















## **UVAR** Exchange

- Road signs
- C-ITS
- Cross-border enforcement

UVAR Exchange: August 2021 until January 2023 A European Parliament Pilot Preparatory Action

> Leading the way for legislation changes





# LEZ road signs

- Stakeholders complain of confusion cross-border
- No harmonised category for UVAR/LEZ (UNECE/CEN)
- Text particularly difficult (cross-border & camera recognition)



Low Emission Zones (LEZ): typologies of road signs and definitions from some EU countries



France - ZFE Zone à Faibles Emissions - Low Emission Zone



Belgium - ZBE Zone à basses émissions - Low Emission Zone



Spain (Barcelona) ZBE Zonas Baixes Emissiones - Low Emission Zone

General sign

**Zona Baixes** 

Emissions





Spain (Madrid) ZBEDEP - Zona de Bajas Emisiones de Especial Protección -Special Protection Low Emission Zone



Portugal - ZER Zona de emissões reduzidas reduced emission zone



Czech Rep. - NEZ Nízkoemisní zóna – Low Emission Zone



Germany - Umweltzone Environmental zone







Sweden Miljözon -Environmental Zone



NL: Draft ZEZ road sign

# Sign Text: hard to read



Limited Traffic Zones (LTZ): typologies of road signs and definitions from some EU countries



Italy – ZTL Zona a <u>Traffico</u> Limitato - limited traffic zone



France – ZTL Zone a <u>Trafic</u> <u>Limité</u> – limited traffic zone



Belgium – ZAL Zone à Accès Limité – limited access zone; BTZ Beperkt Toegankelijke Zones –

restricted traffic zone



Salzburg – <u>Zufahrtsverbot</u> -Prohibition of access



- zaopatrzenia i dojazdu do parkigów w godz. 00:00-10:00
  oznakowanych służb specjalnych, medycznych i technicznych,
  oznakowanych CC CD,
- pracowników firm zlokalizowanych w strefie I w godz. 00:00-10:00 - firm zlokalizowanych w strefi I.
- mieszkańców obszaru zamkniętego Błonia, Łagiewniki, strefy I.
- komunikacji zbiorowej,
- dojeżdżających do szpitali,
- autokarów z identyfikatorem ŚDM
- z zezwoleniem zarządu drogi KMK, TAXI.

Poland – Strefa Ograniczonego

Ruchu (SOR - Krakow) – restricted traffic zone; <u>Strefa Ograniczonei</u> <u>Dostepności</u> (SOD – <u>Gdańsk</u>) limited availability zone

# Road sign work

- Review current situation
- Reports with guidelines for clearer use of UVAR signs
  - 1. Practical aspects on road signs, eg symbols rather than text, positioning advice, possibly combining signs
  - 2. Guidelines for VMS
- Looking at new types of signs
  - Especially ZEZs, new LEZ countries
  - Workshops for input & discussion
  - Working with UNECE & CEN towards harmonisation & UVAR road sign categories
- Demonstrate VMS 4 UVAR, perhaps alterations static signs
  - Workshops to discuss options
- > Better info to drivers (= more compliance)
- More seamless travel across borders

### **C-ITS UVAR Demos**

C-ITS = Cooperative Intelligent Transport Systems

- C-ITS offers opportunities for UVARs
- We will test & demonstrate them
- Test the DATEX II format (UVAR Box) info directly to vehicles with C-ITS (ready for e.g. automated vehicles)
  - Focusing only on with UVAR cities with C-ITS relevant standards (eg Turin, Vienna, Brno....)
- Sending information through e.g. Turin's Geofencing Lab
- Workshops to get input as to what is needed

## Cross-border enforcemt

- LEZ & Parking Cross-border enforcement is difficult
  - eg Aachen looses about half its traffic fines (LEZ & Parking)
    foreign vehicles can park and drive with 'impunity'
  - Cities must disseminate UVARs EU-wide but no EU-wide tools to help enforce
  - Foreign drivers must pre-register LEZs no other way city can identify emissions
  - Bi-lateral agreements & 3<sup>rd</sup> party 'debt agencies' used
  - But can work legally for red traffic light & m/way tolls with CBE & EETS....
- An EU-wide solution would solve these so
  - ➤ Identification → drivers don't need pre-register (& pay related fines)
  - Enforcement → fairer, more compliance, more of the € to city rather than 3<sup>rd</sup> party
- Directives that might be affected in next review
  - CBE = Cross Border Enforcement, for safety issues
  - EETS = European Electronic Tolling System, for tolls

## Cross-border enforcemt

- Identify current & potential EU-wide options
  - Eg used for other purposes, or by some MS
  - EUCARIS provides for EETS & CBE Directives for all MS, but not for UVARs (legal issues)
- Identify barriers, challenges:

Legal, Technical, Administrative, Procedural

- What are the problems / barriers for cities / MS?
- What needs to be done to make the current options work?
- Questionnaires, bilateral meetings to gather information
- Workshops
  - Wide selection of cities; discuss issues to make sure all are identified / assessed / resolved
  - Choose pilot cities / MS
- Demonstrators to prove it can work
  - EUCARIS, national vehicle database agencies, cities, ministries
  - Identifying any other issues

#### Thanks for listening, and here's the team















Steven Boerma











INTELLIGEN<sup>T</sup> TRANSPORT **SYSTEMS** 





Nuno Rodrigues





Maruša Benkic

Jayant Sangwan













Lucy Sadler

austriatech



Martin Böhm



Sign up to be involved: <a href="http://uvarxsignup.panteia.eu">http://uvarxsignup.panteia.eu</a>

Maria Rodrigues <u>m.rodrigues@panteia.nl</u>

Lucy Sadler <u>Lucy.Sadler@airqualitypolicy.eu</u>

Further info: <a href="https://panteia.com/themes/transport-mobility/urban-">https://panteia.com/themes/transport-mobility/urban-</a>

mobility/uvarexchange/

Questionnaire:

https://ec.europa.eu/eusurvey/runner/UVARExchange Project Survey November 2021