
Tunniste/teema: 3.04

Projektin nimi: VRUITS - Improving the Safety and Mobility of Vulnerable Road Users through

ITS applications

Vastuutaho/vastuuhenkilö: VTT/Johan Scholliers

Yhteistyöosapuolet: ECORYS, Luleå Technical University, FACTUM OG, CIDAUT, SICE, TNO, KITE

solutions, Loughborough University, POLIS, NXP, PEEK Traffic

Liitynnät (ml. ohjelmat): EC FP7/TRANSPORT, TransSmart

Aikataulu: 4.2013-3.2016

Budjetti: Noin 4. M€, VTT:n osuus 800 k€

Rahoittajat: EC

Päivitys: 1.2.2014

Kommentit: Käynnissä, tieteellisiä ja teknisiä julkaisuja esityksiä alan päätapahtumissa (ITS

Europe 2014, TRA2014).

Tiivistelmä

In the past, Intelligent Transport Systems (ITS) success has been achieved primarily though equipment of the vehicle and infrastructure. The focus of these ITS has been on clean, safe and efficient mobility for vehicles. The Vulnerable Road User (VRU) has reaped fewer benefits of the ITS developments. While some projects have considered VRUs from a safety viewpoint, they often aimed to avoid or mitigate accidents with VRUs by equipping the vehicle and infrastructure. In the vehicle - infrastructure - human approach of ITS research, VRUs and their needs are not an active part of the "human" element in the ITS approach. What is needed? The VRU must become an active, integrated element in the ITS, addressing safety, mobility and travel comfort needs of VRUs. The VRUITS project will develop an architecture for integrating the VRUs into cooperative ITS. VRUITS will recommend ITS that meet the needs of VRUs. Ex-ante and expost assessments will form input to these recommendations. Assessment methodologies will be modified to account for specific user behaviour of VRUs. Specifications for ITS applications will be developed, culled from focus group assessments per VRU group. VRUITS will recommend best practices to address HMI development for VRUs. Field trials in the Netherlands and Spain for a select number of applications will take place. VRUITS will recommend which actions for the EC and for other stakeholders are necessary to deploy the systems which have positive effects, and mitigate possible negative effects.

VRUITS will fulfill the following objectives:

- 1. Assess societal impacts of selected ITS, and provide recommendations for policy and industry regarding ITS in order to improve the safety andmobility of VRUs;
- 2. Provide evidence-based recommended practices on how VRU can be integrated in Intelligent Transport Systems and on how HMI designs can be adapted to meet the needs of VRUs, and test these recommendations in field trials.