

ASFINAG, Vienna

Start

14:00 on 19th November 2009

End

13:30 on 20th November 2009

Venue

Day 1:

ASFINAG, Wien 1st district

Rotenturmstrasse 5-9, Sitzungszimmer/Meeting room "Inzersdorf"

Travel instructions:

Nearest Underground station from "Austria Centre" is "Kaisermuehlen VIC". From there take U1 for "Reumannplatz". "Stephansplatz" is the 6th stop. Rotenturmstrasse branches off from Stephansplatz which is in the very centre of Vienna.

Day 2:

ASFINAG, Wien 23rd district

Klingerstrasse 10, Sitzungszimmer/Meeting room "02.103"

Travel instructions:

Easiest mode of travel: Taxi.

Public transport:

Suggestion 1: Nearest train station is "Wien Inzersdorf" of WLB (Wiener Lokalbahnen = "Badner Bahn" blue trains). Get a train from its terminal at Wien Oper (opposite of Hotel Bristol, 1st district) or change from Underground line U6 at "Philadelphiabruecke" to WLB trains for Baden. From "Wien Inzersdorf" walk from Anton Baumgartner-Strasse heading east, to Triester Strasse heading south to the first crossing, from there follow Sterngasse to the east, Klingerstraße branches off 2nd or 3rd to the south. Walking time of the last mile: about 10 minutes

Suggestion 2: Go by U1 to terminal station "Reumannplatz", change to bus 66A (Ettenreichgasse, Bussteig D) for Wien Liesing Bahnhof and get off at Sterngasse/Richard-Strauss-Strasse. From there walk to the west, Klingerstrasse branches off to the south. Walking time from the bus stop to ASFINAG about 8 minutes.

Objectives

The scope of the *EW ES4-IIID visual parameters workshop*:

- To focus on full matrix displays as the ones making possible design transference from and to a number of devices (in-vehicle, navigators, Internet, etc.)
- Bring perspectives from experts on different fields concerning perceptual, design, technical and legal issues related to full matrix displays (VMS)
- Envisaging present and future harmonisation (or harmonisable) trends

Agenda

- DAY 1 -

Time	Agenda Item		Lead/Speaker	Supporting Documents/Framing
14:00-14:15	Opening Welcome Introduction, scope of the workshop, agenda Conveniences, logistics		Peter Simlinger IIID Antonio Lucas University of Valencia	Draft agenda (this document)
14:15-14:45	<i>SESSION 1</i> <i>VMS design</i>	<i>VMS information structure, classifying information elements and the need of further research</i>	Peter Simlinger IIID	Freely programmable VMS allow the display of structured information. To not overstrain drivers, the number of elements of unequal perceptual and cognitive comprehensibility must stay within defined limits.
14:45-15:15	<i>and new technologies</i>	<i>Harmonizing graphical information on in-vehicle displays and VMS</i>	Theo Kamalski TOM-TOM	Real time information displays have reached a new stage with navigators (e.g., TOM-TOM). How do these systems elaborate and solve problems posed by animated graphics, size, resolution and the specific (official?) traffic signs used by them?
15:15-15:45	DISCUSSION: Professor Martin Krampen, a German semiotician expert on traffic signs said “Enlargements on the sign repertory are a result of sudden changes in the environment caused by sudden advances in technology” (krampen, 1983). How are advances in technology going to influence the development of the sign catalogue? How is the sign catalogue being integrated by new technologies?			
15:45-16:15	Coffee break			

16:15-16:45	<i>SESSION 2</i>	Legibility criteria, the smallest graphical detail and what it means for typeface and pictogram design	Stefan Egger IIID Michael Smuc Danube Univ. Krems	If the size of the smallest graphical details falls below 1 minute of arc (1 moa) it is no longer discriminable. For people with impaired eyesight the figure is up to 2 moa. Typefaces and pictograms must be designed accordingly.
16:45-17:15	<i>Perceptual and cognitive issues</i>	Notes on VMS design concerning comprehension: on mixing and meaning	Antonio Lucas University of Valencia	A description of different issues concerning design trends and design problems identified on the course of ES4 development
17:15-17:45	DISCUSSION: Legibility is a fundamental issue concerning VMS use. Visual acuity, legibility and driving speed determine the calculation of the number of information units is safe to display on VMS. Antonio Lucas, Univ. Valencia: "To my knowledge, studies done to solve this matter empirically were performed on the 1960s (see CIE, 1994) and applied to painted signs. Are such results still applicable to VMS? Where does the specific difference between painted vs. electronic signs lie with respect to visual acuity, legibility and speed? (i.e., to the calculation of information units that can be displayed on VMS). "			
17:45	End of day 1			

- DAY 2 -

Time	Agenda Item		Lead/Speaker	Supporting Documents/Framing
9:00-9:15	Summing up sessions 1 and 2		Peter Simlinger IIID Antonio Lucas University of Valencia	Draft agenda (this document)
9:15-9:45	<i>SESSION 3</i> <i>Issues on VMS design</i>	Visual acuity of the healthy eye	Prof. Wolfgang Radner	Information designed for people with impaired visual acuity requires signboards wider than a two lane motorway. Therefore: can we change from the requirements of “normal visual acuity” to the less demanding “visual acuity of the healthy eye”?
9:45-10:00	<p>DISCUSSION: We all want drivers to react appropriately to different situations. One of the main issues concerning danger warning and signs is distance. <i>Posted</i> danger warnings are normally placed near danger. VMS can show information concerning near but also far away dangers. On the last RE2 (UNECE’s WP.1) pictograms without red triangle are proposed for informing drivers of dangerous yet not immediate events. Classical danger warning pictograms are meant for near events (e.g., 4 km). This solution is applicable to all VMS the same.</p> <p>Compared to other alternatives (e.g., flashing lights), superimposing the red triangle on and off has the advantage of applicability (all VMS can do it). But, what is the goal here concerning the specific road situation (event, distance, danger)? Do we need it far or near? How can it improve the currently adopted rule (at least on RE.2)? And how the problem of obscuring the meaning of the pictogram temporary is <i>specifically</i> solved in the different danger warning signs? An additional problem involves the standardization of animation on graphic displays and this affects not only the flashing triangle, but also navigators (TOM-TOM) and video pictograms.</p>			
10:00-11:45	ASFINAG Tour and Coffee break			

10:45-11:15	<i>SESSION 3</i>	Alerting drivers: The flashing triangle on top of warning signs and rejected alternatives	Christoph Brugger IIID	On VMS it is possible to separate the sign that warns (the warning triangle) and the symbol that indicates what is warned for. No longer there is a need to reduce the size of the latter so that it fits into the warning triangle. It can be shown full size (> best comprehensibility) with superimposed flashing triangle, thus attracting utmost attention.
11:15-11:45	<i>Issues on VMS design</i>	The use of colours on VMS: advantages and disadvantages	Hans Remeijn Rijkswaterstaat-DVS	National administrations try with pragmatic approaches to signing. Given pros and cons: should or should not electronic signs parallel the available shapes and colours on the 1968 Convention? Why should potentially 'rich' devices (electronic) be restricted to two colours?
11:45-12:15	<i>(cont.)</i>	Technical feasibility	Wolfgang Ernst Swarco Futurit	A much needed intervention: are the suggested design trends and solutions technically feasible? How does the future look like considering industry perspectives?
12:15-12:45	DISCUSSION: The basic questions concerning design issues are: a) specific design features concerning signs, or structural elements of signs, b) the need to progress on the abstract character of displayed information (pictogram, alphanumeric), and on b) the information structures, the signing language and abstract codifications shown to users, d) the problem of the variety of VMS types with different display possibilities.			
12:45-13:00	<i>Conclusions</i>	The VMS Unit –on the need to adapt the 1968 Convention to present and coming times	Antonio Lucas University of Valencia	The VMS Unit is beginning a new program as an ad-hoc WP.1 group at UNECE level. An important restructure of the 1968 Convention could be proposed. How should the coming new technologies, perceptual and design issues be present there?
13:00-13:30	<i>of the workshop</i>	Summary and future prospects	Peter Simlinger Antonio Lucas	
13:30	End of day 2			