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Short CONTENT OF LECTURES AND CV OF SPEAKERS AND AFFILIATIONS

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Standards for ITS and their contributions to safety

In-Vehicle Information and communication Systems (IVIS) as well as Advanced Driver Assistance Systems (ADAS) are becoming more and more a standard equipment in modern cars. Despite of their obvious benefits there are concerns about risks arising e.g. from potential distraction and the additional workload caused by these systems when used while driving. Thereby the human-centred design of the Human-Machine-Interface (HMI) is unequivocally acknowledged as the key factor in balancing the demands for increasing functionality with the already existing workload imposed on the driver by the primary task of driving. This development also constitutes a challenge for activities in the area of international standardisation where in recent years several endeavours have been made to support good design and thereby contributing to usability and safety of ITS in modern cars. The major aim of the talk is to give an overview over the basic principles of standardisation and to highlight some recent developments on the level of ISO (in particular ISO/TC 22/SC 13/WG 8) with a special focus on standards for HMI.

Christhard Gelu was born in 1963, studied psychology at the University of Münster to degree level in 1990. After working as a research scientist at the University of Münster and the Chemnitz University of Technology he took his PhD in psychology in 1996. Since the end of 1998 he is senior research scientist at the Federal Highway Research Institute (BAST), presently Department “Automotive Engineering”, Section “Vehicle Safety Evaluation, Driver Assistance Systems”. Main topics of his work are ergonomics and human factors evaluations of In-vehicle Information Systems/Advanced Driver Assistance Systems. Moreover he is involved in several national and European projects and is a member of standardisation working groups at the national and international level (ISO/CEN/DIN-FAKRA).

Federal Highway Research Institute (BAST), Germany

The Federal Highway Research Institute (BAST) is a technical and scientific institute responsible to the Federal Ministry of Transport. BAST began its research work in the field of highway construction in 1951. In 1965 the activities of the BAST were extended beyond the traditional field of highway construction to also include highway capacity and safety. In 1970 the Federal Parliament nominated BAST as the central accident research centre. The reunification of Germany 1990 brought about an increase in BAST's responsibilities. BAST acts as consulting agency of the Federal Ministry of Transport on technical matters and transport policy and plays a leading role in the formulation of specifications and standards.

Staff research is conducted in fields of special interest. BAST also acts as consultant, conducts laboratory and field investigations and prepares expert reports. To limited extent, this also applies to Third World countries. In most of its tasks BAST collaborates with other research institutions. It has close contacts with the Road and Transport Research Association.