Beter Benutten

Connecting Mobility

DITCM
Innovations

The development of use cases by the Dutch national ITS Round Tables

PRIORITY IS BASED ON ROLLING OUT ITS IN THE NETHERLANDS

INFORMATION FOR GOVERNMENTAL AUTHORITIES AND MARKET PLAYERS

What are the ITS round tables?

Since March 2015, DITCM Innovations has been organizing national ITS "round tables." As a general definition, a round table is a form of discussion where participants agree on a specific topic to discuss and debate. However, the ITS round tables go beyond just discussing smart mobility topics and issues and are rather work groups that aim to deliver concrete results. They have been organized by different topics relevant to the implementation and up-scaling of intelligent transportation systems (ITS) in the Netherlands. At the moment, these topics are: human behavior, cooperative technologies, international policy, effect studies, legal, security, Dutch profiles and automated driving. A round table dedicated to deployment will begin in 2016.

Participants from industry and government are invited to take part in these meetings and the ultimate goal is to allow these stakeholders – in conjunction with experts – to determine the standards for ITS and smart mobility projects.

The ITS round tables examine issues such as:

➜ What agreements should we make about the architecture of new driving systems to ensure that all new systems will eventually fit together?
➜ In addition to the cooperative ITS (C-ITS) standards currently in force in Europe, what agreements should we make in the Netherlands?
➜ What agreements, guidelines and recommendations should we implement in respect to the user aspects of new systems?
➜ How do we ensure that systems are secure against cybercrime and that our privacy isn't violated?
➜ Can we monitor and evaluate the effects of the new systems in a consistent way and can we already begin to predict the effects of up-scaling on a national level?

Why are we using use cases to organize the work of the round tables?

The ITS round tables are divided by topic but each group's projects and discussions are relevant to the work of the other groups. In other words, each group is working on issues that are important and applicable to all ITS projects. So, how do we make sure there's coherence between these groups and that their work delivers concrete results that will translate to the real world of ITS? The best way to do this is to link the work of the round tables to each other by having them work on specific ITS applications. The technical and harmonized descriptions we call *use cases*.

First of all, let's define *use case*. A use case is simply a method for identifying, clarifying and organizing system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. It consists of a group of elements that can be used together in a way that will have an effect larger than the sum of the separate elements combined. The use case should contain all system activities that have significance to the users. A use case can be thought of as a collection of possible scenarios related to a particular goal.

The *Dutch Profiles* round table is the group that determines our ITS use cases. Stakeholders from industry and government select the ones that should be given priority and should be implemented first in the deployment of ITS in the Netherlands. All of the round tables have adopted these use cases and they from the common theme that links the round tables.

Overview use cases

This brochure provides an overview of the prioritized ITS use cases and proposed dates when the guidelines for these applications, preconditions or instruments can be expected from the round tables. This use case list is related to Dutch projects and international developments. An overview of these projects can be found on the Connecting Mobility's website (www.connectingmobility.nl). This overview also indicates the extent to which these projects (and hence indirectly the use cases), contribute to the transition to smart mobility systems.

Living document

The information in this document details the situation in the autumn of 2015. However, the idea is that this summary of use cases is a living document that will be regularly updated with new insights. (The latest version is always available on the DITCM website under the tab 'round tables'.) The goal of this document is to keep round table participants and other stakeholders informed on the work of each round table and its timetable. The schedule extends to the end of 2016.

Expected use cases for the Netherlands

The list of use cases has come from five sources where several applications have already been identified:

- ➜ Amsterdam Group Day One services for V2V and I2V
- ➜ The use cases identified in "DITCM Architecture v1.0"
- ➜ The use cases from the report "Overview of standards for first deployment of ITS"
- ➜ The ECo-AT use cases. ECo-AT is the project from the Austrian part of the ITS Corridor.
- ➜ The use cases put forward by the Beter Benutten follow-up program ITS

The use cases are divided into four categories: *Highways, Cities, Positioning and Data and Autonomous driving*. In addition, we've indicated whether the case use will use 3/4G or **ITS-G5 (IEEE 802.11p / Wi-Fi p)**, or both. That information is barely visible to the end-user but it's relevant for implementation duration and technical specifications.

What will the round tables deliver in 2015 regarding the use cases?

Generally, in 2015 the round table have delivered the following regarding the use cases:

- ➜ Standardization table: Dutch Profiles for three prioritized use cases
- ➜ Architecture table: Reference architecture, worked out for three use cases
- ➜ Security table: Risk reduction overview for three use cases
- ➜ Legal table: Scan of the legal impact for the use cases
- ➜ Human Behavior: Knowledge agenda, encyclopedia/standard indicators linked to use cases
- ➜ Effects: Practical methods 'evaluation by doing', tested on three use cases

For more detailed information on the deliverables of the round tables in 2015, please refer to the document "Round Table Results for 2015" (currently only available in Dutch.) This document will be published soon on DITCM's website.

Up-scaling in 2016 and beyond

In the coming years, the assumption is that up-scaling will take place with the introduction of more applications, more users (higher penetration), more regions and more roads making use of smart mobility systems. Market and government parties give priority to the use cases based on planned projects and developments.
In the attachment "Prioritizing and Planning" the planning is visualized according to the latest status.

More information?

If you'd like to know more, you're invited to participate in the national ITS round tables or you can contact us at info@DITCM.eu

For more information about projects or the national round tables, visit www.DITCM.eu, www.connecting.mobility.nl or www.beterbenutten.nl.