C-ITS Deployment and Evaluation Workshop Summary

Scope and program

The European ITS Platform (EU EIP) and the C-Roads Platform collaborate for mutual benefits on preparing the deployment of interoperable C-ITS services and the best integration of C-ITS with the current ITS deployment. Both platforms jointly organised the C-ITS deployment and evaluation workshop on 05./06.11.2019 at ENGIE premises in Brussels. The C-ITS workshop serves as a practical milestone and enabler of further actions, following the collaboration note signed by both platforms in 2019. It also marks a successful evolution from the November 2017 C-ITS workshop at INEA premises where half of the pilots were in infancy days (C-Roads enlargement from eight to sixteen European states also in November 2017).

The program of the first day – co-organised by C-Roads Working Group 1 on Organisational Issues and EU EIP Sub-Activity 4.4 on C-ITS services deployment support – focused on organisational issues of C-ITS deployment. The overall objective aimed at consolidating the perspective of actors involved in real-life C-ITS deployments, building on feed-back from a "learning by doing" process supporting identification of good / better practices and effective experience sharing. Main topics of the workshop corresponded to the key themes of the C-Roads survey – driven by its WG 1 on Organisational Issues – for which responses were gathered from most C-Roads pilots upfront the workshop. Additional suggestions for presentation and discussion were collected from participants registering for the workshop. The main topics of interest were reflected in the program sessions:

- Policy and strategy evolution for a harmonised C-ITS deployment in Europe,
- Data Privacy and General Data Protection Regulation (GDPR),
- C-ITS ecosystem and deployment business models and
- C-ITS operational aspects.

The program of the second day focused on evaluation and assessment topics which are the scope of C-Roads Working Group 3. The objective was to share and compare evaluation approaches, best practices and evaluation results among partners and with external stakeholders. The aim was to gather experts, researchers and stakeholders dealing with the issue of C-ITS impact assessment, to increase the awareness and the effectiveness of the activities of evaluation and assessment. During the workshop the approaches defined in C-Roads Evaluation and Assessment Plan were presented and shared.

Key figures and impressions

The workshop in Brussels attracted more than 100 participants from C-ITS pilots and evaluation activities around Europe, including delegates from public authorities and European services, industry, research and universities. More than 40 speakers presented project results and pilot status, discussed current deployment issues and moderated through the different sessions.

This input provided broad insight on C-ITS being at the brink of deployment in Europe. On the first day the interim results of the C-Roads questionnaire on organisational issues embraced the different sessions. The presentation input was complemented by lively debates where presenters/panellists interacted with the audience. Program, presentations and minutes from the workshop are accessible from the EU EIP website [as well as the C-Roads website], see below for link[s].

While the contribution of EU EIP and C-Roads experts as workshop organisers were essential, representatives from EC (co-)funded projects on C-ITS (C-MobILE, AUTOCITS, CITRUS, CONCORDA, SOCRATES 2.0) and deployment initiatives (C-ITS Corridor) provided valuable insights on a range of issues which cross-fertilised the lessons learned and the debate, including e.g. urban mobility innovation, business modelling and value network, companion services for truck drivers.

Outcomes and next steps

While the main intention of the workshop – the exchange of knowledge and current challenges in C-ITS deployment – was achieved successfully, some next steps to elaborate on the challenges have already been proposed or initiated. They can be summarised according to the different topics:

- Concerning the **policy and strategy evolution**, the Delegated Act on C-ITS not entering into force has not stopped the further deployment of C-ITS services based on ITS G5. Cooperation has even been strengthened as it can be seen with the newly formed C-ITS Deployment Group. Apart from that, the work on harmonised specifications for a parallel transmission of C-ITS messages via cellular network is pursued with intensified effort and new evolvements in technology evolution are constantly monitored.

- With regard to **data privacy**, legislature could facilitate the processing of C-ITS messages. Even the C-ITS Delegated Act would not have led to legal certainty automatically. As no new legislature is being expected in the near future, a common approach for C-ITS services building on the law in force, e. g. on GDPR should now be followed. In a dedicated workshop, this topic is planned to be tackled by the experts of different Member States beginning of 2020.

- The **C-ITS ecosystem** is constantly evolving. While the exchange of C-ITS messages via short-range and long-range communication has long been developed separately, the C-Roads Platform has taken up the coalescence of both types to a hybrid communication. The workshop itself also enabled and started knowledge exchange with C-ITS projects outside C-Roads like C-MobILE and CONCORDA. The presented **C-ITS deployment business models** will be integrated in the considerations of Working Group 1 Organisational Issues of the C-Roads Platform enriching the collection of business models for the deployment of C-ITS services.

- Once more, it has been shown that the regular **operation of C-ITS services** will bring new permanent tasks to all the different actors. Daily operation is not only influenced within the single entities of actors but also cross-organisational cooperation has to be maintained in order to incorporate modifications and revisions into the systems mutually. This is currently being done in the Task Force Operations where amongst others the cooperation between C-Roads and the Car2Car Communication Consortium comes alive and which has been promoted to be expanded.

- **Evaluation** of the C-ITS pilots is essential to supporting and boosting further roll-out of C-ITS services. The presented evaluation approaches and results already show that harmonisation in the C-Roads Platform is effective. Despite very different pilot environments, similar properties have been measured. Thus the workshop has encouraged the next steps of Working Group 3 Evaluation and Assessment being comparable assessment and cost-benefit analyses. In addition to the mostly simulated ex-ante evaluations, evaluations of deployments on larger scale are expected eagerly with the roll-out of C-ITS in production vehicles.