



UVAR Exchange

Demonstrating harmonised VMS:

Findings & recommendations & VMS demos Lisbon & Monza

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UVARs and VMS signage

Related activities and time planning

	2021					2022												2023					
	15.08	15.09	15.10	15.11	15.12	15.01	15.02	15.03	15.04	15.05	15.06	15.07	15.08	15.09	15.10	15.11	15.12	15.01					
Months:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					
T1 - Improvement of the information of the drivers in the vicinity of UVARs		[Dark blue bar spanning months 2 to 16]																					
1. Practical aspects of UVAR information provision		[Light purple bar spanning months 2 to 5]																					
2. Common European road signage for UVARs						[Light purple bar spanning months 6 to 10]																	
3. Guidelines for UVAR VMS							[Green bar spanning months 7 to 14]																
4. UVAR demonstrators																							

1st draft

Final version

T1.3 Guidelines for UVAR VMS

Collection of UVAR VMS

LEZ



London – UK



Paris - France

LTZ



Parma - Italy



Lecce - Italy

EMERG



Madrid – Spain



Stuttgart – Germany



Geneve - Switzerland

CS



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.
 - 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



Fonte: CML

PÚBLICO



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