European Innovation Day

Research to Market session 5: #AI #AutomatedVehicles #Aeronautics
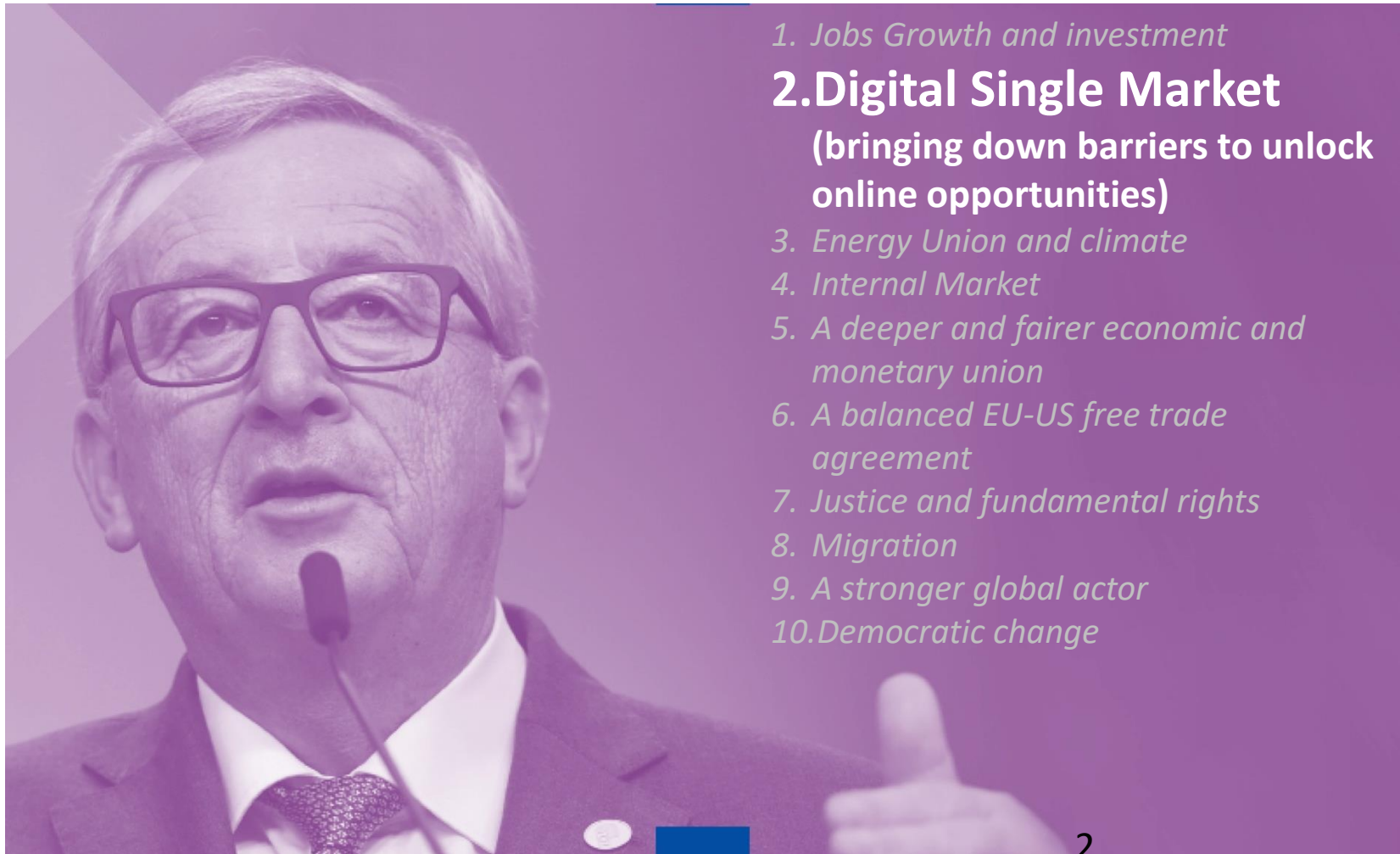
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Senior ICT Policy Officer
Delegation of the European Union to Japan

15 October 2018

10 Commission priorities for 2015-19 – Political Guidelines for the Juncker Commission

(15 July 2014)

1. *Jobs Growth and investment*

2. Digital Single Market
(bringing down barriers to unlock online opportunities)

3. *Energy Union and climate*
4. *Internal Market*
5. *A deeper and fairer economic and monetary union*
6. *A balanced EU-US free trade agreement*
7. *Justice and fundamental rights*
8. *Migration*
9. *A stronger global actor*
10. *Democratic change*

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The Digital Single Market Strategy

Policy response to the opportunities & challenges of the digital revolution

THE STRATEGY AT A GLANCE

Better access for consumers and businesses

- Geo-blocking
- E-commerce (digital contracts, consumer protection)
- Copyright
- Parcel delivery
- VAT

An environment where digital networks and services can prosper

- Telecoms market
- Media services
- Platforms and intermediaries
- Trust and security (e-privacy, cybersecurity cPPP)

Maximise the growth potential of the digital economy

- Data Economy
- Inclusive digital society
- Interoperability and Standardisation
- Digitisation of European industry

European Council implementation deadline: 2018

DSM Strategy Mid-Term Review: May 2017

DSM Strategy: May 2015

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Implementation progress in > 2 years –> legislative proposals

- The European Commission has put on the table **16 key initiatives** and more than **43** proposals**, 24 of which are legislative**

European Parliament and Council have so far reached agreement on:

- ✓ **End of roaming charges** as of 15 June 2017 for all travellers in the EU

- ✓ **Portability of content**: which will allow as of early 2018 Europeans to travel with the films, the music, the video games or the ebooks they have subscribed to at home

- ✓ **End to unjustified geo-blocking:** should apply before Xmas 2018; end discrimination and boost e-commerce to the benefit of consumers and businesses

- ✓ **Spectrum**: Release of the 700 MHz band for the development of 5G and new online services.

- ✓ **Wifi4EU**: free public Wi-Fi hotspots in local communities across the EU
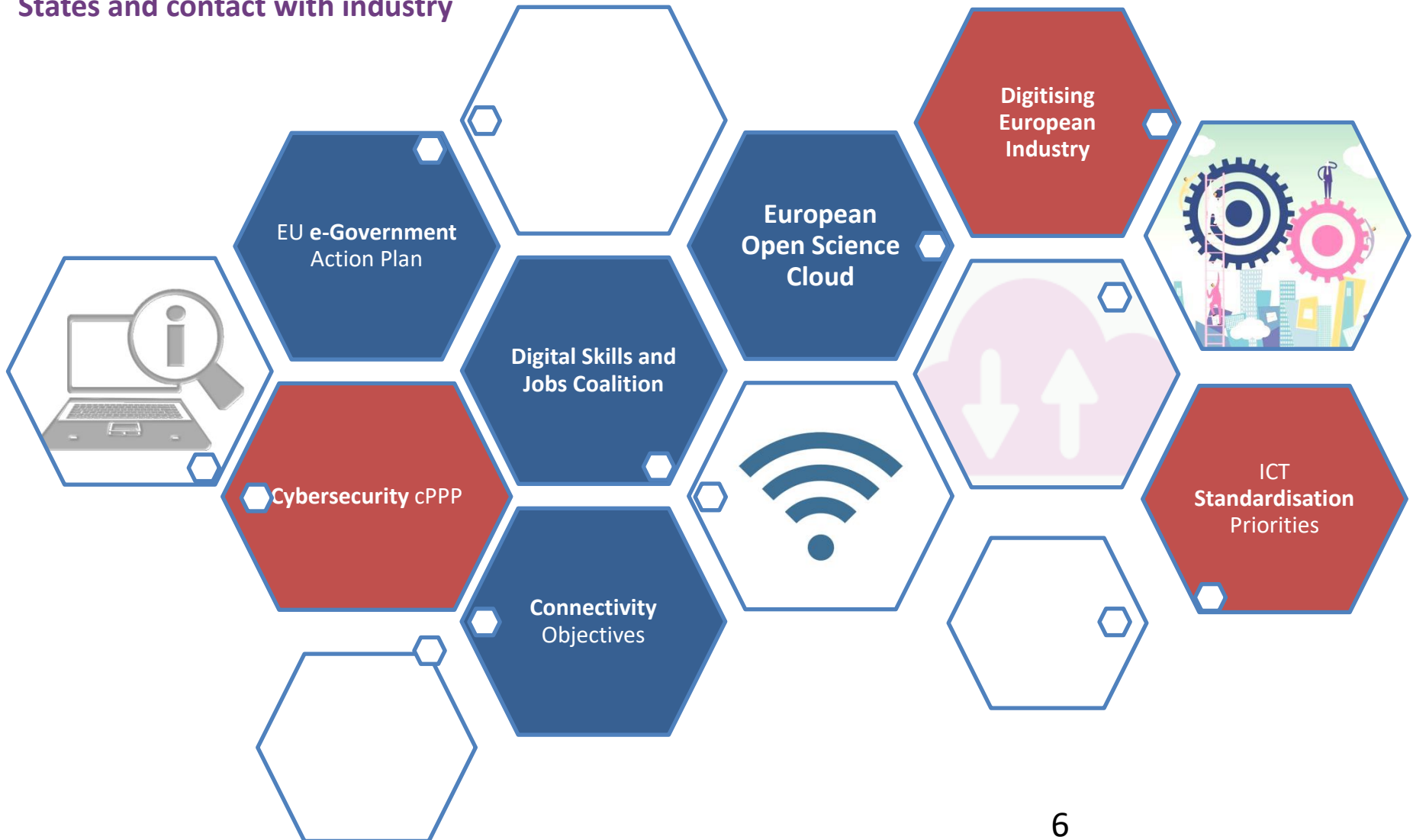
Recent initiatives (April 2018 Package)

✓ Communication on **Artificial Intelligence and Robotics**

  o Boost the EU's technological and industrial capacity
  o Prepare for socio-economic changes
  o Ensure an appropriate ethical and legal framework

✓ Regulation of **.eu top-level domain** (REFIT)

  o More transparent and flexible internet identity for EU citizens and companies
  o Creation of an advisory body

✓ Communication on **eHealth**

  o Access to electronic health records and use of e-prescriptions
  o Disease prevention and personalised health and care
  o Facilitating feedback and interaction between patients and healthcare providers

✓ Communication on **Significant Market Power (SMP) Guidelines**

  o A set of new guidelines for national regulatory authorities

Implementation progress in > 2 years –> non-legislative actions

in close cooperation with Member States and contact with industry
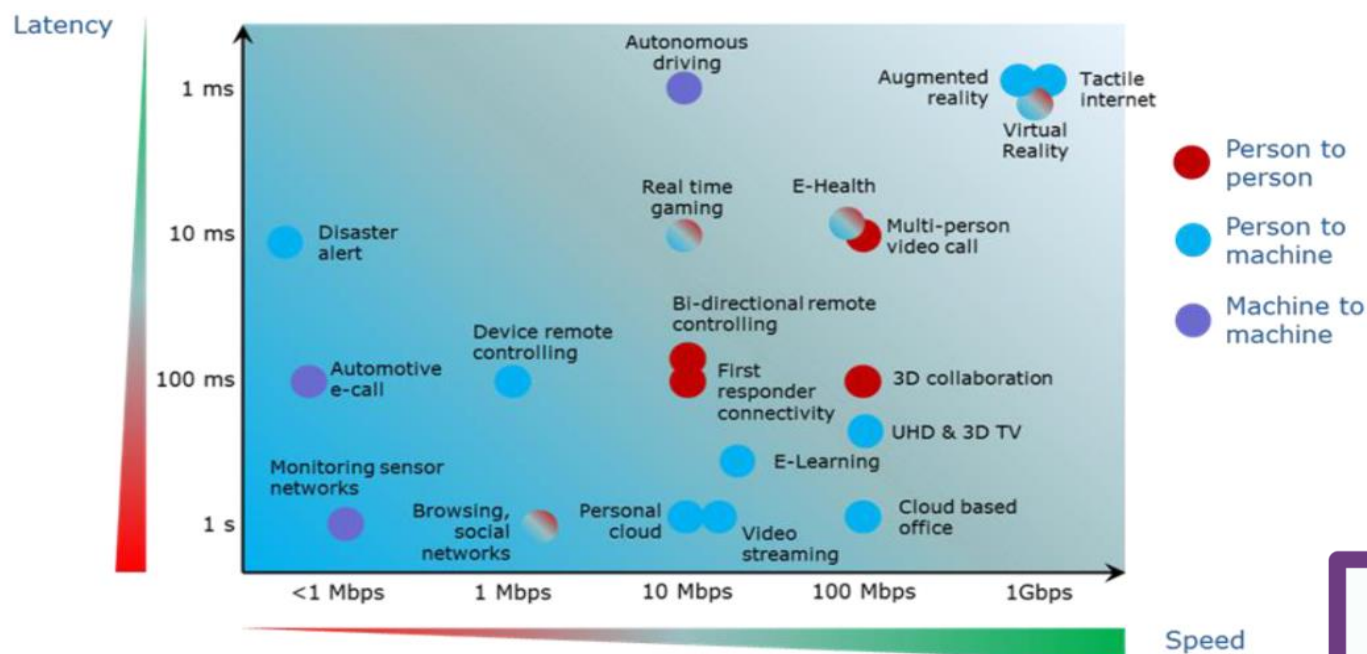

EU **e-Government** Action Plan

Digital Skills and Jobs Coalition

European Open Science Cloud

Digitising European Industry

Cybersecurity cPPP

Connectivity Objectives

ICT Standardisation Priorities

Need for better CONNECTIVITY

- **71% of European households have access to a fast fixed internet connection**
- **But this goes down to 28% for households in rural areas**
- Global Internet traffic in 2021 will be **127 times** that of 2005

Need for speed and latency per application

Very high capacity networks, **like 5G,** enable **use of valuable digital innovations** (e.g. **digital health, connected mobility across borders**)

Source: Commission analysis based on GSMA and EIB

Delegation of the European Union
駐日欧州連合代表部

To meet the growing need for speed, quality and reliability of the infrastructure → joint EU action and investment are needed

3 strategic connectivity objectives for 2025

To be facilitated by 3 main new measures

1. Access to gigabit connectivity for **all main socio-economic drivers**

2. Access to connectivity with a download speed of at least 100 Mbps for **all European households**

3. All **urban areas and major roads and railways** with an uninterrupted 5G coverage and 5G commercially available in at least 1 major city in each EU Member State by 2020

1. A new **Telecoms Code** to help build future networks

- Pro-investment
- Better spectrum coordination
- Stronger consumer protection

2. **WiFi4EU**   **Registration started on 20 March 2018**

3. **An action plan for 5G**

FI-NO

DK-SE-FI-NO

Test corridors
Wave 1

Corridor maps develop constantly
in accordance with Member States'
new agreements

BE-NL

FR-LUX-DE

ES-PT

The 5G Action Plan

For the competitiveness of EU industries

Pooling investments of different industries for scale

Early 5G launch in selected areas

2018

5G CALL

Commercial launch of 5G services in at least one major city in all MS

2020

5G in all urban areas and Along main transport paths

2025

Coordinated launch throughout single market

Comprehensive with geographical and sectorial focus

European R&I roadmap for Automated Mobility

❑ R&I strategy to support the development and deployment of connectivity and automation technologies for road transport in Europe

❑ Concrete action plan for short, medium and long-term research and innovation actions.

❑ Will be developed by developed by EC with the support of MS and input from experts and stakeholders

❑ R&I initiatives and Actions for eight thematic areas:

In-vehicle enablers

Vehicle validation

Large –scale Demos

Shared & automated mobility services

Socio-ec. Impacts

Human Factors

Phys.& dig. infrastr, Connectivity)

Big Data, AI

HIGH LEVEL STRUCTURAL DIALOGUE

Members States

1st High Level Meeting in Amsterdam at Schiphol on 15th February 2017

"Action plan automated and connected driving"

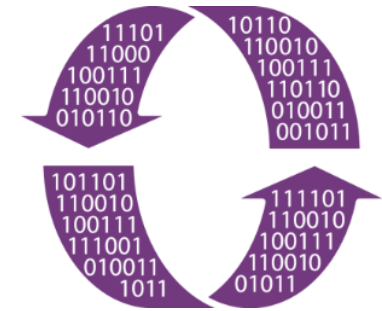from the 2nd High Level Structural Dialogue on 14th-15th September 2017 in Frankfurt/M.

3rd High Level Structural Dialogue on Connected and Automated Driving Gothenburg on 18th -19th June 2018

The Digital Single Market Strategy

Unlocking the DATA ECONOMY

- The EU data economy grew by **21.53%** from 2013 to 2016

- The data economy can reach **€739bn by 2020** (4% of EU GDP)

The EU's Data Packages

✓ **Cross-border free flow of non-personal data** (September 2017)

- ▪ **Removing data localisation restrictions in the EU** … *balanced by* a principle of **data availability for regulatory control**
- ▪ Enhancing **legal certainty for businesses** on storing and processing data in other EU Member States

✓ **Recent Data Package** (April 2018)

- ▪ Review of **Public Sector Information** Directive
- ▪ Guidelines on **private data sharing**
- ▪ Recommendation on access to and preservation of **scientific information**

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AI-RELATED AREAS

Around **€2.6 billion**
over the duration of Horizon 2020
on AI-related areas
(robotics, big data, health, transport,
future and emerging technologies).

ROBOTICS

€700 million under Horizon 2020
+ **€2.1 billion** from private investment
in one of the biggest civilian research
programmes in smart robots in the world.

SKILLS

€27 billion through European
Structural and Investment Funds,
on Skills development out of which
European Social Fund invests,
€2.3 billion specifically in digital
skills.

TRANSPORT

AI can minimise wheel friction of a suspended train
against the track while maximising the speed and
impact and enables autonomous driving.

VI-DAS

Automated sensors detect
possible dangerous situations
and accidents. The driver is
alerted and road safety is
improved.

Contribution: €6.2 million

Transforming Transport

Data-driven transformation
which will solve urban
mobility issues, develop smart
motorways, proactive rails and
much more.

Contribution: €14.6 million

Thank you