C-ITS Deployment Platform and the GEAR 2030 roadmap on highly automated vehicles

1) The C-ITS platform

The European Commission decided early 2014 to take a more prominent role in the deployment of connected driving, by setting up a C-ITS (Cooperative ITS) Deployment Platform. The Platform was conceived as a cooperative framework including national authorities, C-ITS stakeholders and the Commission, in view to develop a shared vision on the interoperable deployment of C-ITS in the EU. The terms of Reference of the platform may be found here: http://ec.europa.eu/transport/themes/its/news/doc/c-its-platform-deployment/corrigendum-call-for-applications.pdf

Hence, it was expected to provide policy recommendations for the development of a roadmap and a deployment strategy for C-ITS in the EU and identify potential solutions to some critical cross-cutting issues.

In the frame of supporting the deployment of C-ITS on European roads, there are a number of C-ITS real-life pilot projects funded under TEN-T and CEF which will create new ITS services for all European road users. These projects will test vehicle-to-infrastructure and vehicle-to-vehicle interactions by using both short-range and cellular communications.

By endorsing the Final Report [3 MB] on 21 January 2016, the C-ITS Platform has now achieved its first milestone towards connected vehicles in the EU. The main recommendations of the report are as follows:

• A coordinated action for the deployment of C-ITS in the EU is paramount.
• To ensure interoperability and maximise benefits, it is vital to base deployment throughout the EU on an agreed list of Day 1 applications (e.g. weather conditions warnings, road works warning, Emergency-braking warnings, In-Vehicle signage, etc.). Because of their societal benefits and technological maturity, these services should be available in the short term.
• A unique legal and technical framework is essential and coordinated efforts to ensure quick uptake of C-ITS are requested.
• This framework is needed urgently. The technology is ready, the industry is already deploying C-ITS equipped vehicles in other parts of the world and announced to be ready to deploy in the EU by 2019, provided that legal certainty is in place in time.
• For security, this means one common standardised C-ITS trust model and certificate policy all over the EU, based on a Public Key Infrastructure (PKI), and defined in an appropriate regulatory framework.
• On data protection, C-ITS messages have been considered as “personal data” because of the potential of indirect identification of users. Therefore, allowing the process of such data will require implementing the principle of "informed consent" and an opt-out possibility should be offered to the drivers, authorising the driver to shut down the broadcast.
• On spectrum, an agreement could be reached on mitigation techniques to ensure coexistence between 5.8 GHz tolling DSRC and 5.9 GHz ITS applications. Strong recommendations were made to seek international cooperation, e.g. via joint studies and positions, towards the protection of the 5.9 GHz band notably, to cope with future capacity demand.
• On access to in-vehicle data, an important technical work has been accomplished. Technical solutions have been identified. Agreement was reached on five guiding principles on which to always base access to in-vehicle data. Concrete standardisation needs have been put forward.
Nevertheless, strong disagreements between vehicle manufacturers and the independent operators/service providers remained on several important topics. The European Commission will now launch an independent study before envisaging further measures in this field.

- Enhanced international cooperation is considered essential to enhance interoperability on a global basis.

The Commission will now prepare the Master Plan for the Deployment of C-ITS, to be ready by mid-2016, based on the recommendations of the platform. The C-ITS Platform will accompany the deployment process with a special focus on the links between connectivity and automation, in particular in relation to infrastructure and road safety issues.

As foreseen in its term of Reference, The outcome of the C-ITS platform will feed into the discussion to be held in the GEAR 2030 High level group on highly automated vehicles

2) The GEAR 2030 High level group on highly automated vehicles

To ensure a co-ordinated approach and to address the challenges faced by the European automotive industry in the next 15 years, the Commission has launched a new High Level Group for the automotive industry: GEAR 2030.

To remain competitive, the European automotive industry will quickly have to adapt to challenges from globalisation, changing mobility patterns, digitalisation and environmental expectations. This is the purpose of the GEAR 2030 High level group (ex: CARS 2020) gathering industry and NGOs (CEOs level) and policy makers (Ministers and relevant Commissioners). This High level group was launched on 26 January 2016 and will focus on three areas of work:

- the adaptation of the value chain to new global challenges
- the automated and connected vehicles
- trade, international harmonisation and global competitiveness.

The roadmap on highly automated vehicles will develop a common vision on the development of these vehicles as well as a set of concrete actions regarding

1) Regulatory and policy issues (e.g. vehicle approval, traffic rules, data issues, liabilities, responsibility issues, ethics, etc.)
2) Financing and research issues
3) Competitiveness/international issues.

This goal of this roadmap is to build political and stakeholder support for the different initiatives of the Commission on automated and connected vehicles and to have a coordinated approach in the Commission and in the Member States on this topic. The “C-ITS platform” will feed the GEAR 2030 process as the initiatives from other Commission departments (e.g. Oettinger round table with the Telecom/car industries and the Digital single market initiative).

To carry out the work, GEAR 2030 will need the support of a dedicated working group on automated vehicles, but it is the intention to rely also on existing frameworks (e.g. UNECE, C-ITS platform from MOVE) for some of the issues in particular connectivity if these frameworks are able to deliver concrete actions.

More information as well as the working documents of GEAR 2030 may be found here:
http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?id=8507
https://circabc.europa.eu/w/browse/f54801b8-c372-4b5f-be03-0d019a795d7c