AIDE relations to guidelines and standards

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Overview

- **Conclusions from the Munich workshop on Naturalistic Driving Studies**
- **Relations to ISO/TC 22/SC 13/WG 8:**
  - Conclusions from the Milano Workshop on evaluation methods
  - Warnings integration/Priority
- **Relations to the European Statement of Principles (ESoP)**

Conclusions from the joint AIDE/HUMANIST workshop on Naturalistic Driving studies

- ND studies were considered as a supplement to accidentology.
- ND studies are a reasonable methodological approach in particular for explorative purposes.
- There might be a need to define standards or recommendations on methodological aspects of ND studies
- ND studies might inspire the development of new standards

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ISO/TC 22/SC 13/WG 8

Part 1 : Projects published by ISO

Work Item No	Project Title Project leader	PWI	NWI	WD	CD	DIS	FDIS	Standard
15005	Dialogue management principles			Under periodic review in 2007: see N582 + 583				Standard published July 2002
15006	Auditory information presentation				Under periodic review in 2007 Review open since 15 Oct 07			Standard published Oct. 2004
15007-1	Measurement of driver visual behaviour - Definitions & metrics			Under periodic review in 2007: see N584 + 585				Standard published March 2002
15007-2	Part 2 : Equipment and procedure				Under periodic review in 2007			TS published Dec 2001 conf. 2004
15008	Visual presentation of information							Standard published March 2003
17287	Suitability of TICS while driving							Standard published April 2003
16951	Criteria for determining priority of messages			Under periodic review in 2007: see N581				TS published March 2004
16352	MMI of warning systems in vehicles - a literature study							TR published Dec 2005

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Part 1 continued

Work item	Project title	PWI	NWI	WD	CD	DIS	FDIS	Standard
16673	Occlusion method to assess visual distraction	N 262 N 265	Oct.2002 NWI approved by TC 22 N 2347 WG 8 N 368	N 362 N 369	CD approved 2004	1st DIS 16673 April–Sep 05 2nd DIS 16673 March-May 06	Proof in Jan. 07	**Standard published April 2007**

Part 2 : Projects completed by WG 8, not yet published

Work item	Project title	PWI	NWI	WD	CD	DIS	FDIS	Standard
26022	Simulated lane-change test - LCT D. Weir	Res. 224 20th meeting Nov. 2003	Sept.2005 NWI approved see TC22 N2557	N 533 etc	SC13 N828 Jan-Apr.07 Approved C: F, J, US	**DIS 26022 published 01 Nov. 07**		

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Part 3 : Projects at WG8 stage

Work item	Project title	PWI	NWI	WD	CD	DIS	FDIS	Standard
PWI	Warnings integration M. Akamatsu	Res. 182 17th meeting June 2002 N 491	NWI under ballot Oct.07 see N587					
PWI	Driver characteristics	Res. 243 22nd meeting Oct. 2004 N 490		Preliminary work item closed see Munich meeting – Resolution 293				
WI 15008	Visual presentation of information [Revision of ISO 15008 : 2003] W. Koenig	Res. 244 22nd meeting Oct. 2004 N 487	NWI approved Oct.07 see N586	at 28th meeting in Soesterberg in Oct.07 Draft approved for direct DIS publication				
PWI	Calibration task K. Bengler	Res. 259 23rd meeting April 2005						

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ISO/TC 22/SC 13/WG 8: Conclusions from the Milano workshop on evaluation methods

- Initiation of a discussion on Peripheral Detection Task (PDT) as a NWI for WG 8

- Visual Demand Measurement (VDM) Tool as an potential input for the update of 15007-1 and -2 (Measurement of visual behavior)

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ISO/TS 16951: 2004 ”Priority”

- Under periodic review since 2007

- N 581 Systematic review: *”The state of the art has progressed and the topic should be revisited. There is enough new information from AIDE and other research that this TS should be revisited and updated. The AIDE programm has apparently developed a new method for classifying and potentially prioritizing warnings that should be considered.”* (comment from ANSI, USA)

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Review of available guidelines & standards

Deliverable N. 4.3.1 **Dissemination Level PU** **Contract N. IST-1-507674-IP**

Title	Source	Type / Status	HMI scope	Importance for AIDE	Availability	Access to document	Format	Comment
A European Statement of Principles on Human Interface (CEC)	Commission of the European Communities (2000). Annex to Commission Recommendation of 21 December 1999 on safe and efficient in-vehicle information and communication systems: A European statement of principles on human machine interface. Official Journal of the European Communities L19, 25.1.2000, p. 64 ff, Brussels, Belgium: European Union.	recommendation	HMI design and message prioritisation	high	public	Official Journal of the European Communities L19, p. 64 ff, 25.1.2000	pdf	chapter 3.1.1
Guidelines for the design and installation of information and communication systems in motor vehicles (UN/ECE)	UN/ECE (1998). Annex 16 to consolitated resolution on the construction of vehicles (R. E. 3): Guidelines for the design and installation of information and communication systems in motor vehicles. UNECE TRANS/WP.29/78/Rev.1/Amend.1, 3 September 1998	recommendation	HMI design and message prioritisation	medium	public	http://www.unece.org/trans/main/wp29/wp29wgs/wp29gen/wp29re3.html	pdf	chapter 3.1.2
Suggested human factors design guidelines for driver information systems (UMTRI)	Green, P., Levison, W., Paelke, G., and Serafin, C. (1993). Preliminary Human Factors Guidelines for Driver Information Systems (Technical Report UMTRI-93-21), Ann Arbor, MI: The University of Michigan Transportation Research Institute (also published as FHWA-RD-94-087, McLean, VA: U.S. Department of Transportation, Federal Highway Administration, December, 1995).	recommendation	HMI design and message prioritisation	medium	public	http://www.umich.edu/~driving/guidelines.html	pdf	chapter 3.1.3

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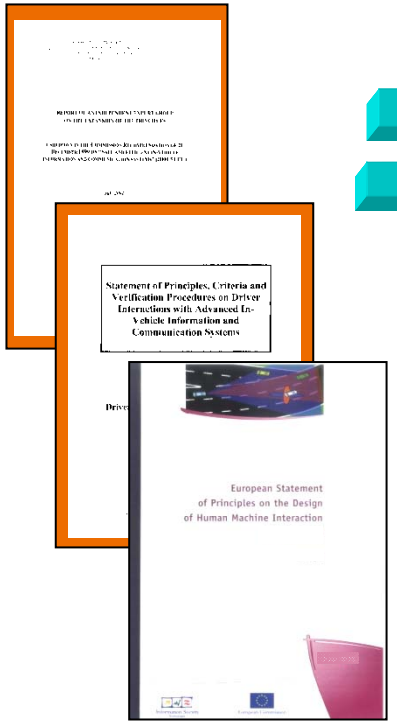

- Design Goals
  - 5 overall goals
- Design Principles
  - For HMI of In-vehicle Information Systems
- Recommendations for Use
  - Service providers, Point of Sale, Hire Companies, Employers, Drivers
- Implementation

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Future perspectives:

Recommendations of the eSafety Conference

1. Voluntary self-commitments by addresees are the preferred option for implementation.

2. Safe integration of ND is a key issue.

3. Equal and balanced participation of ALL stakeholders in the voluntary self-commitments.

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Future perspectives:

Recommendations of the eSafety Conference

4. There is a need for measures to prevent manipulation and misuse.

5. New update based on current experience with the ESoP.

6. Scope of the ESoP should be reconsidered when new update is made.

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Interactions between ESoP and the AIDE project:

– ESoP I was a starting point of the definition of workpackages and activities on method development

– Active support of the eSafety WG HMI and the ESoP Development Group

– Dissemination Platform for ESoP II

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Thank you for your attention!