ERASER
Evaluations to Realise a common Approach to S-E European Roads

Joint Meeting Budapest 2010
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Introduction

• ERASER: Evaluations to Realise a common Approach to Self-Explaining European Roads

• Coordinator: SWOV Institute for Road Safety Research
• Partner 2: Dresden University of Technology, TUD
• Partner 3: Kuratorium für Verkehrssicherheit, KfV
• Partner 4: Transport Research Laboratory, TRL
• Partner 5: Lund University

• Planned duration: 01/01/2010 – 31/12/2011
• 5 workpackages
Introduction

• Self explaining roads:
  ▪ what & why?

• Self explaining ≠ self enforcing
Objectives

- ERA-Net Roads, Call: “Safety at the heart of road design”:
  - self-explaining roads (ERASER, SPACE, RISMET)
  - forgiving roadsides (IRDES, EurSI, RISMET)
- Objective C of the Guide for Applicants (GfA):
  - “Comparison and implementation of approaches: self-explaining roads in theory and practice”.
- Objective stated in DoW:
  - bridge the gap between science & practice
- Intended result:
  - Decision Support Tool (DST) for road authorities: checklist & advice
Outline of ERASER

• SER approaches
  ▪ relevant parameters

• Categorisation by users
  ▪ recognisable parameters

• Modelling costs and benefits
  ▪ Decision Support Tool

• Check
  ▪ usable DST

• Dissemination
  ▪ spread the good news!
Structure of the project

Management

State of the art → Pilot: road user → Pilot: road authorities → Feasibility check

Dissemination
WP1 State-of-the-art (TUD)

- SER approaches, relevant parameters
  - Literature review Serves to derive criteria (safety relevant and relevant for SER)
  - Survey User Group, networks (p.e. FERSI)
- Ranking of these criteria
  - According to their safety relevance and applicability (input from WP4)
  - Definition of safe ranges
- Evaluation of existing SER approaches
- Deliverable:
  - Overview and evaluation of SER-approaches in Europe.
WP2: Road user pilot

- Identify relevant behaviour based design elements
- Recognisable categories and parameters
  - Lab studies (TUD/SWOV):
    - photo-experiments
  - Field studies (LUND)
    - Video analysis
- Lund (0.8), TUD (1), SWOV (1)
- Deliverable:
  - Road user pilots in different European countries.
    March 2011
Based on previous work by TU Dresden & SWOV

- Relevant concepts for SER:
  - ‘recognisability’ and ‘credibility’

- Features that can influence the credibility of the speed limit:
  - the road width;
  - the presence or absence of a bend;
  - the view ahead;
  - the view to the right;
  - the clarity of the situation;
  - the presence or absence of buildings;
  - the presence or absence of trees on the right hand side
WP3: Road authorities pilot (SWOV)

- Road authority DST - Builds on SWOV-tool
  - safe speeds and credible limits (SACRED)
- Impact assessment (e.g. on speed) of relevant parameters:
  - Cost Benefit Analysis
- DST:
  - assess credibility (evaluation), advice for improvements
- Road authorities pilots:
  - partners countries
- Deliverable:
  - Road authorities pilots in different European countries.
  - Tool to improve the value of self explaining (quantifiable)
SaCred Algorithm: 3 parts

1. **an input segment** in which data on the road, surroundings, speeds, traffic volumes, traffic characteristics, crashes, enforcement activities, etc. is gathered;

2. **a diagnosis segment** in which an inventory is made of problems and possible solutions, based on a number of logical and well-founded steps;

3. **an output segment** that makes recommendations to the user, based on the decision-heuristics. This involves a comparison between various possible solutions and the necessary measures.
WP4: Feasibility check by users (TRL)

- Focus groups of road authorities (appr. 5 per country)
  - Number of solutions presented, scored and discussed
  - Recommendations for improvement of DST
- ‘transnational’ conclusions

- Deliverable
  - Results of feasibility check.
Approach

• **Objective:**
  - Assess the feasibility of the outputs of earlier work
  - Refine these prior to dissemination (WP 5)

• **Work Package 4 will ensure that:**
  - Solutions are as user friendly as possible for authorities
  - The results are appropriate for a wide range of end users
  - The product is effective in a broad range of scenarios
  - Uptake is good by involving road authorities in the development and refinement of the materials
PEB input

- Each partner will need to identify at least 5 representatives from road authorities in their country with help from PEB
- Programme Executive Board should provide the national authority representative(s)
- CEDR groups: can we combine them with a focus group session (September 2011)?
WP5: Dissemination

- Spread the good news!
- “passive”: website, ‘kit’, journals
- “active”: seminars and workshops (TRA, FERSI, …)
- “on demand”: consultancy (post ERASER)

- Deliverable
  - Dissemination kit.
Timeline

- January 2010: Kickoff
- June 2010: D. State of the Art
- December 2010: D. Website
- March 2011: D. Road user pilot
- November 2011: D. Road authorities pilot & D. Feasability check
- December 2011: D. Dissemination kit