**Internet of Things,
A European Outlook**
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Internet of Things

▶ IoT represents the next step towards the digitalisation of our society and economy, where objects and people are interconnected through communication networks and report about their status and/or the surrounding environment.

▶ According to a EU study, the market value of the IoT in the EU is expected to exceed 1 trillion euros in 2020.

▶ For the past years, the European Commission has been actively cooperating with the industry and various organisations as well as with EU Member States and third countries to unleash the potential of the IoT technology.

I N T E R N E T   O F   T H I N G S

Europe's IoT Policy

EU's IoT vision is based on 3 pillars:
- ▶ a thriving IoT ecosystem
- ▶ a human-centred IoT approach
- ▶ a single market for IoT

In the last two years a set of supporting policy actions have been adopted by the EU to accelerate the take-up of IoT and to unleash its potential in Europe for the benefit of European citizens and businesses.

March 2015: launch of Alliance for Internet of Things Innovation (AIOTI) to support the creation of an innovative and industry driven European Internet of Things ecosystem.

May 2015: adoption of Digital Single Market Strategy (DSM): the need to avoid fragmentation and to foster interoperability for IoT to reach its potential.

The 2016 review of the EU telecoms rules and the recently proposed "European data economy" initiative (January 2017) also contribute to fine tuning the regulatory framework for the IoT ecosystem.

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ANDRUS ANSIP

European Commission | #dataeconomy

"Data should be able to flow freely across borders and within a single data space. We need a coordinated and pan-European approach to make the most of data opportunities, building on strong EU rules to protect personal data and privacy"

Towards a Connected Gigabit Society

The policy and legal framework for investment in networks therefore needs to be adapted to provide the conditions within which this additional investment can take place in a costeffective way

▶ Predictable regulatory conditions (also to promote Co-investment)
▶ Appropriate network access remedies
▶ Updated Spectrum rules for mobile connectivity and 5G
▶ Public support to private investments

Connected Cars & Automated Driving
ECTA & EATA

ECTA, the European Competitive Telecommunications Association, is the pan-European procompetitive trade association that represents over 100 of the leading challenger telecoms operators across Europe.

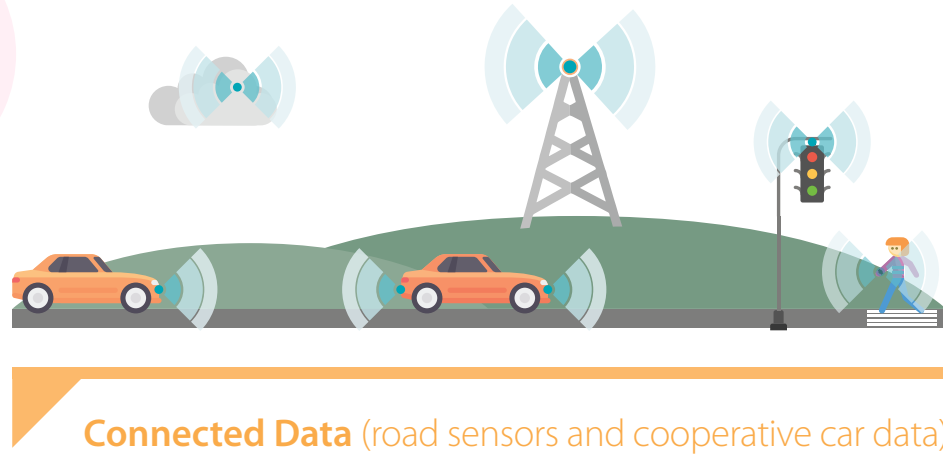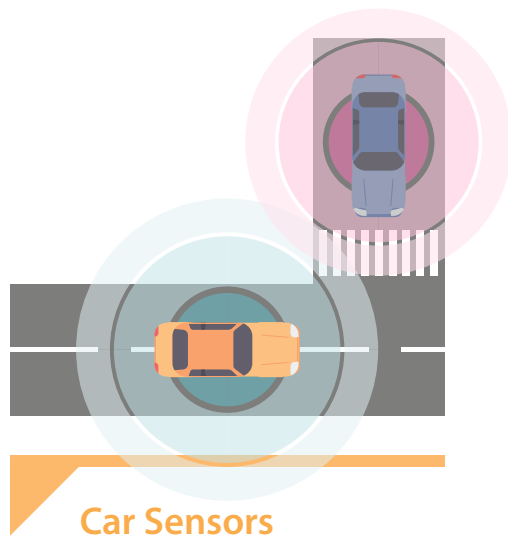**EATA**, the European Automotive Telecom Alliance, founded by six associations:

▶ Operational roll-out through companies: 38 members (telco network operators, telco suppliers, automotive)

▶ To promote the wider deployment of connected and automated driving in Europe. The first concrete step is the advancement of a "Pre-Deployment Project" aimed at testing three major use-case categories:

| Automated driving | Road safety and traffic efficiency | Digitalisation of transport and logistics |

Car Sensors

Connected Data (road sensors and cooperative car data)

Sence   Plan   Act

Basic System	Advanced Warning Use Cases	Automation via fusion C2X -autonomous sensors	Automated assistance functions for all relevant driving situations
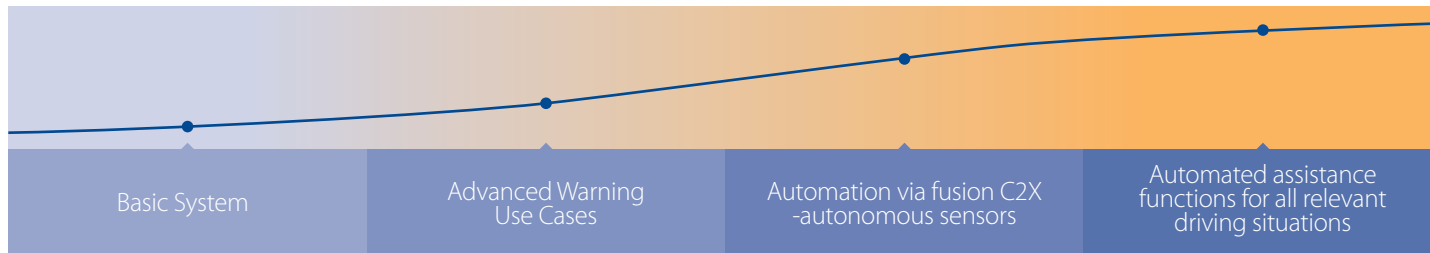
The connected data as additional car sensor:

New messages and attributes to messages (e.g. trust , confidence levels)

▶ Safety relevant applications need redundancy via the hybrid communication channels.

▶ Network slicing, priority for AD vital messages

▶ Application of safety rules on digital infrastructure

▶ More accurate and safety relevant localization : GNSS correction and relative fall back solutions.
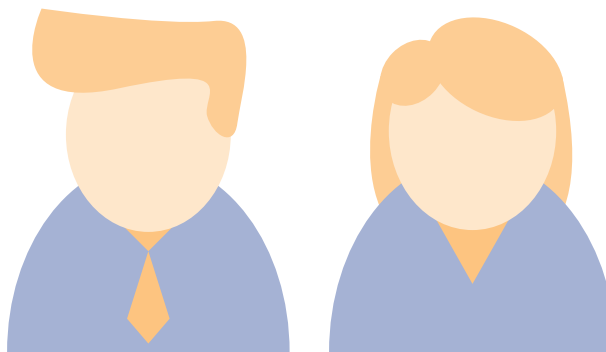
Connected Cars & Automated Driving

The need for a supportive regulatory environment

In Barcelona, in presence of EU Commissioners Ansip & Oettinger, EATA presents deployment roadmap & submits proposal for EU-wide project.

EATA stressed that **a supportive regulatory environment is an essential for 2 reasons:**

regulatory certainty to support investment efforts in Europe's digital networks;

trust, security and consumer protection to ensure take-up of new products.

Regulatory Challenges

Telecoms framework	• Net neutrality regulation, incl. BEREC guidelines • 5G Action Plan • Availability of networks: spectrum allocation • Network handover/international roaming
Data economy	• ePrivacy draft regulation : impact for telcos's & OEM's • Data protection solution needed for C-ITS messaging • Ownership, use and access to data: CAD as experiment
Industrial policy	• GEAR 2030: which policies for CAD ? Industry leadership of the EU, EU competitiveness of automotive • Type approval implications for AD • Cyber security : key for increasing trust in CAD
Other	• Liability rules in IoT environment • Conventions and Regulations at UN level to make highly automated driving legally possible • R&I funding programs

Conclusion

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▶ **Automotive and telecoms sectors working hand in hand to deliver tangible connected and automated driving solutions across the European Union.**

▶ **EATA perfect match with the European Commission's agenda on cooperated, connected and automated mobility.**

▶ **Active membership**

▶ **More information: www.ectaportal.com**