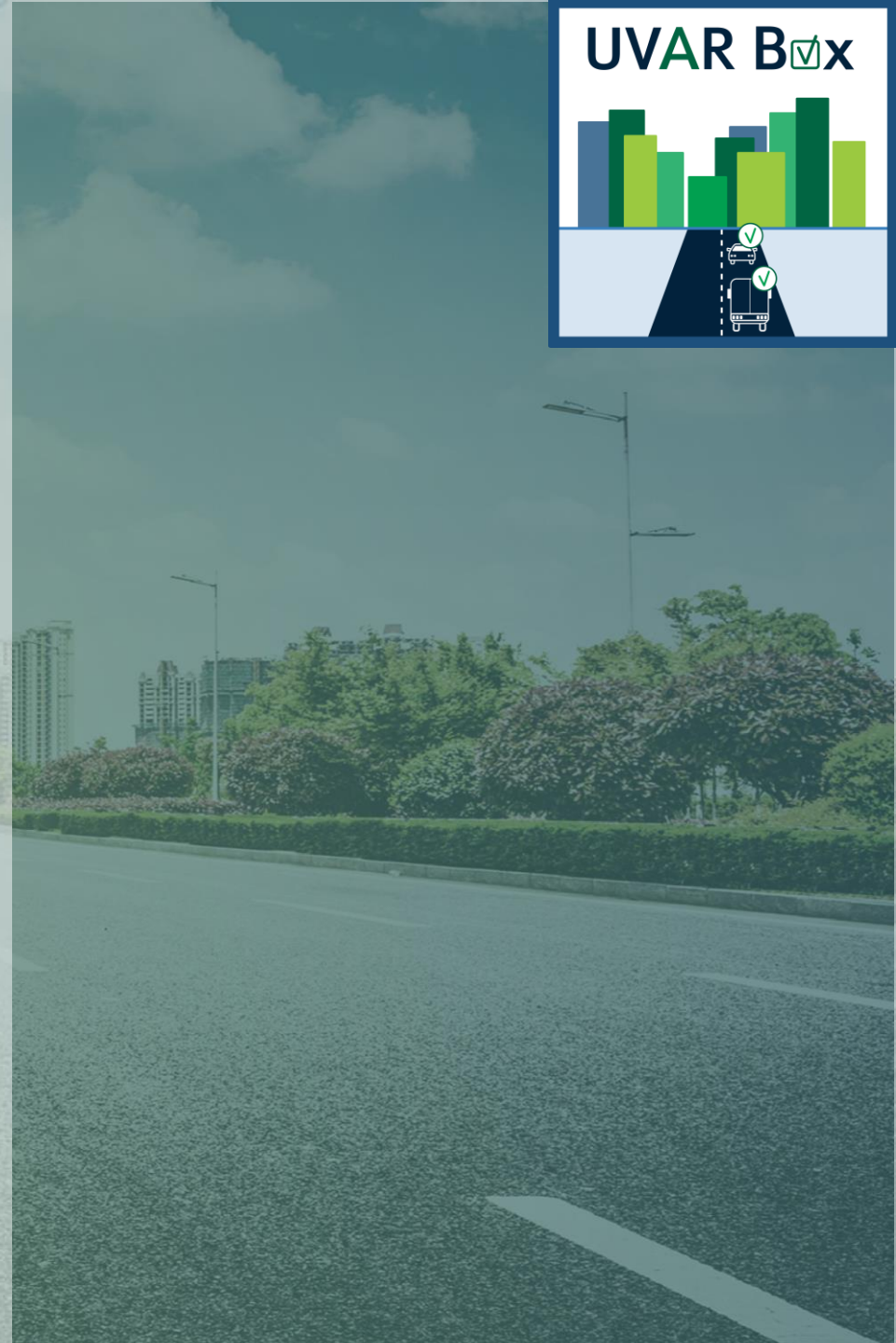
# UVAR Box and City's Resilience

With traffic levels in Europe, quickly climbing back up to the levels of 2019, thus emissions, would suggest that traditional physical measures, put in place in the last couple of years, although very positive, **will not be sufficient to achieve carbon neutrality targets by 2030.**

The good momentum achieved and all the efforts done so far, in particular by cities, **needs to be complemented with much more flexible and dynamic measures of urban space use,** reinforcing the role of Public transport combined with greener multimodal options.

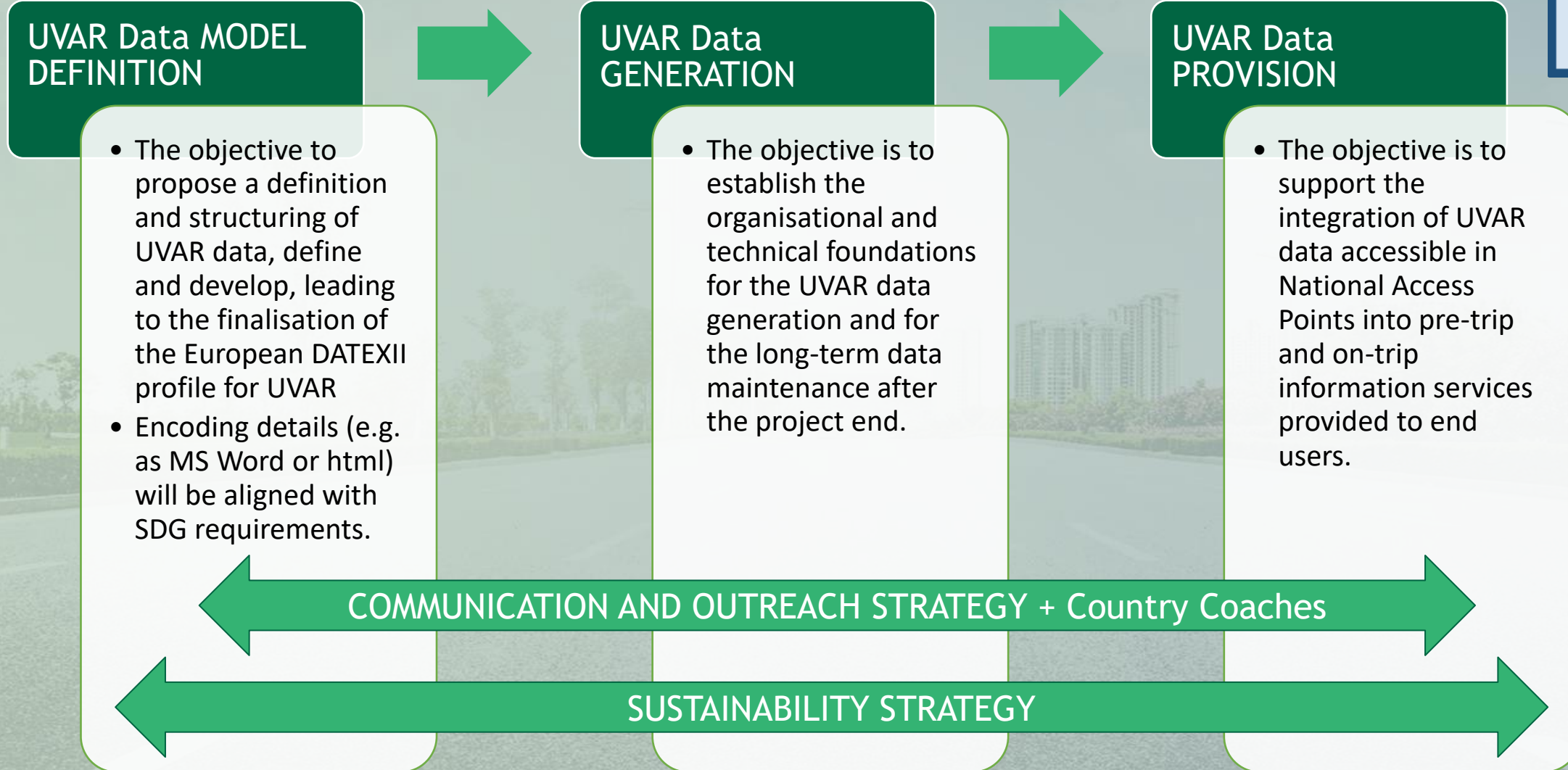
Urban Vehicle Access Regulations (UVAR) have been established across European Cities, under **different schemes** aiming to positively impact the reduction of emissions, traffic congestion or, simply, to return back to pedestrians and cyclists, the most scarcest resource in the city: urban space.

The Projects' results need to be quickly scaled up and multiplied across the EU, in favour of **Reducing the carbon footprint,** by making **better use of Digitalisation.**





# UVARBox Project Organisation





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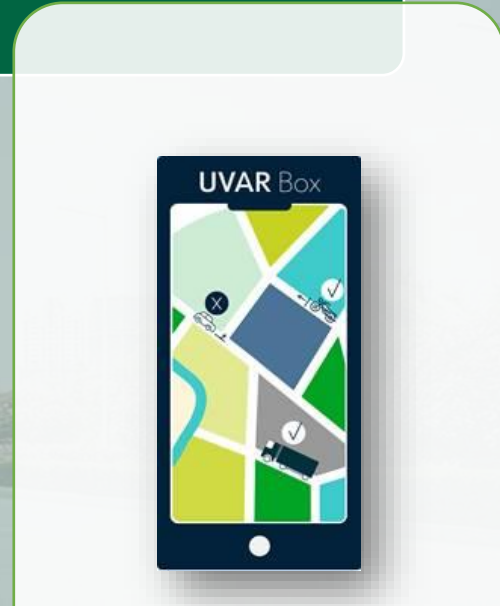
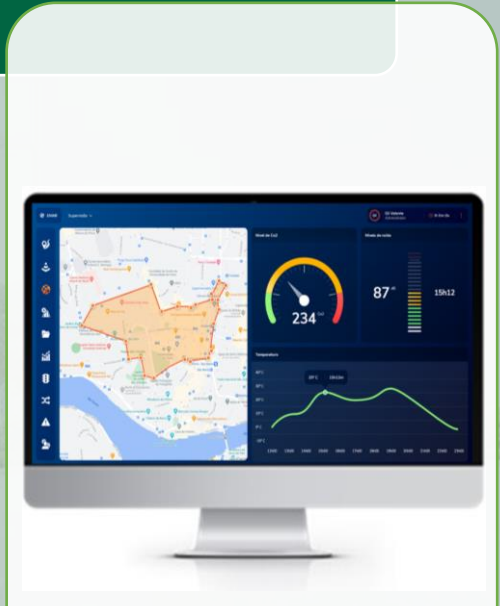
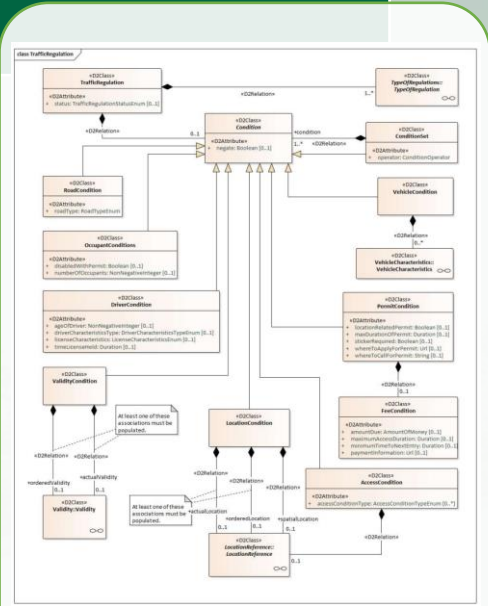
UVAR Data MODEL DEFINITION



UVAR Data GENERATION



UVAR Data PROVISION



COMMUNICATION AND OUTREACH STRATEGY + Country Coaches

SUSTAINABILITY STRATEGY



# UVARBox DATA MODEL DEFINITION

## UVAR Data DEFINITION

- The UVAR data definition lead to the **creation of a DATEX II profile** for data exchange.
- This was achieved by:
  - Developing a state of the art report providing **information on the existing and planned UVARs** over the 5 focus countries - D1.1;
  - **Building on top of** the requirements already developed in the CEF PSA which proved to be a solid foundation for a potential UVARs model - D1.2.

## UVAR Data STATE OF THE ART

- Gaining knowledge about UVAR policies at **local, regional and national** level.
- Mapping and understanding **current information and data flows** surrounding UVARs, barriers and drivers for uptake of the UVAR Toolbox.
- Identifying existing interfaces for UVAR regulations, **both digital based on GIS systems or EXCEL tables and physical like PDFs or websites.**
- Providing knowledge on **procedures to activate/deactivate especially dynamic UVARS.**

## OUTREACH

- **questionnaire** aiming to involve the different key stakeholders
- **translated into:** Italian, German, and French
- In some cases, country coaches **assisted** the authorities in responding to the questionnaire, explaining on the phone what was meant to avoid confusion
- The questionnaire has now been online for nearly seven months. **More than 410 different people visited the homepage** of the questionnaire and 94 of them finished all of the 26 questions
- Some of them skipped a question or two.



# UVARBox DATA MODEL DEFINITION

## TAKE AWAYS

- There is a **gap between the persons responsible for UVARs at local level and the ones involved in European cooperation** - challenge to ensure harmonisation and a uniform tool relevant for all stakeholders.
  - Different EU member states have a **very heterogeneous level of digitisation of traffic regulations**.
  - Most advanced authorities **need to support** other authorities to improve the harmonisation of UVAR communication in Europe.
- 
- **There are similarities between all UVARs in Europe, which are based on the same attributes.**
  - **This is an asset to build on for the development of machine-readable formats, as well as tools to facilitate the digitisation process.**



# UVARBox DATA MODEL DEFINITION

## TAKE AWAYS

- **Other barriers to cities** using the UVAR toolbox would include:
  - Resources
  - Skills
  - Difficulty in digitising data (e.g., 3-D maps when fly-overs are on the boundaries)
  - Not seeing the benefit (though knowing that they should do so)
  - DATEX II not being understood or easily accessible
- **Support and training** need to become a part of day-to-day operations for the sustainability of the Project.
- Importance of the **Country Coach** as a tool and mechanism needs to be embedded in the Sustainability Strategy



# UVARBox UVAR DATA GENERATION

## METHODOLOGY

- Based on the information obtained through **questionnaires, workshops** and in personal follow-up meetings, the structure and content for **the first two deliverables in WP2** were defined:
  - **D2.1 Overview report on legal processes for UVAR definition (Dec 21)**
  - **D2.2 Functional specification of UVAR tool (Dec 21)**
- Furthermore, this information, provided Country Coaches the initial ingredients to **start defining and validating country-specific data collection strategies** as part of Task2.4 data collection and maintenance

## OUTREACH

- **6 Workshops organised** with, AT, BE, DE, IT NL and Other MS
- **contact setting** with the right governmental stakeholders, experts and future users **to train for the test and use of the soon to be available tools.**
- The workshops also provided more **detailed information on the current governance, legal and technical processes**, including the level of maturity of digitalization and availability of UVARs in the cities.
- Country coaches collected insight necessary to develop **their initial concepts for data collection and maintenance strategies.**

## FUNCIONALITIES

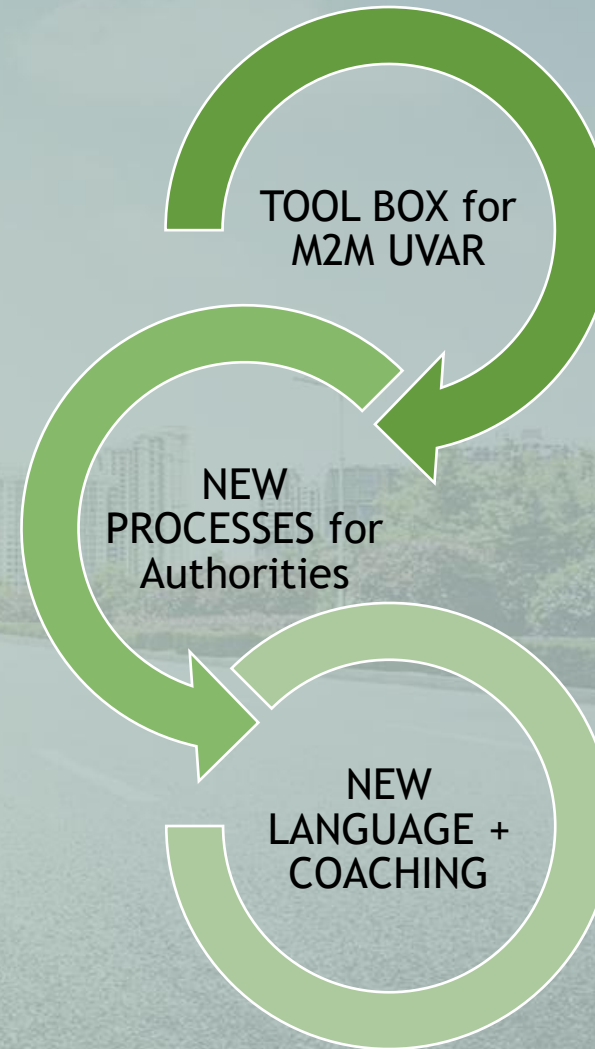
- Interfaces to import/export and publish UVARs + manual generation and editing of UVARs in a map.
- Use cases, to be supported by the user interface:
  - Login to the System
  - Create a new UVAR
  - Search existing UVARs
  - Edit existing UVAR
  - Add Geometry from File
  - Store UVAR with attributes
  - Save Template
  - Navigate map
  - Navigate to default extent
  - Search in the Map for Cities and Regions
  - Filtering the Map
  - Import/Export data
  - Logout of the System



# UVAR Box Project outline

In sum, UVARBox tools are designed to:

- enable the **provision of accurate, up to date, continuous and interoperable EU-wide real-time traffic information services.**
- **support cities streamlining and simplifying the digital procedures** for issuing such schemes, at the level of the **National Access Points.**
- by means of developing the **adequate machine-readable formats** in DATEX II, that navigation systems, or mobile applications may use.
- **Piloting Member States - AU, BE, DE, IT and NL**





# UVARBox Project timeline

## Kickoff Ago2020 | Jul2021

- Inception Report
- Communication strategy
- Project leaflet
- Stakeholder workshop 1 supporting WP1
- UVAR state of the art report
- Structure for different data sets relevant for the definition of UVARs
- Stakeholder Workshop 2 together with WP2

## Final Report Ma | Ago2022

- Organisation of a hackathon at TRA2022
- UVAR data access in navigation services
- Report on organisational frameworks in place concerning the publication of UVARs, including legal framework conditions for data access and data provision
- Final report



## Interim Report Ago2021 | May 2022

- DATEXII Profiles for UVAR data Exchange and Template for SDG
- 5 capacity building webinars
- UVAR tool package + development report
- Specification of UVAR related data-flows for data collection and data maintenance
- Technical documentation and user documentation of UVAR tool



# UVAR Box Project outline

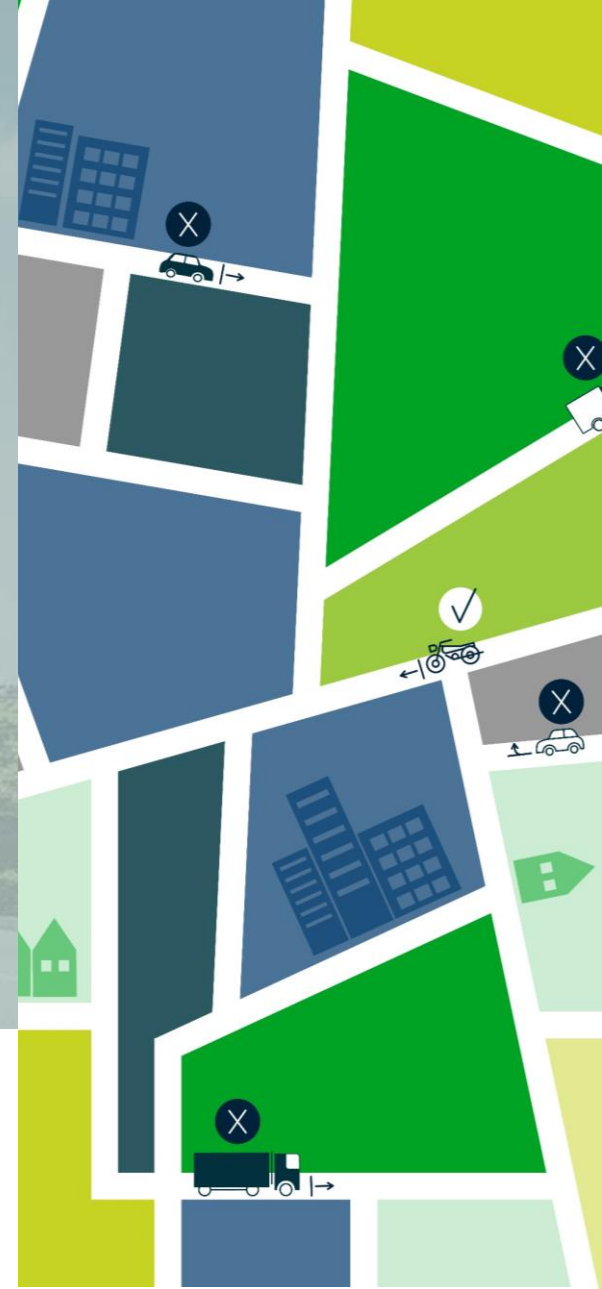
- The project will contribute to **define a standard for UVAR communication**, which can also support their definition, but is most importantly **designed to support an easier perception and comprehension of UVARs by their targeted public, i.e., road users.**
- The project also supports the communication of UVARs from **local authorities to National Access Points**, facilitating the localisation of information on UVARs.

- This coordination between local and national levels **must be further encouraged through other initiatives.**
- Therefore, future work should support the completion of the **European UVARs' overview**, a task that is not included in the UVAR Box's coming activity.

# Thank you



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