



## Clouds of Things

# A European Digital Single Market for Cloud Computing, Big Data and the Internet of Things

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## DSM = the next generation

### COMPLETING THE INTERNAL MARKET

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White Paper from the Commission  
to the European Council  
(Milan, 28-29 June 1985)

# DIGITAL ECONOMY



75% of EU citizens use Internet regularly  
 158 million subscriptions on fixed Broadband  
 134 mobile subscriptions per 100 people

## DIGITAL BUSINESSES



2 in 3 EU enterprises provide mobile devices for business use

36% of EU enterprises use Social Media



317.9 billion EUR turnover of EU B2C eCommerce (2013)  
 15% of EU SMEs sell online

28% of EU enterprises use e-Invoices



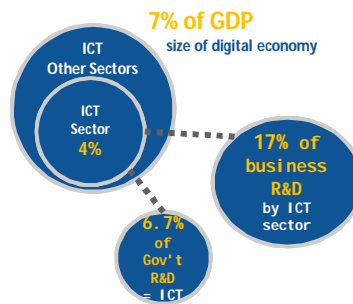
# DIGITAL ECONOMY



ICT drives 1/3 EU GDP growth 2001-2011

43% EU risk capital in ICT companies

17% EU patents in ICT



## ICT PROFESSIONALS

825 000 estimated demand/supply gap by 2020



2.8% of workforce

55% work outside of ICT sector

+ 3%- 4% yearly employment growth

## President Juncker's Political Guidelines A connected Digital Single Market

*"...break down national silos in telecoms regulation, in copyright and data protection legislation, in the management of radio waves and in the application of competition law."*

### What is the Digital Single Market?

*"The **Digital Single Market** means an area where the free movement of goods, persons, services and capital is ensured and where **citizens** and **businesses** can therefore seamlessly access and exercise online activities under conditions of fair competition, irrespective of their nationality or place of residence."*

**Better access for consumers and businesses**

- Geoblocking
- Copyright
- E-commerce
- Parcel delivery
- Reducing VAT burden


**Advanced digital networks and innovative services**

- Telecoms market
- Media services
- Platforms and intermediaries
- Trust and security

**Enhance the digital economy**

- Data economy (Initiatives for a Free flow of data / European cloud)
- Inclusive digital economy and society
- Interoperability and standardisation

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# 1

Better access for consumers and businesses to digital goods and services across Europe

## Unlocking the e-commerce potential



**15 % of consumers** bought online from other EU countries in 2014, while **44% did so domestically.**



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## 2 Shaping the right environment for digital networks and services to flourish



### Strong European data protection rules to boost the digital economy

72% of Internet users in Europe still worry that they are being asked for too much personal data online

## 3 Creating a European Digital Economy and society with growth potential

### Big data and cloud



Digital data stored in cloud:  
2013: 20% - 2020: 40%

The use of big data by the top 100 EU manufacturers could lead to savings worth €425 billion

## DSM for data technologies and services

Data are the building block of the digital economy

Cloud computing, big data, Internet of Things are central to EU competitiveness

*A European Free Flow of Data Initiative, a European Cloud Initiative, and an Initiative for interoperability and standards*

## A European Free Flow of Data Initiative

An effective free movement of data

Complementing the legislative framework for the protection of personal data

Addressing data location restrictions and emerging issues on ownership, (re)usability and access to data, and liability

## A European Cloud Initiative

Computing and networking capabilities are essential for keeping Europe at the forefront of the data economy

Building on experience with science community: a European Science Cloud

Unlocking investment opportunities and building trust are central to such an ambition



## An Initiative for interoperability and standards

Standards to ensure interoperability for critical domains

Identifying and defining priorities

**= Timing =**

2015	2016
<b>Better access for consumers and businesses to digital goods and services across Europe</b>	
<p>Legislative proposals for simple and effective cross-border <b>contract rules</b> for consumers and businesses</p> <p>Competition sector inquiry into <b>e-commerce</b> relating to the online trade of goods and the online provision of services</p>	<p>Review of the <b>Regulation on Consumer Protection Cooperation</b></p> <p>Measures in the area of <b>parcel delivery</b></p>
<p>Legislative proposals for a reform of the <b>copyright regime</b></p> <p>Review of the <b>Satellite and Cable Directive</b></p>	<p>Legislative proposals to reduce the administrative burden on businesses arising from different VAT regimes</p> <p>Review of the <b>e-Privacy Directive</b></p>
<b>Creating the right conditions for digital networks and services to flourish</b>	
<p>Comprehensive analysis of the role of <b>platforms</b> in the market including <b>illegal content</b> on the Internet</p>	<p>Legislative proposals to reform the current <b>telecoms rules</b> and the <b>Audiovisual Media Services Directive</b></p> <p>Establishment of a <b>Cybersecurity contractual Public-Private Partnership</b></p>
<b>Maximising the growth potential of the Digital Economy</b>	
<p>Adoption of a <b>Priority ICT Standards Plan</b> and extending the European <b>Interoperability Framework</b> for public services</p>	<p>Initiatives on data ownership, <b>free flow of data</b> (e.g. between cloud providers) and on a <b>European Cloud</b></p> <p>New <b>e-Government Action Plan</b> including an initiative on the 'Once-Only' principle and an initiative on mandatory interconnection of business registers</p>


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## DSM Public Consultations

*Public consultations on:*

- *Platforms, data, cloud computing*
- *Interoperability and standards*
- *Geo-blocking*
- *.....*



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[ec.europa.eu/priorities/digital-single-market/index\\_en.htm](http://ec.europa.eu/priorities/digital-single-market/index_en.htm)



[ec.europa.eu/digital-agenda/en/digital-single-market](http://ec.europa.eu/digital-agenda/en/digital-single-market)



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Digital Agenda for Europe