



IRDES

Proceedings of the second webinar

Deliverable Nr 5.2

November 2011



Università degli Studi di Firenze (UNIFI, Project
Coordinator)



ÖFPZ Arsenal GmbH (AIT)

CHALMERS

Chalmers University of Technology
(CHALMERS)



ANAS S.p.A. (ANAS)



Institut français des sciences et technologies
des transports, de l'aménagement et des
réseaux (IFSTTAR)

Project Nr. 823176

Project acronym: IRDES

Project title:

Improving Roadside Design to Forgive Human Errors

Deliverable Nr 5.2 – Proceedings of the second webinar

Due date of deliverable: 30.11.2011

Actual submission date: 30.11.2011

Last revision date: 31.01.2012

Start date of project: 15.09.2009

End date of project: 30.11.2011

Author(s):

Yann Goyat, IFSTTAR, France

Helen Fagerlind, CHALMERS, Sweden

Peter Saleh, AIT, Austria

Francesca La Torre, UNIFI, Italy

Version: 2.0

Executive summary

Short for **web-based seminar**, a webinar is a workshop that is transmitted over the web.

This second webinar was aimed at presenting the two last deliverables of the IRDES Project and also to propose an interactive discussion on the results. It was opened to road laboratories, authorities, operators (including toll motorway operators) and owners, road users (fleet operators), and governmental organisations that are dealing with forgiving roadsides.

Speakers were in different places (in France, Italy, ...) and the attendees participated from their own offices with a combined phone-web connection tool.

This document describes the webinar organization and attendees, summarises the presentations offered during the webinar and the discussion that occurred with the attendees on the different topics.

The full presentations offered at the webinar are included at the end of the document.

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1 Introduction

The goal of the Webinar was to present final results of the project IRDES to the “potential clients”: road operators and managers.

4 deliverables will be done during IRDES project:

- D1: State of the art - existing treatments for the design of forgiving roadsides;
- D2: Practical guide for the assessment of treatment effectiveness;
- D3: New forgiving roadside design guide;
- D4: European survey about roadside treatment.

In the Webinar, speakers showed presentations (cf. §4) of the D2 and D3 deliverables. The presentations are uploaded in a ftp site and the link and password was sent to the attendees of the webinar. Questions on the presentations can be asked directly to the presenters (emails are included) or the IRDES coordinator (francesca.latorre@unifi.it).

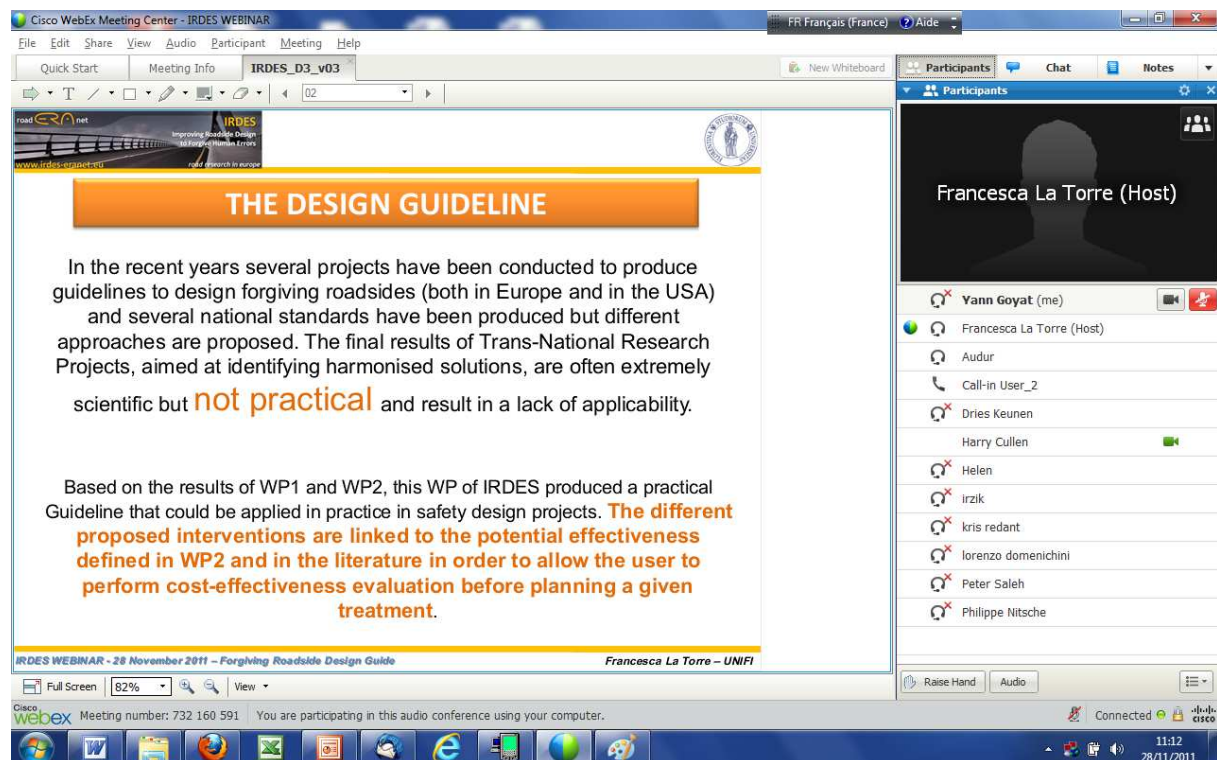


Figure 1: screen example of the webinar. On the left, the slides and on the right the attendees connected.

2 Attendees

11 experts attended the webinar, 4 speakers and 7 in web connection, from 8 countries (Austria, Belgium, France, Germany, Iceland, Ireland, Italy, and Sweden) :

Francesca LA TORRE (University of Florence, ITALY)

Lorenzo DOMENICHINI (University of Florence, ITALY)

Yann GOYAT (IFSTTAR, FRANCE)

Helen FAGERLIND (Chalmers University of Technology, SWEDEN)

Peter SALEH (AIT, AUSTRIA)

Philippe NITSCHKE (AIT, AUSTRIA)

Harry CULLEN (National Roads Authority, IRELAND)

Audur Thora ARNADOTTIR (Public Roads Administration, ICELAND)

Kris REDANT (Belgian Road Research Centre, BELGIUM)

Dries KEUNEN (Agency for Road and Traffic, BELGIUM)

Marco IRZIC (BASt, GERMANY)

3 Agenda

10:00-10:10	Welcome
10:10-10:20	Introduction of the ERANET Road call
10:20-10:35	Presentation of IRDES project
10:35-11:15	Presentation of 2 guides (Guide for the Assessment of treatment Effectiveness, Forging Roadside Design Guide)
11:15-11:30	Interactive discussion, via internet

4 Interactive presentations

4.1 *Presentation n°1 : Guide for the assessment of treatment effectiveness (Helen Fagerlind, Chalmers)*

The aim of this deliverable is to present the results of Work Package 2, which include four studies on different approaches to analyse the effectiveness of identified treatments which are variation of shoulder width; protection of barrier terminals; implementation of grooved rumble strips and treatments in curves.

To assess the effectiveness of shoulder width extension a tool designed to analyse vehicle speeds and trajectories was evaluated. The tool, named ODT (Observatory of Trajectories), enables to measure vehicle movements. Due to delays in the modifications of the road only measurement before the modifications could be conducted and analysed. Some issues regarding the amount of data collected were found and modifications to the method are needed.

In the study assessing the safety effects of unprotected barriers terminals on secondary rural roads the development of a Crash Modification Factor was derived. The method is based on cross sectional analysis of part of the Arezzo Prince road network in Italy. The procedure proposed could be applied to the evaluation of different roadside features.

To assess the effectiveness of the implementation of grooved rumble strips on dual carriageways comparisons between treated and non-treated roads were evaluated by statistical methods. Accident data from several years with and without treatment are needed to perform the analysis.

The assessment of the effectiveness of treatments in curves was evaluated by means of a Vehicle-Infrastructure Interaction Simulation tool. Case studies related to two accident spots in curves have been simulated and the effect of different possible treatments has been assessed.

4.2 Presentation n°2 : Forgiving Roadside Design guideline (Francesca La Torre, UNIFI)

In the recent years several projects have been conducted to produce guidelines to design forgiving roadsides (both in Europe and in the USA) and several national standards have been produced but different approaches are proposed. The final results of Trans-National Research Projects, aimed at identifying harmonised solutions, are often extremely not practical scientific but and result in a lack of applicability.

Based on the results of the other deliverables, this document is a practical Guideline that could be applied in practice in safety design projects. The different proposed interventions are linked to the potential effectiveness defined in the guide for the assessment of treatment effectiveness (deliverable D2) and in the literature in order to allow the user to perform cost-effectiveness evaluation before planning a given treatment.

One of the issues has been the harmonisation of different existing standards or the identification of underlying reasons for different existing solutions for the same treatments in order to allow the user to select the optimal treatment and to properly assess its effectiveness.

The roadside features for which the IRDES design guideline has been developed are:

- Barrier terminals
- Forgiving support structures for road equipment
- Shoulder rumble strips
- Shoulder width.

Each feature is analysed in a separate section of the guideline providing:

- Introduction
- Design criteria;
- Assessment of effectiveness;
- Case studies/Examples;
- Key references.