

## SAFECYCLE...

... is an EU-funded project that investigates how intelligent transport systems (ITS) and ICT applications can be used to increase the safety of cyclists in Europe.

... published recommendations for standardization, harmonization and a research agenda on the project website.

... recently presented the outcomes so far at VeloCity in Vancouver, The Cycling and Society Annual Symposium UK in London, World Cycling Research Forum in Enschede, CIVINET in Genova, ITS World Congress in Vienna, Verkeerskunde Congress in Den Bosch and at ICTC in Hasselt.

... is going to present the outcomes at the Transportation Research Board in Washington and at BICY in Prague.

... published the impact assessment report on the project website.

... has more than 300 members in the SAFECYCLE LinkedIn group (40 different nationalities) to discuss the project, preliminary results and related topics. You can join the discussion!

... has witnessed that SAVECAP, one of the eleven most promising applications, was shown as a news item on the six o'clock news on television.

... organised a workshop in the Czech Republic to discuss the most promising applications and recommendations for future research and deployment.

... held the final conference on the 25<sup>th</sup> October 2012 in Vienna. Information about the final conference is available on the project website.

## Project partners...

Mobycon, The Netherlands  
IMOB, Belgium  
CTL, Italy  
CDV, Czech Republic

## Final conference in Vienna

**On October 25 2012 the final SAFECYCLE conference took place in Vienna, parallel to the ITS World Congress. In total 35 participants from 12 different countries participated in the conference.**



The conference started with a presentation by Andrea Weninger about VeloCity 2013 in Vienna. Thereafter moderator Ronald Jorna introduced the project in general. Marjolein de Jong presented an overview of the intelligent cycling applications found, followed by a presentation by Antonino Tripodi about the impact assessment of the eleven most promising applications. After a short break Zbynek Sperat introduced the rules for small group discussions to the participants. The groups were asked to rank more than 20 intelligent applications from most promising to least promising. In the end the bicycle route planner Gent and bicycle braking light came out as the most promising e-safety applications. After the group discussion Ronald Jorna introduced statements about three topics to the participants. The first statement was about standardisation. It led to a fruitful discussion. On the one hand, it

was said that standardization takes a lot of time, often eight to ten years. On the other hand, participants stated that if you want the (car) industry to invest in intelligent applications, you need standards, because the industry needs some perspective in order to invest. The second statement was about future research and demonstrations. One important notion is that there is not a lot of research available about intelligent applications for cyclists. There is also little research available about how and why cycling accidents happen. So it is hard to conclude which intelligent applications for cycling are the most promising related to improving the safety of cyclists. The final statement was about future cycling and ITS policy. More data collection is needed to evaluate applications and put ITS and cycling forward. It is also important to know where there is cycling potential and why you want to invest in certain applications.

The conference was concluded with a cycling tour in the city of Vienna. Two Austrian cycling experts showed intelligent applications and the cycling infrastructure in the city.

Visit [www.safecycle.eu/section/conference/](http://www.safecycle.eu/section/conference/) for more information



## Impact assessment

The objective of SAFECYCLE is to find out if intelligent applications can be used to increase the safety of cyclists. The impact assessment deliverable describes the project team's Cost Benefit analysis. For the most promising eleven applications the analysis was made for the following countries: the Netherlands, Belgium, Italy and Czech Republic. These countries were chosen because the project partners are located in these countries and because these countries represent a good mix of cycling experience. Data was collected on a European level, so that data was comparable for all four countries.

The outcomes of the Cost Benefit analysis are hinting towards the following conclusions:

- ITS applications that require installations in all passenger cars result in a very low Benefit Cost ratio.
- The same applies for ITS applications that need to be installed in trucks. On a European-wide basis this requires an investment of hundreds of millions of euros.

- For the systems to be installed on the bicycles, two out of three seem to have a Benefit Cost ratio higher than one. These are relatively cheap applications.
  - The infrastructure-based systems show a mixed picture, even per country.
  - It seems that Internet or nomadic applications have the highest Benefit Cost ratio. With relatively little investment many potential users can be reached, which seems to result in a very positive Benefit Cost ratio.
- It should be stressed that the conclusions are based on the data available and on generalisation of impacts of safety measures with similar objectives. It is highly recommended to carry out demonstrations and measure the observed impacts in large-scale Field Operational Tests. It is also recommended to conduct in-depth analyses of accidents to develop better estimations of safety effects of intelligent cycling applications.

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### From the SAFECYCLE project co-ordinator

Per 1 December 2012 the SAFECYCLE project has come to an end. In the past 18 months we did a lot of research in the world of ITS, cycling and e-safety. It has learned us that there is a multitude of e-safety applications already existing, and even more ideas in the area of co-operative systems. The next challenge is to incorporate the topic of ITS for cycling in the new Horizon 2020 programme with a focus on cooperative systems including cyclists.

**Ronald Jorna, Mobycon**

## Recommendations

Ministries in the EU (25) and Norway and Switzerland were asked to fill in a questionnaire about the potential of eleven intelligent cycling applications. Eleven Ministries returned the questionnaire. One of the questions was to rank the applications from 1 (no potential) to 5 (a lot of potential). An active blind spot system for trucks (LEXGUARD) was selected as the application with the most potential, followed by SaveCap, an airbag on the windscreen of cars to mitigate the effects of car-bicycle accidents. The ranking of potentially promising applications differs between Ministries in Western and Eastern Europe, especially with respect to applications related to the visibility of cyclists. What's more, in some countries certain applications need approval or are forbidden under current regulations.

Based on the previous SAFECYCLE deliverables, input from Ministries and experts recommendations for standardization and future development were formulated. In this newsletter we present a selection of these recommendations:

- Standardization: the concept of active communication bike-to-car and bike-to-infrastructure has to be included in the concept of cooperative systems that is already standardized.
- Harmonization: analysis of barriers (and ways to overcome them) to deployment and use of e-safety applications for bicycles.

Can other use of ICT and ITS in cycling (e.g. theft protection, bike sharing) speed up the introduction and harmonization of ICT for safety of cyclists.

- Deployment: transfer of experience and know-how. Cooperation with local authorities and application developers to implement e-safety applications that gave good results in other cities or areas.
- Cyclists in cooperative systems: cost-benefit analysis of the incorporation of the cyclists in cooperative systems. With increasing importance of cooperative systems in motor vehicles bicycles cannot be

forgotten. So far the bicycle is not part of the cooperative systems and can easily be overlooked.

- Knowledge and information: it can be recommended to set the rules in that way that a SAFECYCLE project - version 2.0 could have opportunity to be launched at the year 2014 (start of Horizon 2020), i.e. a project focusing on ICT and ITS in relation to cycling. It is possible to go for a wider scope, including other topics than safety of cyclists.

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