GSMA-ETNO Letter on safe and competitive Connected and Automated Driving in Europe

5 April 2019

Dear Ms Delli,

On behalf of ETNO and GSMA, the two leading telecoms associations in Europe, we would like to raise our concern about the competitiveness and safety of connected and automated driving in Europe. For this reason, we would like to draw your attention to some fundamental considerations regarding safety and growth in the automotive sector, underpinned by telecoms technologies.

In this light, we would like to share important points regarding the Delegated Regulation on Cooperative Intelligent Transport Systems (C-ITS).

First and foremost, Wifi (802.11p or ITS G5) is NOT the only one technology available for C-ITS. As a matter of fact, since 2018, Cellular Vehicle to everything (C-V2X) is on the market and is already becoming the standard for short- and long-range communications. This year, infrastructure and aftermarket devices are set to begin commercial deployment. Roadside units with C-V2X are already available. A range of OEMs has announced to equip their models with C-V2X, such as BMW, PSA and Ford. Ford will even equip all new cars with C-V2X technology in China by 2021 and in the United States by 2022.

Secondly, Wifi (802.11p) does not better protect citizen safety. This standard was developed over a decade ago for the ITS-G5 framework. Despite being ready for many years it has seen very little commercial deployment so far. It has a poorer performance than C-V2X – in terms of security, reliability, range and latency, and by default functions as a standalone network, while future networks are all about interchanging data in a seamless flow. The safety of road users can be greatly enhanced when cars can ‘talk’ to people (V2P), for example alerting pedestrians of an incoming vehicle. C-V2X can do this because it will be fully compatible with existing and future (5G) networks, and can easily be integrated in smart city environments.

Thirdly, Wifi will not be cheaper for taxpayers. Some voices claim that consumers will have to wait years (and pay “hundreds of billions of euros”) for 5G networks in order to enjoy C-ITS services. This is not true. Basic safety services (so call day-one services) do not require 5G. C-V2X chipsets are market ready and work with current networks. Most importantly, they can rely on existing networks, and they work without a network in short-range mode. Cost benefit analysis have been developed showing that C-V2X has the least cost of deployment.1 Concerning the 5G costs, without a clear business case for 5G in general and for connected vehicles in particular, this will be a big stick in the wheel which will have the effect of delaying investments and undermining the development of a 5G ecosystem in

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1 See for example 5GAA and Analysys Mason: http://5gaa.org/news/5gaa-study-the-cost-benefit-analysis-on-cellular-vehicle-to-everything-c-v2x-technology-and-its-evolution-to-5g-v2x/
Europe despite all the good intentions laid out in the 5G Strategic Deployment Agenda from the European Commission.

We believe, instead, that the problem is with the Delegated Act, as it demands ‘interoperability’ and ‘backwards compatibility’ between 802.11p and future communication infrastructure. This is a serious problem: C-V2X cannot ‘talk’ to 802.11p; they are entirely different technologies using radio waves incompatibly. It is like putting a DVD into a VHS player and try to make it work. This means that even if C-V2X is eventually recognised as a communication layer for C-ITS, it will de facto be locked out. European citizens will be relegated to an inferior technology that only a very limited amount of car manufacturers are planning to deploy.

Until now, only one car manufacturer has announced a new model to have 802.11p installed, but even that model is now delayed until 2020 (so it will not be introduced this year). This happens in an environment in which, every year, hundreds of car models are being introduced to the market and the replacement cycle of cars is 12-15 years. As mentioned above, many leading (European) OEMs have already announced integration of C-V2X.

There are four additional considerations that have not been fully reflected in the debate.

First, EU Member States are currently divided on the issue. Only a few of the Member States are enthusiastic about the current C-ITS plans whereas many others are hesitant or even outright against; primarily because of the very high costs involved and because of the lack of actual safety improvements. This is not the right climate to start the rollout of an important ecosystem.

Secondly, C-ITS will be deployed on highways where eight percent of the road fatalities occur. We are failing to tackle the real challenge: local traffic circumstances, where most accidents happen. C-ITS stations can in those areas simply run on cellular networks and do not need to be operated by a 802.11p network which currently does not exist.

Thirdly, 802.11p will not have any effect, even when fully rolled out and with all OEMs participating in it, to the most vulnerable group in traffic: pedestrians and cyclists. This is a major shortcoming in the C-ITS ecosystem and can only be tackled by C-V2X solutions, as these will be able to warn vulnerable road users via cellular networks and mobile phones.

Fourthly, the vehicle market is global. North America and China are already moving forward with C-V2X, which will allow them to move to connected driving more quickly, cheaply and safely than Europe. In the United States, the mandate for DSRC (similar to 802.11p) has never been adopted and regulators are keeping the market technology neutral (which has led to Ford spurring its deployment commitment). The technology choice that Europe is making towards 802.11p, goes in the other direction, basically ignoring market developments.

In view of the important decision on the Draft Motion for Resolution on Monday 8 April, we would like to share with you our views.
The GSMA and ETNO are still deeply concerned about the Delegated Act on C-ITS and the many wrong assertions about the underlying technology choice; notably within parts of the Commission. We therefore commend the TRAN committee for its work in reviewing this important act and we urge MEPs to take a decision based on the important facts outlined before, which demonstrate how excluding 5G from European roads will hamper competitiveness and will not help to improve safety.

For your information, we also attach the note shared by the Finnish Delegation in view of the Council discussions today (5 April). Importantly, it notes that there are both technological but also legal concerns to the Delegated Act, notably regarding Article 30 and powers conferred to the Commission in relation to interim measures without the involvement of Member States. The concerns are whether the implementing and interim powers to the Commission instead of Member States, runs in fact contrary to the TFEU and ITS Directive.

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CC:  
Ministers of EU Transport and Telecoms Ministers  
Members of the TRAN Committee of the European Parliament  
Vice-President Ansip, Commissioners Bulc, Gabriel, Oettinger