



Mobility in Europe – Challenges and chances

Every cloud has a silver lining. That's how I see the challenges facing our Transport Network in Europe. There are, however, many issues to be tackled.

The story of Climate Change is by now nothing new, and transport has to carry its fair share of the burden. Transport is responsible for around a quarter of EU greenhouse gas emissions making it the second biggest greenhouse gas-emitting sector after energy. Road transport alone contributes about one-fifth of the EU's total emissions of carbon dioxide (CO₂), the main greenhouse gas. In 2011, the EU committed to reduce transport emissions by 60% on 1990 levels by 2050. As the Paris Climate Conference is edging closer, it is very important to revive an ambitious decarbonisation agenda. We need to internalise external costs and to disincentivise the least environmentally friendly forms of transport by adhering to the 'user pays, polluter pays' principle.

Congestion in the EU is often located in and around urban areas and costs nearly 100 billion EUR, or 1% of the EU's GDP, annually. In a world where we are competing with economies globally, a 1% reduction in costs for our businesses would be a huge advantage in competitiveness terms.

In addressing the issues of congestion and pollution, we face another challenge – that of the lack of investment. The European Union recognises that in order to meet the future needs of people and business, it is crucial that we invest, and invest strategically. We are therefore continuing with our vision to build the Trans-European Transport Network, more commonly referred to in EU circles as the TEN-T programme. The CEF funding mechanism is vital to this, and earlier this year, the first CEF call was announced, with funding to the value of 13.1 billion EUR for 276 different transport projects. However public monies alone will not be enough. Through President Juncker's 315 billion EUR Investment Plan, the Commission has put in place a plan to leverage private investment into a whole range of areas including transport.

Necessity is the mother of invention, and these challenges will provide new opportunities for mobility in Europe. One of the key growth areas, which I am prioritising, is Intelligent Transport Systems or ITS. The digitalization of transport will bring about many benefits. Firstly, there is a chance to develop new types of transport sector jobs, in areas such as research and development. Secondly, through increased automatised, safety will improve. Thirdly, new innovative mobility sharing services will be enabled, and reliability of services will increase. We must constantly ensure that we serve the needs of business and people. So how should we go about further developing ITS?

I see the need for protocols and standards in order to promote conditions for interoperability and co-modality. We also need regu-

lation to ensure good market conditions, and attract investment. I propose we create four basic layers in ITS where standardisation and regulation can take place.

The *first* one is the infrastructure layer. We will need to equip our infrastructure to become a provider of data. Our transport infrastructure can be the source of rich data to be used in apps for the transport sector and beyond.

The *second* one is the data layer. As we move towards the internet of things we have to provide European standards for common or interoperable platforms. We have to keep an eye on standards developing internationally. The ability to collect, analyse and use data in a variety of ways will be crucial. Finding new mechanisms to share data will be equally important. We have an extensive transport network across all modes in Europe. I am convinced that transport can become a valuable source of 'data fuel' as the Commission continues its work to implement the Digital Single Market.

Thirdly, the applications layer: Once data is collected in a usable manner, we need to find a way to put it to work. As far as possible, we must aim to provide open and accessible platforms for developers to transform data into useful applications. ITS data can be used for a wide range of applications from signalling on our rail network, to traffic management and pollution control. Other examples include: timetable apps, accident reporting, information about delays and about alternative transport offerings.

Fourthly and finally, the services and solutions layer. Applications can then be taken to the next stage and turned into services and complete solutions for the end user. We can start concentrating on the 'Mobility as a Service' concept, and focus on passenger and companies using rather than owning modes of transport. There are many opportunities going forward, with the possibility in of a one-stop website to book all transport – regardless of mode. There is the chance to create a single on-board unit for all road-charging across Europe with one single bill for the end user. We will have the opportunity to really see connected mobility and ultimately driverless cars.

I suggest that we use these 4 core horizontal layers for standardisation and regulatory framework for ITS. If we get these layers right, we will make good progress in ITS.

Although there are many challenges, I am confident that if we put the right framework in place, we will be able to meet those challenges head-on. I am confident that new opportunities will outweigh the challenges, and lead us to a bright future for mobility in Europe.

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