

Demonstrating harmonised VMS:

Findings & recommendations & VMS demos Lisbon & Monza

Sónia Soares (ARMIS) – <u>sonia.soares@armis.pt</u>

18th October 2022









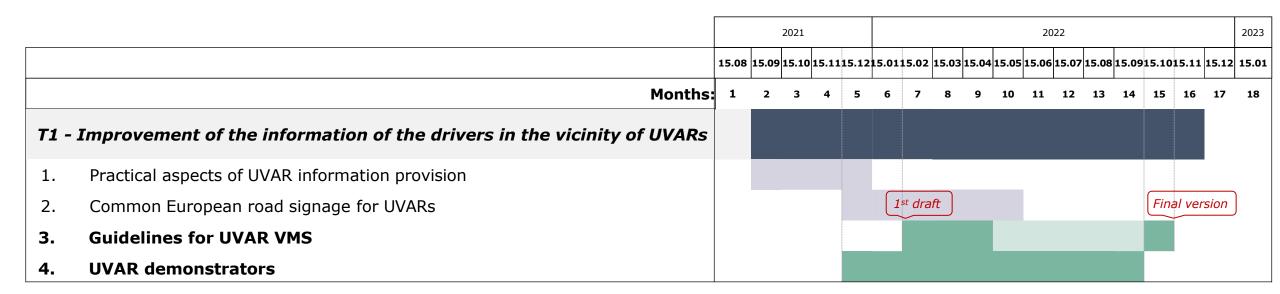






UVARs and **VMS** signage

Related activities and time planning



T1.3 Guidelines for UVAR VMS

Collection of UVAR VMS

LEZ LTZ EMERG CS



London - UK



Paris - France



Parma - Italy



Lecce - Italy



Madrid - Spain



Stuttgart – Germany



Geneve - Switzerland



London - UK

T1.3 Guidelines for UVAR VMS

Collection of UVAR VMS

- UVAR VMS in Europe are far from being harmonised; some similarities are commonly noticed between neighbour cities (same country); however, they differ a lot between countries.
- UVAR VMS are frequently used for pollution emergency schemes (EMERG schemes).
- National abbreviations are still being used.
- Usually, only the local language is used.
- Text prevails over symbols.
 - The symbols mainly used are concerning speed limits.
 - Spain uses sometimes a polluting car symbol on the EMERG schemes.
 - o Switzerland, Belgium, and Germany use sometimes a warning symbol on the EMERG schemes.
 - Stuttgart uses symbols to describe the vehicles recommended on the EMERG schemes.
- VMS are never used for the end zone

T1.3 Guidelines for UVAR VMS

General recommendations

- Pictograms should be central to VMS use; text should be minimised.
- It must be ensured that the information is easily perceptible standardized pictograms that must reproduce as close as possible the ones used in common vertical signs.
- It must be ensured that the information is reliable, and up to date.
- Free text should be limited to the minimum (5-7 words).
- Local abbreviations and acronyms should be avoided.
- Bilingual messages should be used, when possible.
- Sometimes the use of additional information explaining the restriction can be valuable to help increase compliance.
- To avoid distraction, the VMS can also be switched off (or only displaying the hour) when the UVAR is not active.
- The VMS location should be such that drivers have the chance to safely react to the information being displayed.

T1.4 Demonstrators

T1.4.1 UVAR signage demonstrator - VMS

- The demonstrator aims to enable the harmonisation of VMS for selected UVARs.
- The representation in VMS was addressed in a real-life demonstration.
- Messages were draft based on the recommendation reports and a feedback loop with cities and organizations.
- The cities of Lisbon and Monza showed UVAR messages on their already installed VMS panels.



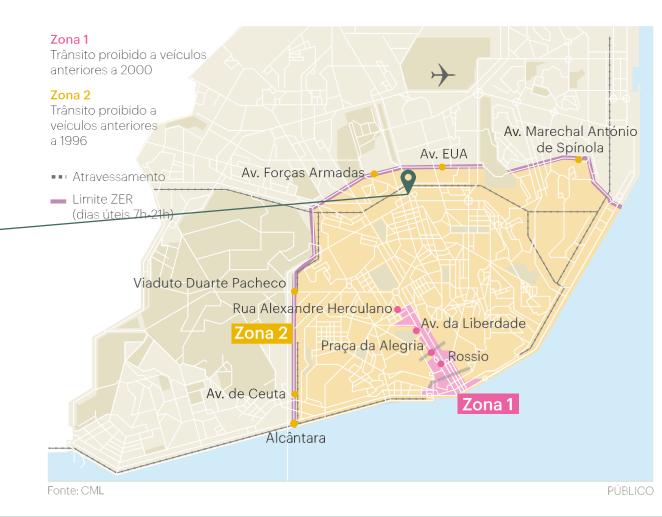


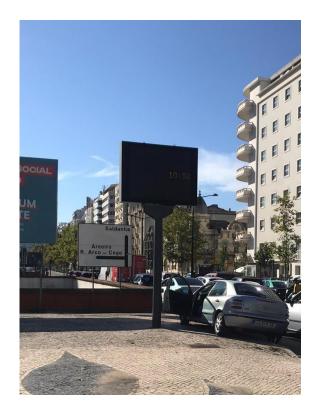
T1.4 Demonstrators

VMS demo in Lisbon



Zonas de emissões reduzidas em Lisboa











T1.4 Demonstrators *VMS demo in Lisbon*



T1.4 Demonstrators VMS demo in Monza

UVARs and VMS signage

Challenges and closing notes

- VMS was addressed in two main tasks:
 - 1) T1.3 focusing on research, collection of real examples, and defining guidelines
 - 2) T1.4 demonstrating real applications resulting from the recommendations set
- Lisbon and Monza showcased the real applications
- The panels' characteristics represented a challenge (limitations related to location, dimensions, and resolution)
- Regulations and standards are an obligation while recommendations serve as guidance for achieving a result with the higher quality possible