

3 Minute Contribution to Panel 1: Role and trends of Automation in Transport: Safety, efficiency and sustainability.

Thank you Mr Kim,

Ladies and Gentlemen,

I would like to thank the ITC for inviting me today to contribute to this important policy debate. I would like to share with you how we at the European Investment Bank see the development of automation in the transport sector and how we can support such investment in our role as the EU's long-term investment bank.

Mobility is becoming increasingly connected and integrated. A number of social, economic, and technological trends are coinciding to disrupt how we currently design and manage

transport systems and how we access, use and pay for them. Automation, as well as developments in complementary areas such as vehicle electrification, mobility-as-a-service, shared mobility, intelligent transport systems, computing power and big data are already shaping the future of mobility.

For some transport modes – for example metro and light rail systems where infrastructure and rolling stock are closely integrated in controlled environments – we already see certain automated functions. We can trace the deployment of automated operation back to the 1960s.

We are now entering the age of the **connected and autonomous road vehicles**. The primary benefit from automating road transport systems is **increased safety**.

Given that 90% of road vehicle accidents involve driver error, automated driving systems can significantly contribute to reducing road accidents. The other potential benefit comes from **more efficient mobility and reduction in congestion costs.**

The rapid development of technology poses new technical, policy and regulatory challenges. Whilst automation can make transport more efficient, and hence cheaper, this can potentially lead to an increase demand without other policy responses and initiatives. Therefore, at the system level, the impact of automation measures on vehicle emissions and the environment may be more difficult to predict.

For businesses and managers of transport services and logistic fleets – automation is likely to have a significant impact on the economics of the industry. Truck platooning for road freight transport can generate direct cost savings

but, at the policy level, we should also consider the potential wider social impacts of the technology. What are the associated infrastructure investment costs? What will be the impact on jobs? How secure are the computer and connectivity systems?

Vehicle automation, along with other technology and social developments, opens up potentially new business, ownership and delivery models. Who will pay for infrastructure and services? How will these investments be funded and financed? The answers to these questions will not be straightforward.

The EIB's main activity is to support the financing of investment projects of high added value and in-line with our lending policies and EU transport policy. Transport is one of the largest sectors of EIB investment. In 2018 nearly 20% of our annual lending volume, some EUR 10 billion, was for

the transport sector. Whilst infrastructure and rolling stock remain the core type of transport investments, we also support R&D programmes including the development of automation technology.

An example of a recent EIB operation is for NAVYA, a company pioneering electric autonomous vehicles and shuttles. We are supporting, with a EUR 30 million loan and guaranteed under the European Fund for Strategic Investments (EFSI), NAVYA's investment programme to further develop and industrialise autonomous vehicles.

In summary, automation of transport is evolving alongside other disruptive technologies. The scale of impact on personal and freight mobility, on the economy and society is difficult to predict as we move towards an increasingly

connected and integrated transport system. Debates and forums such as today are therefore crucial to exchange and share our different organisations' experiences, to help set the right regulatory response and to disseminate this knowledge more widely.

Thank you.