



AGENDA DIGITAL

Desde a Europa até ao Nível Local

Porto, 22/11/2013

Jorge Carvalho
European Commission
DG CONNECT



Comissão
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Enquadramento: Europa 2020 (*)

- **Agenda Digital para a Europa**
- União da Inovação
- Juventude em movimento
- Uma Europa eficiente em termos de recursos
- Uma política industrial para a era da globalização
- Agenda para Novas Competências e Empregos
- Plataforma europeia contra a pobreza



- (*) Estratégia para um crescimento inteligente, sustentável e inclusivo, Março 2010



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Economia digital

- A economia digital está a crescer a um ritmo maior que o do resto da economia, mas este grande potencial está parcialmente bloqueado por um quadro regulamentar pan-europeu heterogéneo
- Gartner (Janeiro 2013):
 - despesa em TI a nível mundial crescerá 4,2% em 2013, em contraste com o crescimento quase estagnado da economia mundial
 - despesas em TI a nível mundial: \$3700 bilhões em 2013, incluindo: dispositivos (\$666B), centros de dados (\$147B), software de empresas (\$296B), serviços de TI (\$927B) e serviços de telecomunicações (\$1701B)
- Previsão de crescimento em 2013 (OCDE): média de 1,4% para os 34 países membros

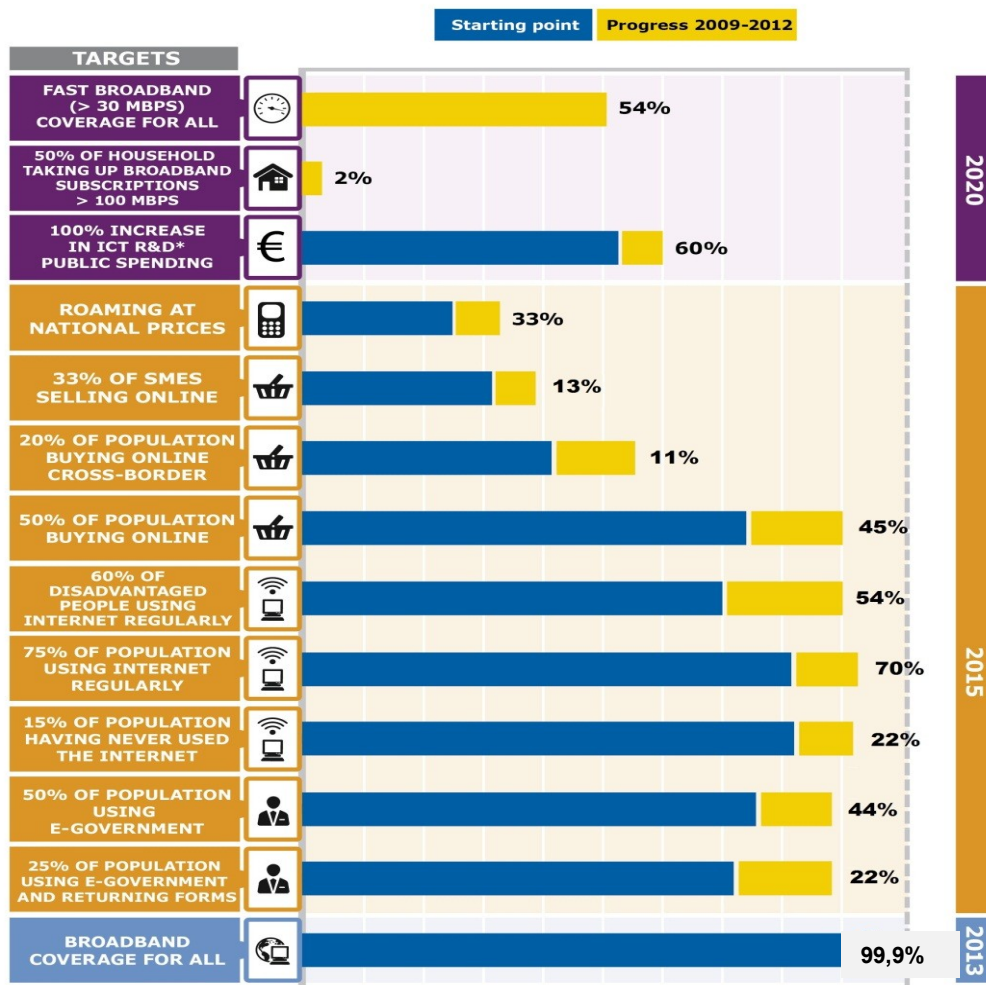


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Agenda Digital

- Basic Broadband virtually everywhere – Fast broadband >30 Mbps reaches 54% of EU
- Internet access increasingly going mobile - 36% of EU citizens use portable devices
- 50% have no or low computer skills – 40% of companies have difficulties recruiting IT specialists
- 1,000,000 ICT vacancies by 2015
- eCommerce growing steadily, but not cross-border

2012 Scoreboard





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Agenda Digital para a Europa

- A Comissão Europeia adotou (18 de dezembro 2012) sete novas prioridades para a economia e a sociedade digitais
 - 1. Criar um novo quadro regulamentar estável para a banda larga**
 2. Criar novas infraestruturas públicas de serviços digitais através do mecanismo "Interligar Europa" (CEF, Connecting Europe Facility)
 - 3. Lançar uma grande coligação para as qualificações e o emprego no setor digital**
 4. Propor uma estratégia e uma diretiva da UE para a ciber-segurança
 5. Atualizar o quadro jurídico dos direitos de autor na EU
 - 6. Acelerar a adoção da computação em nuvem com base no setor público**
 7. Lançar uma nova estratégia industrial para a eletrónica
- As prioridades adotadas decorrem de uma avaliação exaustiva da política em vigor e dão maior ênfase aos elementos mais transformadores da Agenda Digital para a Europa (lançada em 2010).



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Estratégia Europeia de Computação em Nuvem



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Estratégia Europeia para a Computação em Nuvem

- Comunicação da Comissão de 27 setembro 2012:
 - Possibilitar e facilitar uma adesão mais rápida à computação em nuvem em todos os setores da economia
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0529:FIN:PT:HTML>
- Três ações específicas
 - Por fim ao emaranhado (selva) de normas
 - Estabelecer condições contratuais seguras e justas
 - Criar uma parceria europeia (European Cloud Partnership) destinada a impulsionar a inovação e o crescimento com base no poder de compra do setor público



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Objetivos

- **Motivação para adesão mais rápida à computação em nuvem**
 - Redução de custos com implementação de TI (infraestrutura, instalações e recursos humanos)
 - Previsão de despesas com 'public cloud' na UE ate' 2020 (estudo IDC):
http://ec.europa.eu/information_society/activities/cloudcomputing/docs/quantitative_estimates.pdf
 - €35 bilhões sem intervenção política
 - €78 bilhões se iniciativas políticas apropriadas forem bem sucedidas
- **Impacto em todos os setores da economia**
 - Acréscimo ao PIB da UE em 2020:
 - €88 bilhões sem intervenção política
 - €250 bilhões se iniciativas políticas apropriadas forem bem sucedidas
- **Criação* de empregos na UE relacionados a computação em nuvem até 2020**
 - 1,3 milhões sem intervenção política
 - 3,8 milhões se iniciativas políticas apropriadas forem bem sucedidas

* O aumento de produtividade, devido a utilização de serviços em nuvem, pode também acarretar perda ou deslocamento de empregos. Embora, o efeito líquido seja positivo



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Impacto nos utilizadores

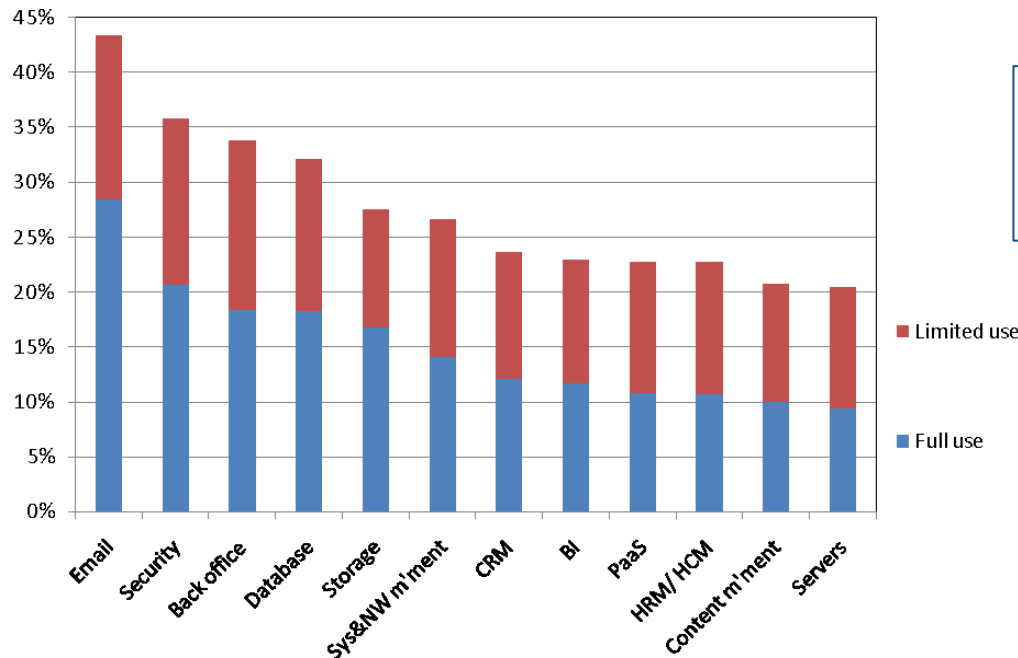
- Muitos utilizadores potenciais acreditam que a computação em nuvem pode acarretar riscos, por exemplo, quanto à privacidade de dados pessoais, segurança e continuidade dos serviços
- Novas oportunidades para operadores de telecomunicações, fornecedores de serviços e fabricantes de equipamento e integradores de sistemas
- Aumento acelerado de produtividade, maior competitividade, risco menor de indisponibilidade de TI, rapidez* na implementação de TI avançada (especialmente para start-ups e PMEs)

* Boston Consulting Group: 70% dos CIOs indicam 'rapidez' como fator primordial na decisão de utilizar computação em nuvem



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Nível de adoção atual de serviços de computação em nuvem



Fonte: IDC, 2012

Amostra: 1056 organizações

Geografia: CZ, FR, DE, IT, HU, ES, SE, UK

Eixo vertical = % de respostas

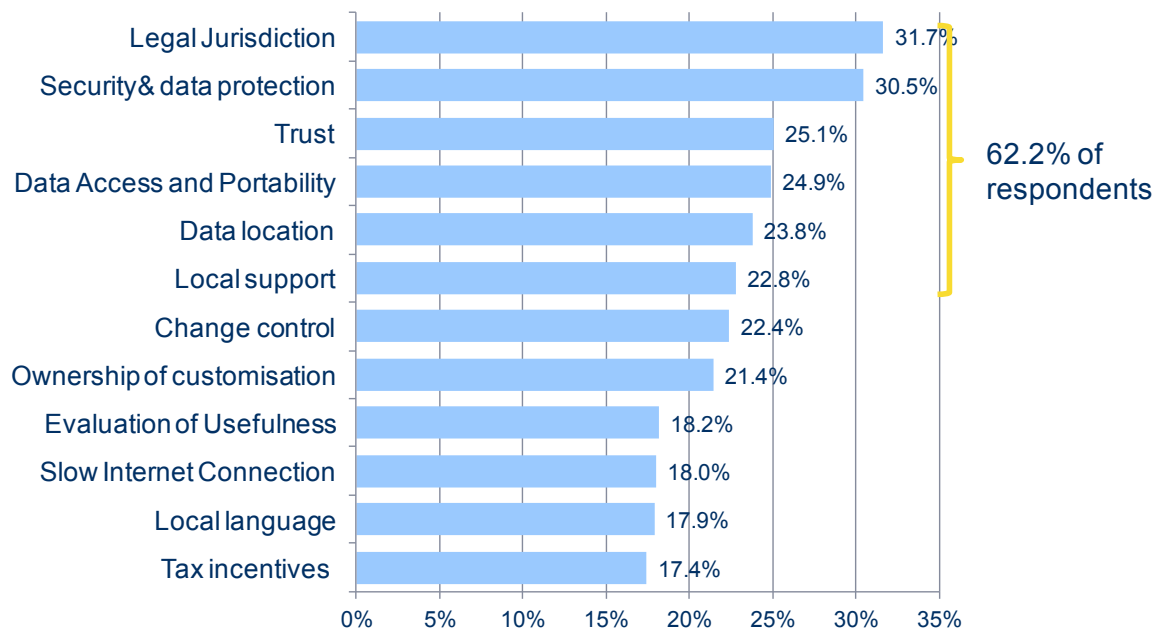
CRM = customer relationship management
BI = business intelligence
PaaS = application development and testing
HRM = human resources management
HCM = human capital management



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Obstáculos principais à adoção

% of respondents stating barrier is restricting
(very/completely) cloud adoption



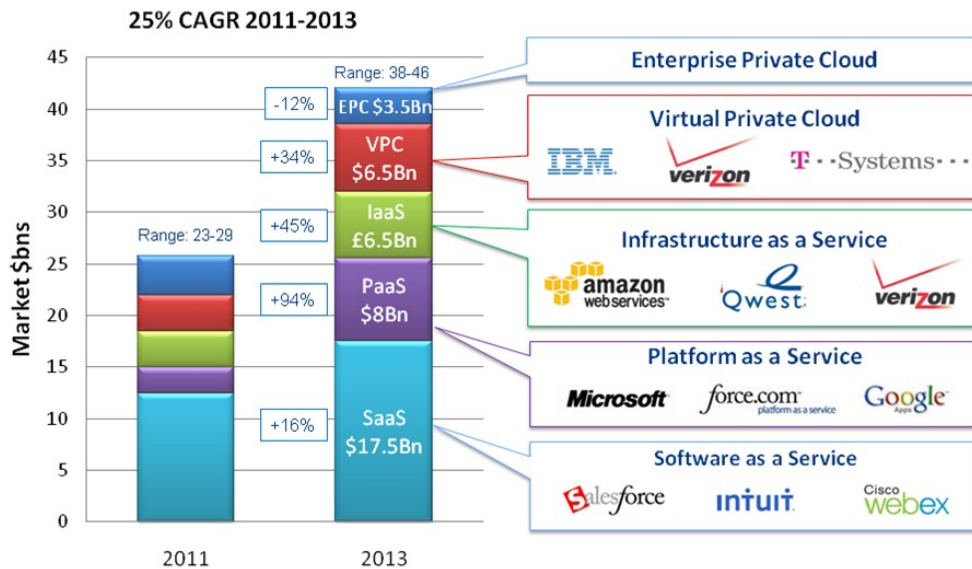
1. Múltiplas jurisdições
2. Segurança e proteção dos dados
3. Confiança
4. Acesso e portabilidade dos dados
5. Localização dos dados
6. Suporte local



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Mercado de computação em nuvem

Cloud services: market forecast and current players



Source: Bain Analysis, Forrester, IDC, Gartner, William Blair & Co.



Mercado mundial de computação em nuvem em 2013

451 Market Monitor: de \$8,7B em 2010 para \$16,7B em 2013

MarketsandMarkets: de \$5,6B em 2012 para \$46.8B em 2013

Em comparação com o mercado mundial de serviços de TI: **computação em nuvem entre 2% e 5%**



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Amazon Web Services

- Dados dos analistas (Macquarie Capital) publicados em janeiro de 2013: as 200 contas mais valiosas da AWS em somente uma das regiões de vendas nos EUA correspondem a valores que variam entre \$5,000 e \$200,000 mensais
- Potencial de mercado para os tipos de serviços oferecido pela AWS:
 - \$11.0 bilhões em 2012
- Receita da AWS em 2012: \$2.0 bilhões (18% do mercado)
- Previsão de receitas da AWS:
 - 2013: \$3.8 bilhões (crescimento = 90%)
 - 2014: \$6.2 bilhões (crescimento = 63%)
 - 2015: \$8.8 bilhões (crescimento = 42%)
- Receita acumulada da AWS ate' 2020 (supondo crescimento zero depois de 2015) = \$63 bilhões
- Previsão de despesas com 'public cloud' na UE até 2020 (fonte IDC): entre €35 bilhões e €78 bilhões



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Acção-chave 1: pôr fim à selva de normas

- Aumentar a confiança através de especificações técnicas, a nível da EU, no domínio das TIC para a proteção de informações de caráter pessoal. Mecanismo proposto na COM(2011)315 de 1 de junho 2011, levando ao ...
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0315:FIN:PT:PDF>
- Regulamento do Parlamento e do Conselho relativo a normalização europeia adotado em 25 de outubro 2012, entrou em vigor em 1 de janeiro 2013
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:316:0012:0033:PT:PDF>
- Trabalhar com o apoio da ENISA e outros organismos competentes, prestando assistência na criação de regimes de certificação voluntária no domínio da computação em nuvem (incluindo proteção de dados) em escala da UE. Estabelecer uma lista desses regimes até 2014
- Acordar com as empresas (2014) métodos harmonizados de medição de consumo de energia, consumo de água e das emissões de carbono dos serviços em nuvem





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Acção-chave 2: estabelecer condições contratuais seguras e justas (compra e venda)

- Definir com os interessados, condições-tipo para acordos sobre o nível dos serviços (SLA) de computação em nuvem a incluir nos contratos entre fornecedores de serviços e utilizadores profissionais de serviços
- Em consonância com a Comunicação relativa a um direito europeu comum da compra e venda [COM(2012)225 de 22 de maio 2012], propor aos consumidores e às PME condições contratuais-tipo. O objetivo é harmonizar as condições contratuais essenciais em aspetos relacionados com o fornecimento de conteúdos digitais
http://ec.europa.eu/consumers/strategy/docs/consumer_agenda_2012_pt.pdf
- Encarregar um grupo de peritos e representantes do setor de identificar até ao final de 2013, condições contratuais seguras e justas para os consumidores e as pequenas empresas



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Ação-chave 2: estabelecer condições contratuais seguras e justas (dados)

- Rever as cláusulas contratuais-tipo aplicáveis a transferência de dados pessoais para países terceiros e adaptando-as na medida do necessário aos serviços em nuvem
- Trabalhar com o setor na definição de um código de conduta para os fornecedores de serviços de computação em nuvem, com vista a uma aplicação uniforme das regras de proteção de dados
- Apresentar o código de conduta ao Grupo de Trabalho do Artigo 29 para aprovação, garantindo segurança jurídica e coerência entre o referido código e a legislação da EU

Grupo de Trabalho do Artigo 29 = grupo independente (advisory status)
http://ec.europa.eu/justice/data-protection/article-29/index_en.htm



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Ação-chave 3: promover a liderança do setor público através de uma parceria europeia (European Cloud Partnership)

- Identificar os requisitos do setor público no domínio dos serviços em nuvem; estabelecer especificações para a aquisição de produtos informáticos e adquirir implementações de referência para demonstração de conformidade e do desempenho (FP7 Call 10, orçamento de €10 milhões; projeto CloudForEurope, início Junho 2013)
- Avançar para a aquisição conjunta de serviços de computação em nuvem por organismos públicos com base nos novos requisitos comuns de utilizador



Composição da parceria (novembro 2013)

Name	Organization
Toomas Hendrik Ilves, Chair of the SB	President of Estonia
Reinhard Posch	Austria
Jacques Marzin	France
Maarten Hillenaar	Netherlands
Katarina de Brisis	Norway
Aitor Cubo Contreras	Spain
Andrzej Rękowski	Poland
Pierre Nanterme	Accenture
Werner Vogels	Amazon
Thierry Breton	ATOS
Bernard Charles	Dassault
Michael Gorriz	Daimler
Hans Vestberg	Ericsson
Christian Fredrikson	F-Secure
Jim Hagemann-Snabe	SAP
Karl-Heinz Streibich	Software AG
Vivek Dev	Telefónica Digital
Leo Apotheker	Ad personam
Michael Hange	Germany

Implementation actors

European Commission strategy
'Unleashing the potential of cloud computing in Europe'

COM adopted on 27/09/2012
Intended to speed up cloud uptake across Europe

Cutting through the jungle of standards

Development of safe and fair contract terms

European Cloud Partnership to drive innovation and growth through the public sector

ETSI: Cloud Standards Coordination

Launched on 04/12/2012

The Cloud Select Industry Group on Service Level Agreements

Launched on 21/02/2013

The Cloud Select Industry Group on Certification Schemes

Launched on 10/04/2013

The Cloud Selected Industry Group on Code of Conduct

Launched on 21/02/2013

Research: The Cloud Expert Group

Now completed

• *Steering Board*

Launched on 19/11/2012

The European Cloud Partnership

• *Cloud for Europe PCP Project*

Launch 14/11/2013



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What about scientific research?

COM(2012)529 of 27 September 2012:

- Make full use of other instruments, notably through research and development support under Horizon 2020 on long term challenges specific to cloud computing as well as assisting the migration to cloud-based solutions

Current status: significant resources will be allocated to fund cloud computing research within H2020 WP2014-15



R&D within the FP7 ICT Programme

WP 2007-2008 (Call 1): Service and Software Architectures, Infrastructures and Engineering: €120 million

WP 2009-2010 (Call 5): Internet of Services, Software and Virtualisation: €110 million

WP 2011-2012 (Call 8): Cloud Computing, Internet of Services and Advanced Software Engineering: €70.0 million

WP 2013 (Call 10): Software Engineering, Services and Cloud Computing: €41.5 million

Total investment: €341.5 million over 7 years

Average = €48.8 million per year



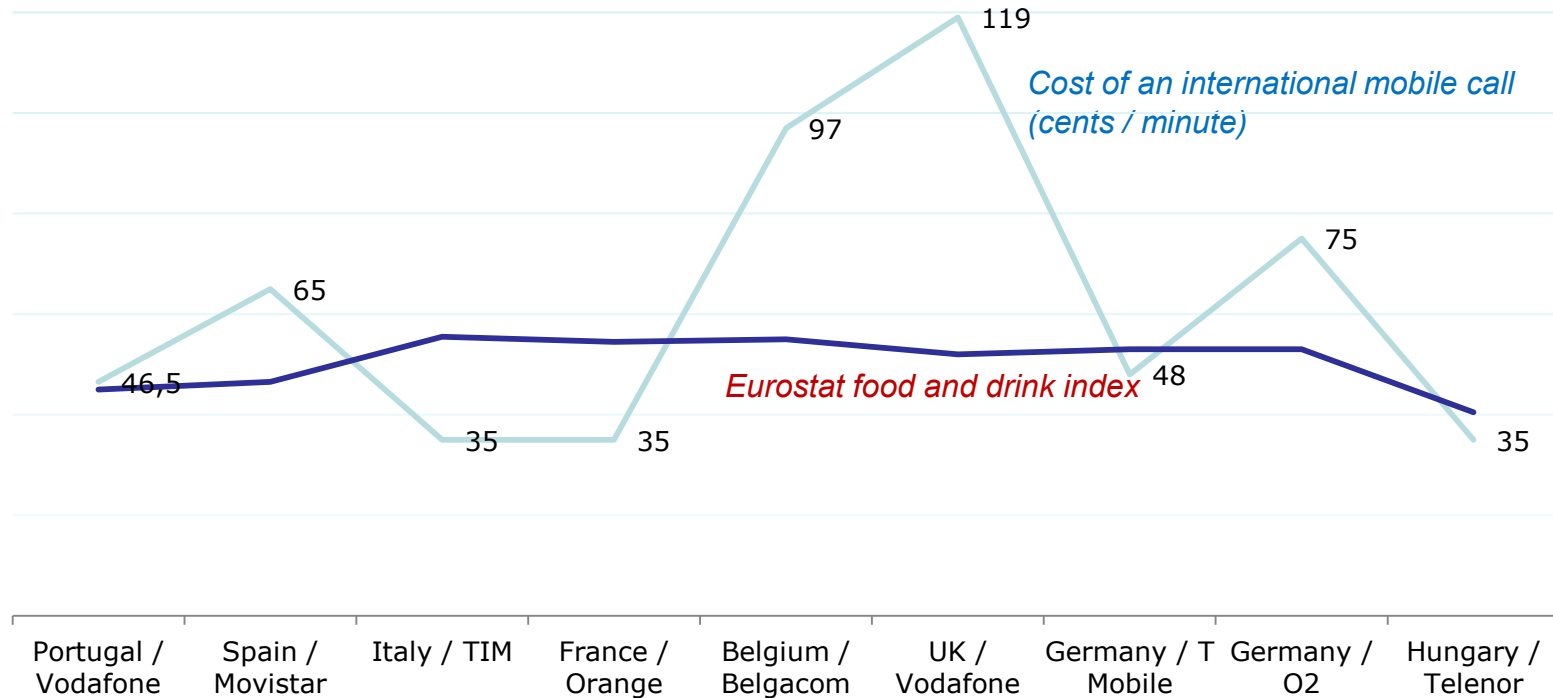
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Mercado único das telecomunicações

This is not a Single Market



A UE é um mercado único. Por que razão os custos das chamadas variam tanto?

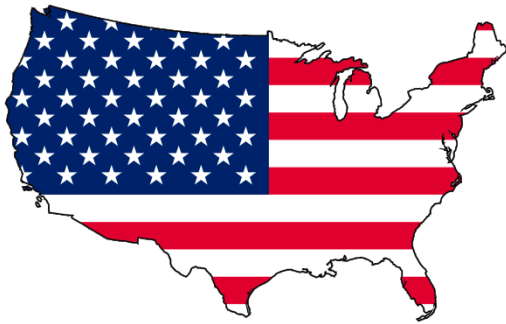


O que está mal?



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Isto não é um Mercado Único



Major Operators

3



Major operators

250

Regulatory frameworks

28



Major Operators

3

||

So many businesses use
the EU's single market.
They need the
communications to
match - we can't leave
them stranded

||

Neelie Kroes

Vice-President of the European Commission for the Digital Agenda



ROAMING



**THIS IS NOT A
SINGLE MARKET**

**Copenhagen is 53 times closer
to Malmo than Kiruna
in north Sweden**

**But sending an email
to Copenhagen is
45 times more expensive
(from mobile)**



Would you pay

€1000

for this?



Then why do you pay up €1

to send an **SMS**

within Europe?*



** Today consumers pay up to 1000% profit mark-ups on SMS within Europe. It's not fair and it makes no sense in a European Single Market.*











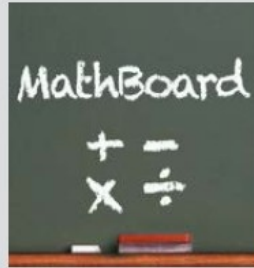

*** That's why we are planning to change it.*



The EU: making life better

Citizen benefits

Mobile applications can be useful 24/7 –
delivering not only games but a range of social
benefits

Health	Transport	Disability	Civic	Education	News
					
					

#ConnectedContinent

SPECTRUM



**Across the EU, spectrum prices
vary by up to a factor of 50***

** That's why we're
planning to change it*



The EU:
making life
better

MS	Total Revenues (billion € - 800 MHz)	Total Revenues (billion € - 2.6 GHz FDD)	Revenues (€/MHz/pop - 800 MHz)	Revenues (€/MHz/pop - 2.6 GHz FDD)
Germany	3,576	0,258	0,73	0,022
France	2,64	0,936	0,68	0,103
Spain	1,302	0,117	0,47	0,023
Italy	2,934	0,432	0,82	0,06
The Netherlands		0,0026	0,5	0,002
Portugal	0,27	0,036	0,28	0,028
UK			0,48	0,054

BROADBAND

Why broadband matters for business

Businesses with more than one site contribute
over half the EU economy's value

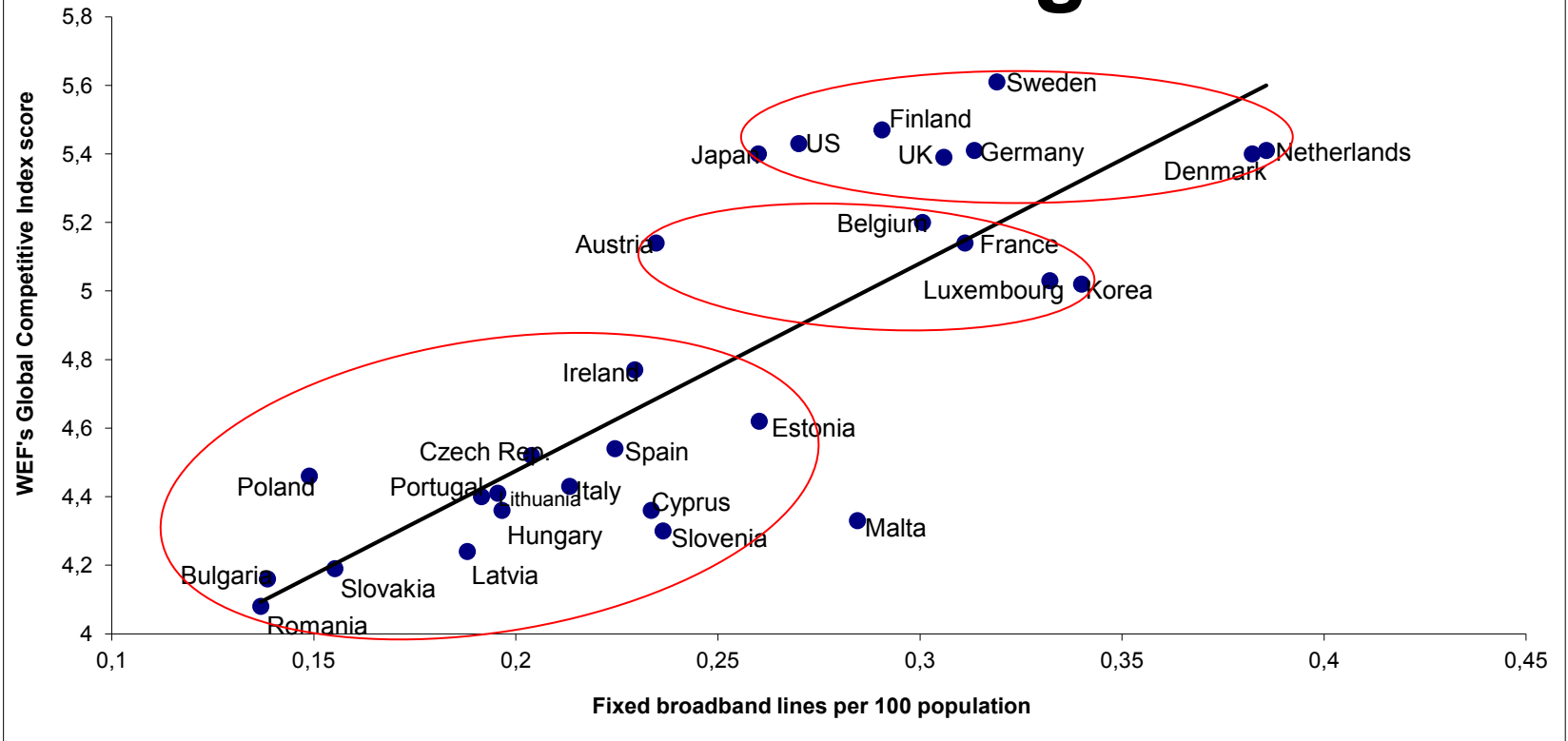
Half of them buy communications
across multiple countries

69% would rather have a single supplier

But **46%** can rarely find suppliers

Benefit to fixing this: nearly **€90 bn** per year

Broadband boosts growth



Just **10 percentage points** more broadband penetration
is worth over **€100 billion** to the EU economy

Net Neutrality

||

Internet growth
depends on openness
and innovation: I will
guarantee net
neutrality.

||

Neelie Kroes

Vice-President of the European Commission for the Digital Agenda



#ConnectedContinent

||

**Blocking and throttling
internet services isn't just
unfair and annoying for
users - it's a death
sentence for innovators
too.**

||

Neelie Kroes

Vice-President of the European Commission for the Digital Agenda



||

**I will end anti-competitive
blocking of services
for every citizen,
on every network,
on every device.**

||

Neelie Kroes

Vice-President of the European Commission for the Digital Agenda



Why is the Internet so useful?

Because it's **OPEN**

You can **experiment** without needing permission
so **new ideas** and **innovations** are **everywhere** like



Wikipedia
The Free Encyclopedia



KICKSTARTER

Unlike networks such as
electricity or telephones,
the **internet** has **never**
been under direct **state**
control or private
monopoly



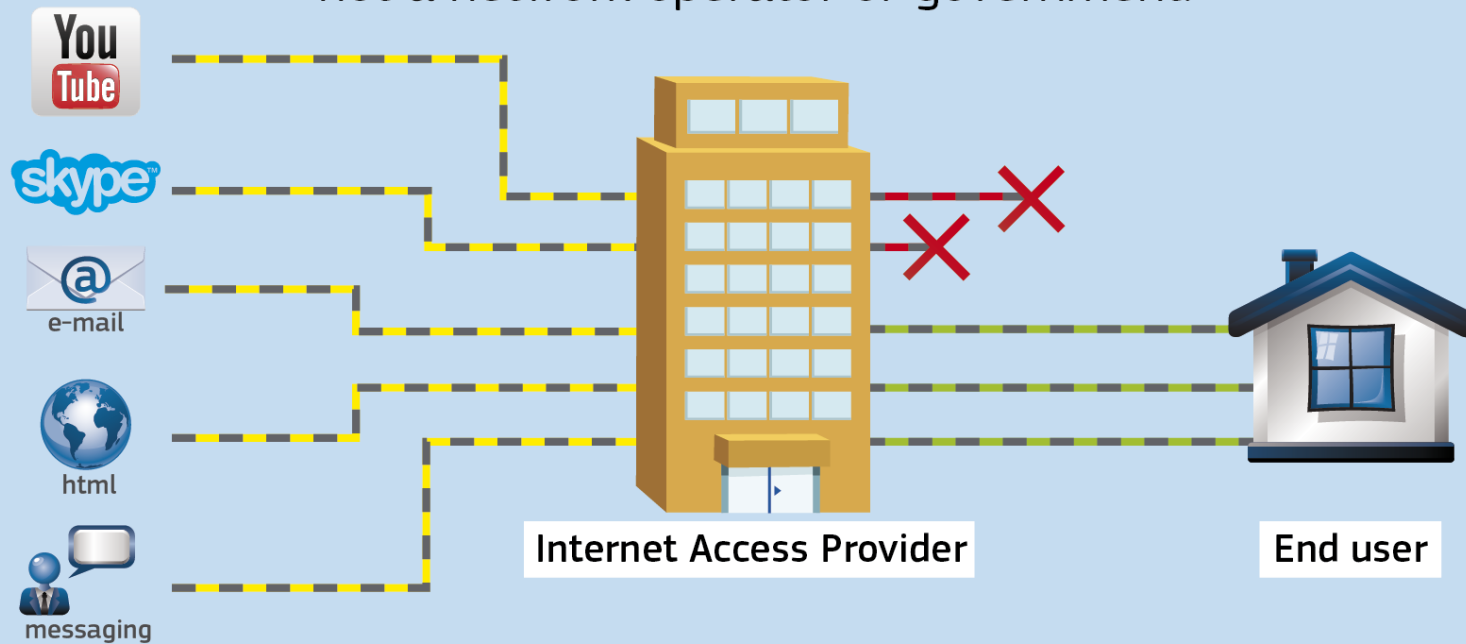
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Digital Agenda
for Europe

How does net neutrality fit in?

Net neutrality is what keeps the internet **open**.

It's the idea that all packets of **information** are **treated equally** by network operators. It means **you decide what content you see and use**, not a network operator or government.





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A genuine Telecoms Single Market

- where operators can provide cross-borders digital services from wherever they are located
- where citizens and businesses can receive digital services from wherever in Europe, wherever they are, without unjustified extra costs
- making Europe an attractive home for web entrepreneurs, device makers, and all international businesses



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IN

Simplifying regulation: so operators can offer services anywhere in Europe following a single notification

Spectrum: more coordination so pan-EU business models and companies can exist.

Standardised access products: to allow companies to obtain similar access to fixed networks in countries where they do not have their own network, and facilitate seamless provision of digital services across Europe

Open internet: ensure net neutrality while maximising innovation, competition and consumer choice.

Mobile roaming: phase out roaming from 1/7/2014. No incoming call charges

European fixed calls: companies must charge fixed calls to other EU countries as if a long-distance domestic call, unless specific objectively cost-recovery is required.

Consumer protection: new rights to plain language contracts, with more comparable information, guaranteed internet speeds, and greater rights to switch provider or contract if desired

NOT IN

No single telecoms regulator

No Eurotariff termination rates

No change to definition of electronic communications services provider

No pan-European spectrum license

No strait-jacket for internet (can be different speeds for different needs – but no blocking, throttling, lying)



A Connected Continent means

Economic recovery

- 5% on GDP = €1500 per person
- 2 million jobs
- €110 billion GDP growth / year
- €300 billion saving on public services

More productive businesses

- Savings from pan-EU telecoms providers
- A secure cloud
- Top-quality videoconferencing
- World-class digital infrastructure
- + 5-6% productivity

Real benefits for citizens

- More choice & more telecoms providers
- End to unfair roaming charges
- A full open Internet
- Easier & more efficient public services

A stronger telecoms sector

- Consistent rules, regulators & remedies
- Cross-border business boost
- Stable, consistent investment climate

Brighter prospects for SMEs & Start-ups

- Operators can't block or throttle bright ideas
- A home market that is fully connected
- Wireless services & gadgets that work perfectly across the EU



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Ambitious adoption timeline

European
Council:

14/15
March
2013

European
Council:

24/25
October
2013

Entry into
force:

1 July 2014
/ 1 July
2016



Adoption of
Commission
proposal:

10
September
2013

Adoption
by EP and
Council:

Spring
2014



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O empreendedorismo web

A iniciativa "Startup Europe"



O Mercado Único Digital O empreendedorismo web

- **Startup Europe:**

*"In recognition of the job creation potential of web start-ups, the Commission is launching **Startup Europe**, a single platform for tools and programmes supporting people wanting to set up and grow web start-ups in Europe."*

Neelie Kroes, Vice-President of the European Commission, responsible for the Digital Agenda for Europe, World Economic Forum – Davos January 25th, 2013

Startup Europe is an umbrella platform (www.startupeurope.eu) with Commission and private programmes and tools to help people *wanting to set up and grow web startups in Europe*.

www.StartupEurope.EU

"Start in Europe! Stay in Europe!"



Startup Europe

➤ Achievements:

- A **clear vision**: a strategy to structure, accelerate and celebrate the startups ecosystem in Europe (focused on startups around web business models) with the objective of generating a tsunami of viable, sustainable and global startups at a European level.
- A **big demand** from the constituency for the EU to act on this area (eg. www.startupmanifesto.eu)
- A very well received list of **(operational) actions**:
 - **Startup Europe Leaders Club** to get role models and informed advices, e.g.: startupmanifesto.eu with 22 actions and more than 4000 signatures of entrepreneurs supporting the manifesto
 - **Startup Europe Accelerator Assembly** (200 accelerators across Europe) - launched
 - **Startup Europe Investors Forum** – launched – 60 investors across 7 member states
 - **Startup Europe Partnership** of corporations and education organisations to help successful startups to scale up and not stay stuck at the startup level - to be launched in the coming months
 - **Startup Europe crowdfunding network** – launched -22 crowdfunding platforms in the network
 - **Startup Europe Co-working spaces Network** – to be launched in November
 - Competitions and award to celebrate best startups across Europe: **Europioneers and techAllStars**
 - **Pledges** from large corporations to support Startup Europe objectives, e.g. Telefonica, Microsoft, etc
 - **Dynamic Visual Mapping** of the startup ecosystem in Europe – to be launched by December

➤ What is next:

- To analyse and operationalize the **Startup Manifesto** 22 actions: "the roadmap for a Startup Europe"
- To mobilise resources from **private corporations** to help startups
- To mobilise **public resources**, e.g. FP7 last call and Horizon 2020 first call

- References

- Web entrepreneurs Action Plan (within Entrepreneurship 2020 Action Plan)
- Web Entrepreneurs Staff Working Document

- Other Background documents

- Startup Europe Manifesto startupmanifesto.eu
- Report on how Horizon 2020 could be used to support web entrepreneurs
- All documents available at startupeurope.eu
See section on funding opportunities
- Follow us on Twitter [@startupEU](https://twitter.com/startupEU)
[#startupeurope](https://twitter.com/startupeurope)



Funding opportunities

WP2014-15 Web Entrepreneurship

- The objective is to create an environment in Europe that encourages more web entrepreneurs to start a business in Europe, and grow internationally.
- The focus of this topic is on entrepreneurs who use web and mobile technologies as main components in their innovation.

Expected impact:

- To support the emergence of dynamic European ecosystems for web entrepreneurs that also contribute to shaping future web entrepreneurship specific policies, in particular for *the implementation of Startup Europe EU initiative*.

(funding €10M)

Funding opportunities

FI-PPP Phase 3 – Call 3

- Aims at providing and running a stable infrastructure for the large scale trials, expanding the core platform, the use case specific functionalities and their demand-driven instantiations, and involving through open calls SMEs and web entrepreneurs as developers of highly innovative, infrastructure based, data-rich services and applications, building on, and extending, the large scale trials and the core platform functionalities.
- The third phase of the FI-PPP ensures that technological developments and trials taking place in phases one and two will evolve into seed-type activities generating actual take-up of innovative Internet services and applications.

Funding opportunities

FI-PPP Phase 3 – Call 3

- The FI-PPP should also be an accelerator for regional smart growth. Therefore this last phase of the FI-PPP is expected to connect and establish close synergies with regional developments and policies.
- The call is closes on December 10th.
- Funding: €100M)

Oportunidades de financiamento

H2020, the EU Framework Programme for Research and Innovation

- Strengthen the EU's position in science with a dedicated budget of €27 billion. This will provide a boost to top-level research in Europe,.
- Strengthen industrial leadership in innovation € 13, 5 billion. This includes major investment in key technologies, greater access to capital and support for SMEs
- Almost € 30 billion to help address major concerns shared by all Europeans such as climate change, developing sustainable transport and mobility, making renewable energy more affordable, ensuring food safety and security, or coping with the challenge of an ageing population.
(20% of the 2 above amounts for SMEs)

Obrigado!



Funding opportunities

H2020, the EU Framework Programme for Research and Innovation

- Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.
- Running from 2014 to 2020 with a budget of just over €70 billion, the EU's new programme for research and innovation is part of the drive to create new growth and jobs in Europe.



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Content of the proposal:

Single consumer space

- Harmonised end-user rights and easier switching
- Open Internet: net neutrality
- Phasing out roaming

Single EU authorisation

- Simplified regulation and enhanced convergence of regulatory conditions

European inputs for high-speed broadband

- Wireless: spectrum coordination; facilitating small cells
- Fixed: European virtual access products



The vision

- Establishing a borderless **European connectivity market** with fewer barriers
- In which telecoms companies can **think European and compete globally**, and consumers can get what they need and want
- **EU-scale networks** supporting a competitive digital single market, which should lead to a lessening of ex ante regulatory pressure.
- Making **Europe an attractive home** for web entrepreneurs, device makers, and all international businesses.



FRAME OF THE PROPOSAL

- We propose changing several directives and regulations into one regulation
- Makes a reality of two key EU Treaty Principles: the freedom to provide and to consumer (digital) services wherever one is in the EU. Pushes the sector to a tipping point, so that enough of the conditions exist for completing a real single market. Does this through:
 - Incentives for new business models and more investment
 - Removing bottlenecks and barriers that foster today's 28 fragmented markets
 - Enshrining new and fully harmonised user rights
- All stakeholder groups are net beneficiaries.
- There are no carve-outs / package cannot be split up to suit one interest group only

What does a Connected Continent mean for...

...ICT companies & startups?

- The chance to innovate and develop – knowing operators can't block or throttle your bright ideas
- A connected home market where your innovations can grow and succeed
- A more aligned spectrum market – for wireless services and gadgets that work perfectly across the EU

...big businesses?

- Communications that serve all your sites – without multiple providers and contracts
 - New innovations:
 - Secure communications
 - Top-quality videoconferencing
 - Speedy cloud computing
- Broadband that is reliable, pervasive, fast
 - An economic boost worth **€90 bn** / year

...citizens?

More choice & more telecoms providers competing in your country

The right to choose a "bundle" you can use across the EU

– without unfair roaming charges

The guaranteed right to the full, open Internet – no blocked services

Easier, more consistent consumer protection – wherever you are

...telecoms providers?

- A stronger sector for a connected continent
- The chance to work between countries with consistent rules, regulators & remedies
- Easier to plan and bid across borders
- The chance to think big and compete globally
- The chance to provide innovative services
- Stable, consistent rules for investment
 - ➔ More fast broadband for more Europeans

...Europe?

- 21st century digital infrastructure – like they have in the US and Asia
- More growth and jobs from the broadband boost
 - More competitiveness for every sector that depends on connectivity – *from transport to television.*

#ConnectedContinent

||

I want us to show
citizens that the EU is
relevant to their lives.

That we made the
digital rules catch up
with their legitimate
expectations.

||

Neelie Kroes

Vice-President of the European Commission for the Digital Agenda



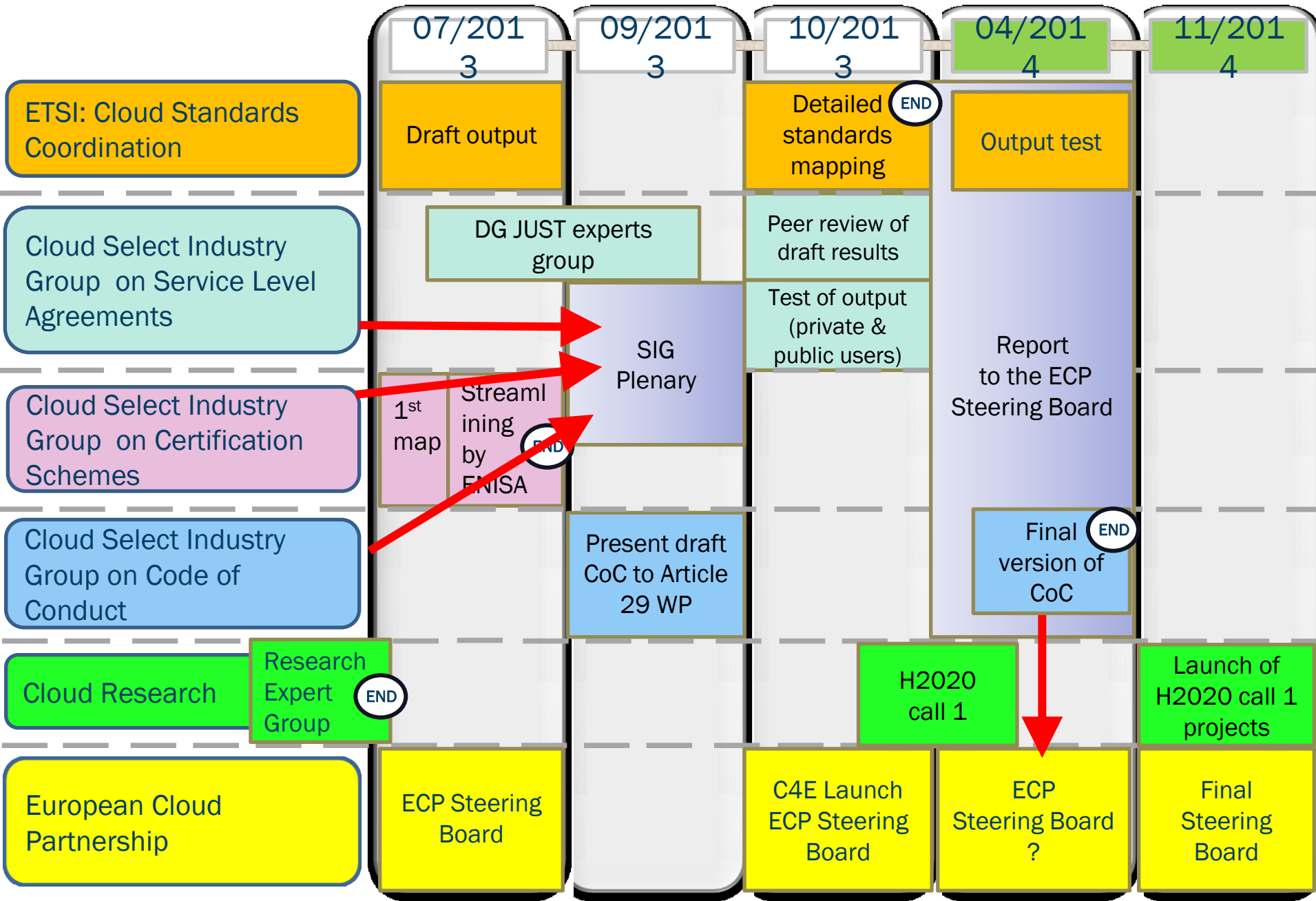


Comissão
Europeia

Forthcoming events

- 14 Nov: Launch of pre-commercial procurement project C4E in Berlin
<http://ec.europa.eu/digital-agenda/en/news/cloud-europe-gears-future>
- 14-15 Nov: ECP Steering Board meeting in Berlin
- ECP info at <https://ec.europa.eu/digital-agenda/node/609>
- 4 Dec: ETSI Cloud Standards Coordination, Final Meeting in Brussels
- Info on SIG and ETSI: <https://ec.europa.eu/digital-agenda/en/cloud-computing-strategy-working-groups>

Implementation of the cloud strategy





Comissão
Europeia

Select Industry Group (SIG)

- Structured into 3 working groups (since January 2013):
 - **Service Level Agreements** for cloud computing services
<https://ec.europa.eu/digital-agenda/en/cloud-select-industry-group-service-level-agreements>
 - **Certification Schemes** in the domain of cloud computing, including data protection
<https://ec.europa.eu/digital-agenda/en/cloud-select-industry-group-certification-schemes>
 - **Code of Conduct** for cloud providers with a view to support uniform application of data protection rules
<https://ec.europa.eu/digital-agenda/en/cloud-select-industry-group-code-conduct>



Common concerns

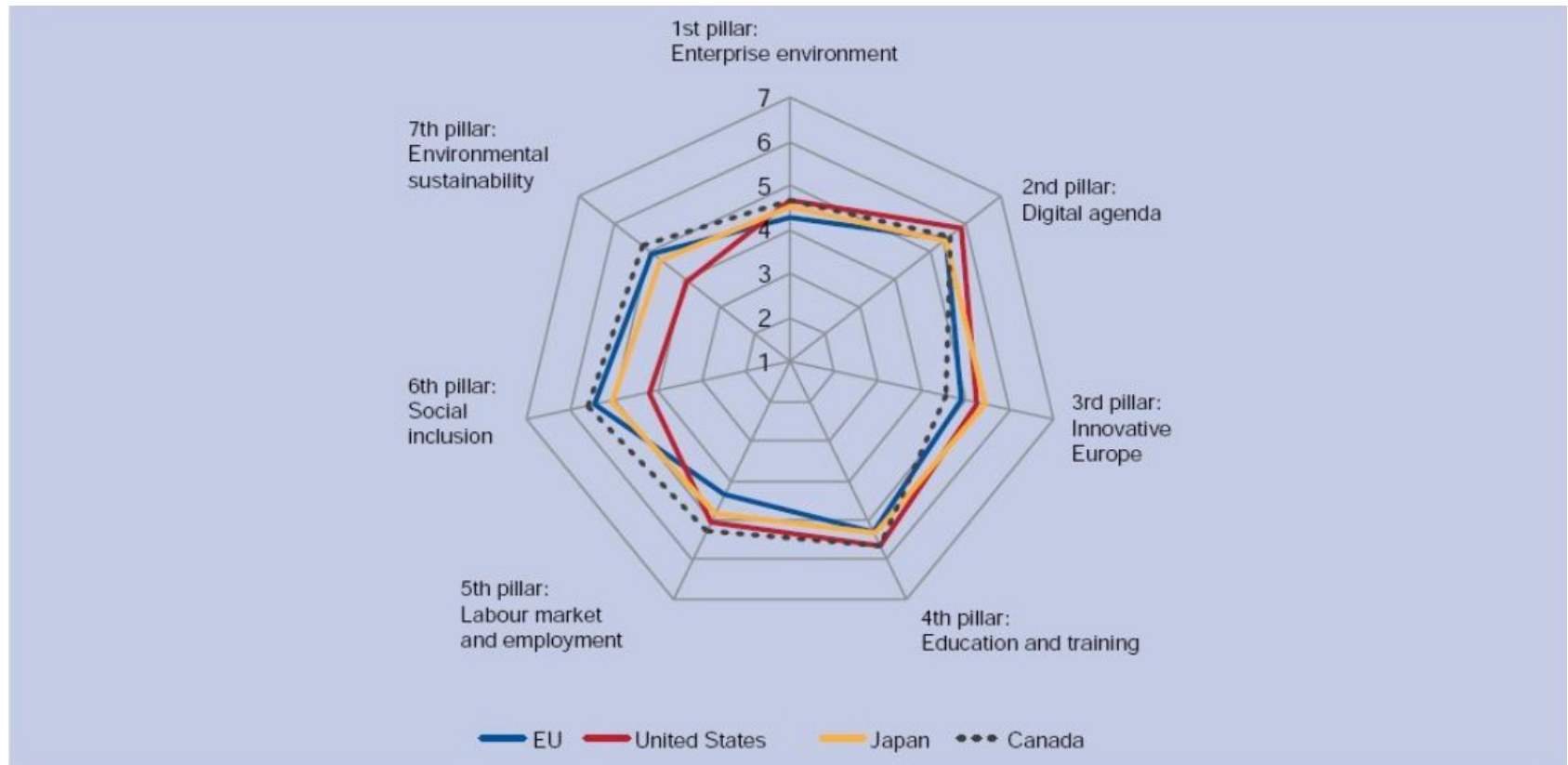
Do you know where your **critical data** is located right now? [does it matter?]

What are the security issues when people use **Gmail**, **Hotmail**, **Dropbox**, **Google** or **Basecamp**?

There is no "one size fits all" when it comes to cloud **compliance** and **standards**. For instance, **PII** (personally identifiable information), **PCI-DSS** (payment card industry – data security standard), **Sarbanes-Oxley** Act, **HIPAA** (health insurance portability and accountability act) and **HITECH** (health information technology for economic and clinical health act) all comprise standards and regulations that need to be addressed **depending on the specific industry sector**

Got a **Facebook** page? A **Gmail** account? A **Hotmail** account? Use **Google** to search? Use **Amazon** to purchase? If so, "**the cloud**" has read, aggregated and data-mined your personal information and your company's data ...

Performance Digital: EU v competidores globais





Comissão
Europeia

1. Medidas em curso (ADE)

- Abertura do acesso aos conteúdos em linha
 - Modelos de distribuição de conteúdos que melhorem o acesso e a utilização de todos os tipos de conteúdos (música, vídeo, livros) em diferentes dispositivos e em diversos territórios
 - A Comissão está a estudar novas ações para a promoção e facilitação do licenciamento de obras audiovisuais para distribuição em linha e, em especial transfronteiras, como sequência do Livro Verde sobre o audiovisual [COM(2011)427 de 13 de julho 2011]
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0427:FIN:PT:PDF>
 - Dado que o consumidor pode utilizar a nuvem como um cacifo digital para conteúdos com acesso a partir de diferentes dispositivos, levantam-se questões sobre a eventual cobrança de taxas sobre a cópia de conteúdo para uso privado com origem ou destino na nuvem. Possibilidade de uma iniciativa legislativa em matéria de cópia para uso privado em 2013



Comissão
Europeia

2. Medidas em curso (ADE)

- Simplificação das transações em linha e transfronteiras
 - A revisão recente da Diretiva relativa ao comércio eletrónico, reafirmou o comércio eletrónico como alicerce essencial do crescimento dos serviços digitais na Europa [COM(2011)942 de 11 de janeiro 2012]
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0942:FIN:pt:PDF>
 - Exoneração de responsabilidade dos fornecedores de serviços da sociedade de informação quando alojam ou transmitem informações ilegais fornecidas por terceiros
 - Cadeias de valor complexas, abrangendo múltiplas jurisdições, determinação do direito aplicável e procedimentos de notificação e ação respeitantes a informações e atividades (alegadamente) ilícitas, em seguimento da COM(2011)942
 - Adoção de normas comuns que possibilitem uma utilização segura de serviços que exigem processos de autenticação e autorização fiáveis [COM(2012)238 de 4 de junho 2012]
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0238:FIN:PT:PDF>
 - A Comissão debruçar-se-á nos próximos meses sobre os problemas da cibersegurança em geral ao desenvolver uma estratégia nesse domínio



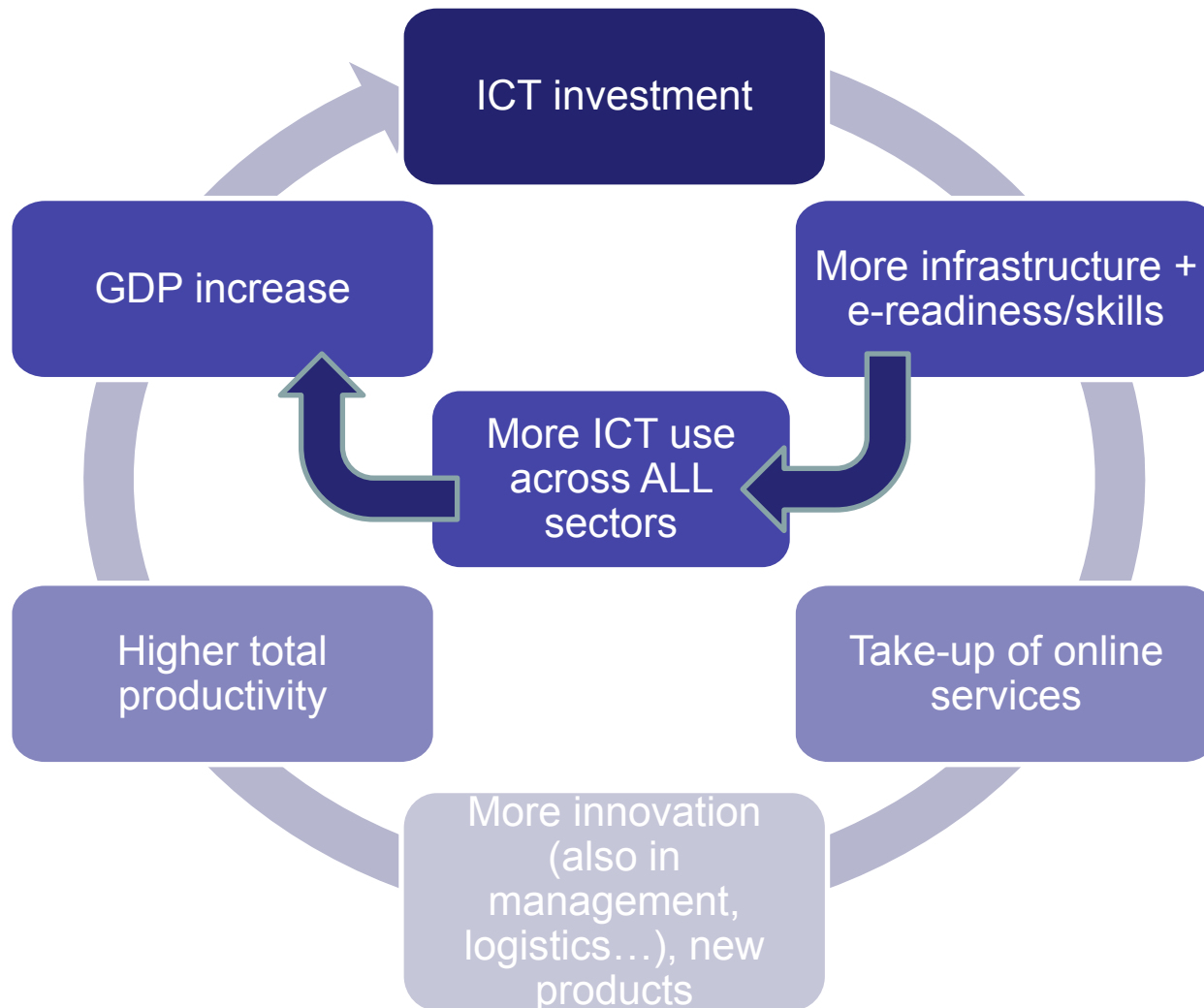
Comissão
Europeia

3. Medidas em curso (ADE)

- Criação de confiança nas tecnologias digitais
 - Proteção dos dados = uma das preocupações centrais que pode dificultar a adesão aos serviços de computação em nuvem
 - Devido a 27 quadros legislativos nacionais (parcialmente divergentes), é muito difícil oferecer uma solução em nuvem economicamente eficiente ao nível do mercado único digital
 - Dado o âmbito mundial da nuvem, precisa-se clareza na regulamentação das transferências internacionais de dados
 - Proposta de Regulamento do Parlamento Europeu e do Conselho relativo a proteção das pessoas singulares no que diz respeito ao tratamento de dados pessoais e a livre circulação desses dados [COM(2012)11 de 25 de janeiro 2012]
 - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0011:FIN:PT:PDF>

Regulamento: entra em força simultaneamente em todos Estados Membros; não e' necessária transposição para lei nacional

Entrepreneurship and digital jobs and skills





What are we looking for? (I)

1. Accelerate web entrepreneurship in Europe:

- New cross-border services to support web entrepreneurs connecting existing local web entrepreneurship ecosystems and hubs.
- The services should help promising web startups to launch and scale up their operations across Europe.
- Examples (non-comprehensive list) :
 - linking potential web entrepreneurs with key actors (e.g. mentors, located anywhere in Europe)
 - linking acceleration programmes from several locations
 - exposure to new financing opportunities
 - prizes for innovative web and mobile services and applications
 - putting geeks from one local ecosystem in residence within accelerators and startups of another local ecosystem
 - meet-ups of stakeholders of the local ecosystems, Internships across local ecosystems or travel grants
 - providing online tools (legal, training) that support web entrepreneurs to start a new venture and scale across borders
 - ...
- Other relevant activities (see the H2020 consultation report of March 2013 for a list of potential relevant activities)



What are we looking for? (II)

1. Accelerate web entrepreneurship in Europe:

- We aim at creating cross borders environments composed of a few highly integrated local ecosystems (3-4 local ecosystems?) where the members of the individual ecosystems feel as belonging to the new cross border environment created by the project.
- Recommended size of the projects: around 2 Mio € (70% funding)
- Budget: 6 Mio €



What are we looking for? (III)

- **2. Coordination activities in the area of web entrepreneurs**
 - -Strengthen the environment for web entrepreneurship in Europe and that exploit synergies across stakeholder communities.
 - -Increase the impact, accessibility and reach of the online support platforms and the new services they offer as well as link into other relevant initiatives.
 - -Should cover actions such as training, legal and financial aspects.
 - Therefore proposals may include features such as:
 - networking all relevant stakeholders groups;
 - supporting European initiatives on web entrepreneurship, in particular to support Startup Europe implementation
 - encouraging people, notably young people and women, to become web entrepreneurs;
 - supporting awards to celebrate web entrepreneurship;
 - promoting the use of MOOCs for web entrepreneurship skills
 -
 - -Budget: €4 Mio
 -



What are we looking for? (IV)

We expect proposals which will:



- "think European"
- allow for the provision of pan-EU services for web entrepreneurs
- involve the right partners in the consortium
- - engage the real players in the local ecosystems to be connected
- - complement existing activities in MS and EC policy initiatives
-

Startup Europe: A renewed Digital Continent

- Startup Europe Leaders Club, see startupmanifesto.eu
- Competitions and awards (TechAllStars, Europioneers)
- Startup Europe Accelerators Assembly
- Startup Europe Web Investors Forum
- Startup Europe support for crowdfunding
- FI-PPP call 3
- Stimulating the emergence of Massive Online Open Courses focused on web skills (in preparation)
- Dynamic visual mapping of the major tech hubs in Europe (in preparation)
- For further information: StartupEurope.EU





Actions underway for Web entrepreneurs

- Startup Europe Leaders Club, see startupmanifesto.eu
- Competitions and awards (TechAllStars, Europioneers)
- Startup Europe Accelerators Assembly
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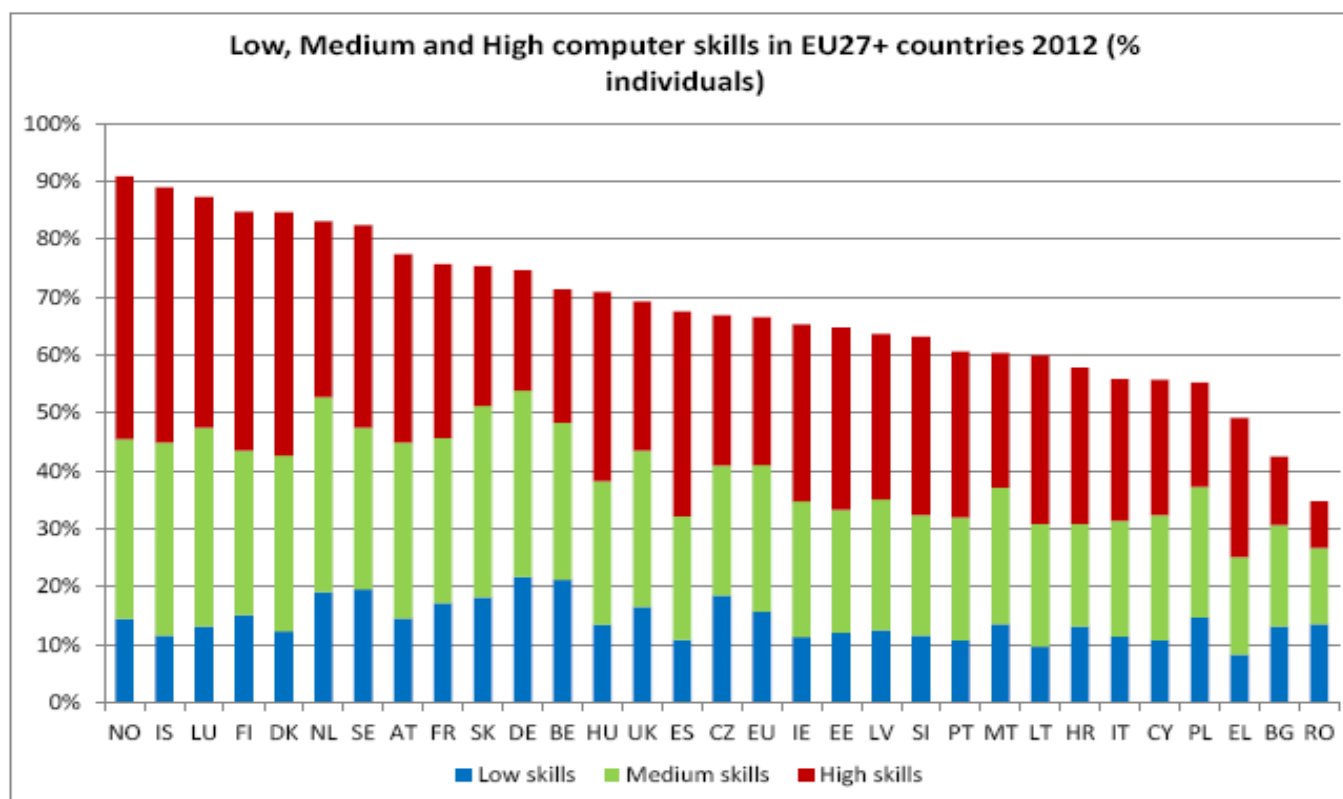




European
Commission

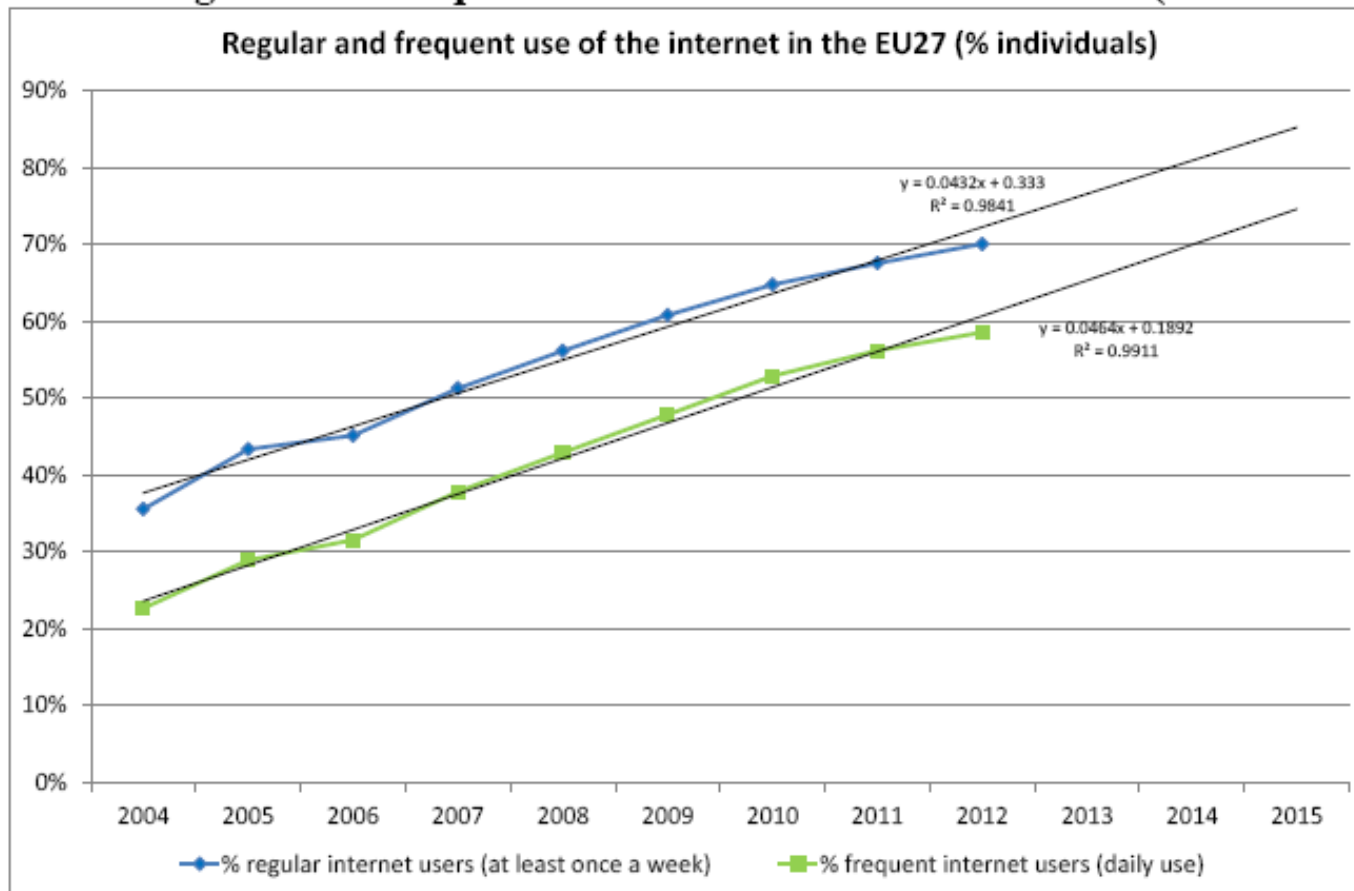
Computer skills

Figure 83: Low, Medium and High computer skills in EU27+ countries 2012 (% individuals)



Source: Eurostat

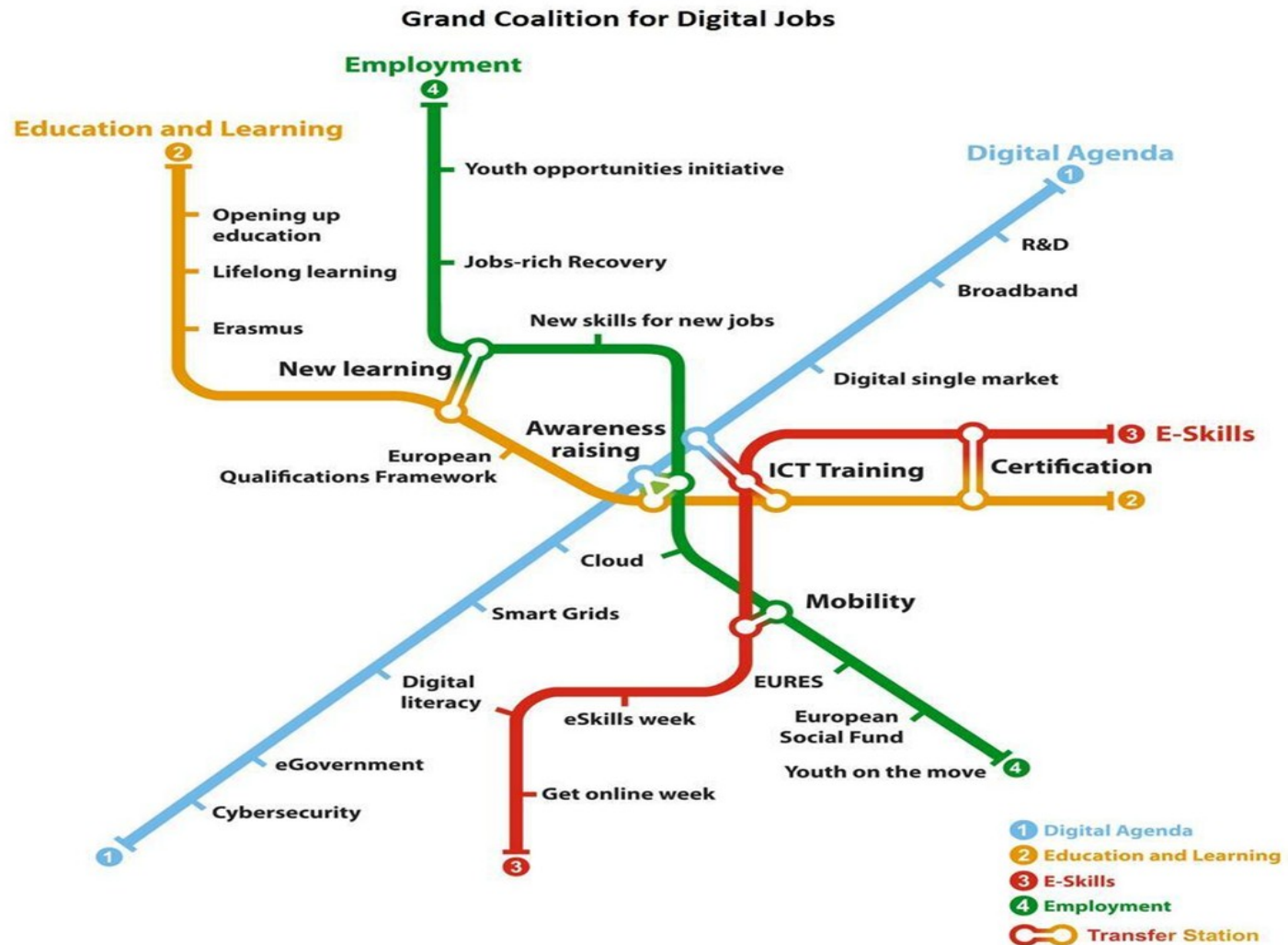
Figure 74: Regular and frequent use of the internet in the EU27 (% individuals)



Source: Eurostat

Grand Coalition

5 Policy Clusters





Some Current Pledges

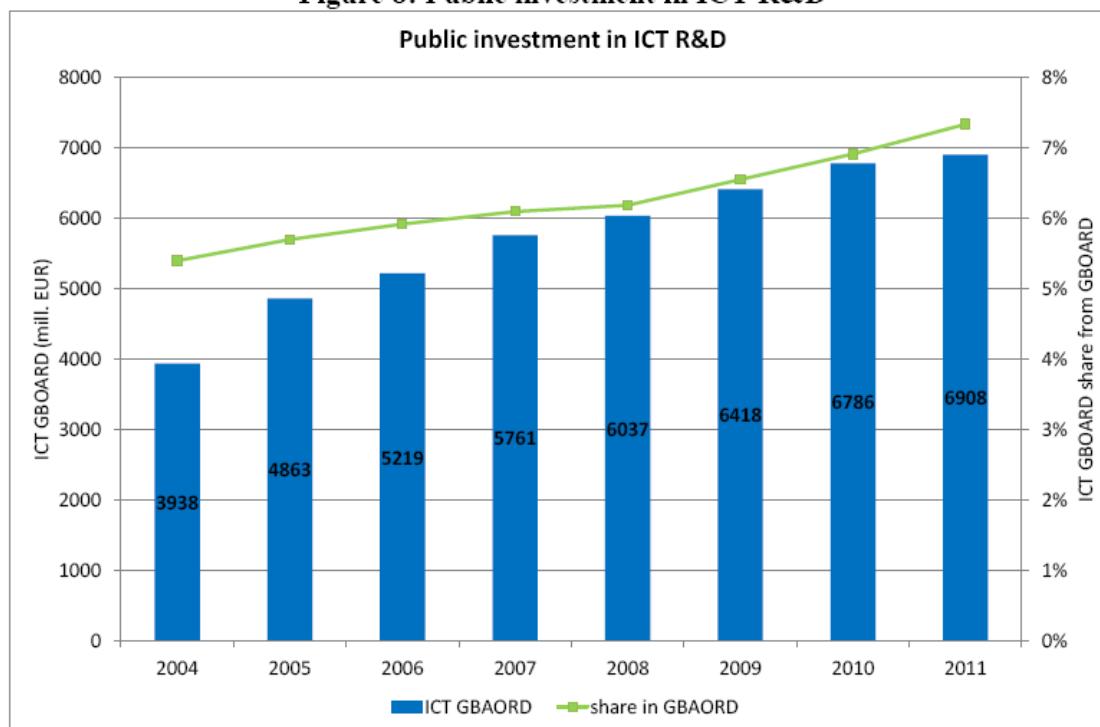
- ICT TRAINING:
 - **Online ICT learning platform (Academy Cube)**
 - **Smart grid training, etc.**
- NEW LEARNING:
 - **Support industry/education provider collaboration**
 - **Launch MOOC for secondary teachers**
- CERTIFICATION:
 - **Support roll-out of common eCompetences framework**
- MOBILITY:
 - **Launch mobility assistance services**
- AWARENESS RAISING:
 - **GetOnline Week**



European
Commission

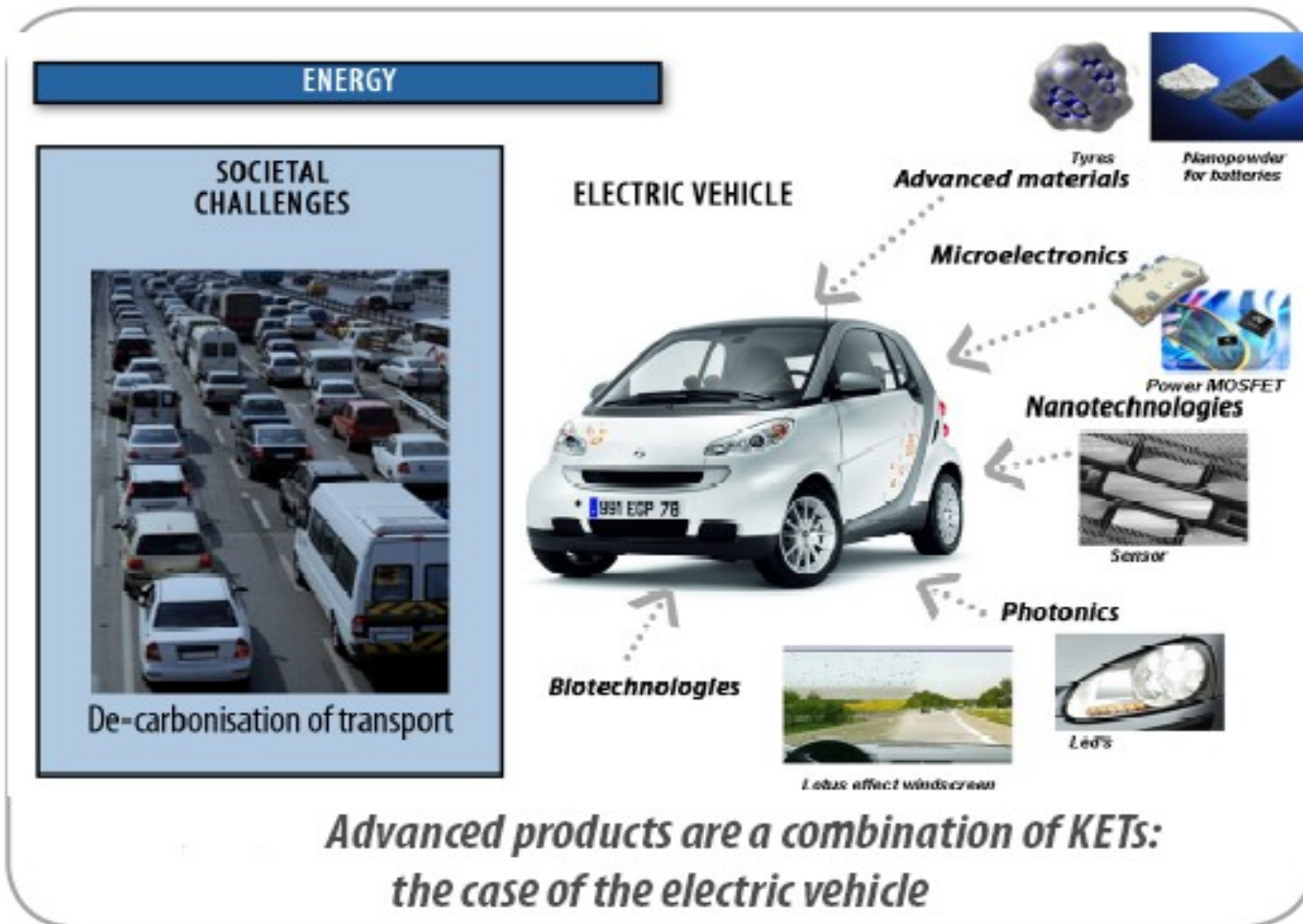
Public investment in ICT R&D

Figure 8: Public investment in ICT R&D



Source: IPTS5. Values for EU-27 in EUR m. NB: the baseline estimate for 2007 has been revised due to a new methodology;

Beyond R&D&I: An industrial agenda for key enabling technologies



Full implementation of updated DAE - Impacts

5% expected increase of European
GDP by 2020

1.2 million jobs to be created in
infrastructure construction in the short
term, rising to 3.8 million jobs
throughout the economy in the long term



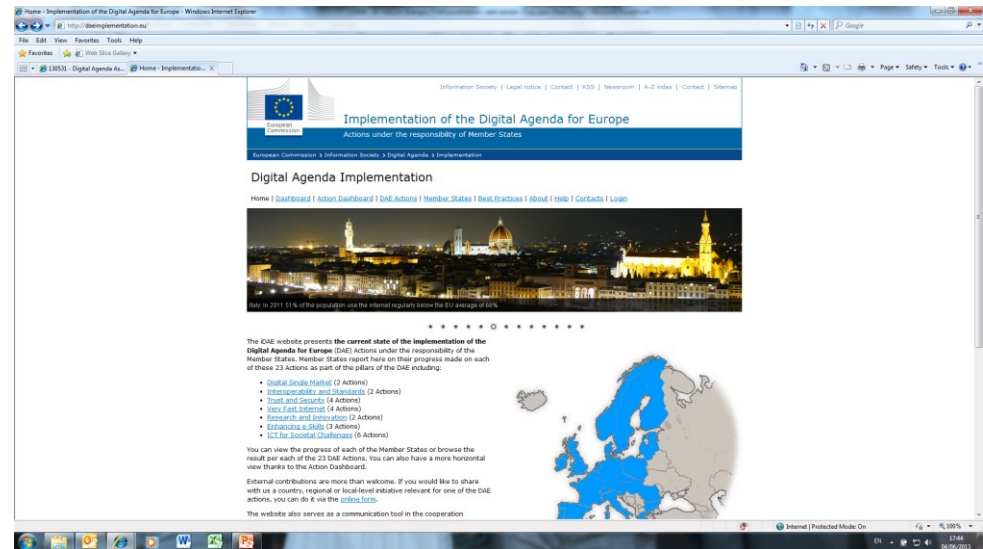
```
graph TD; A[5% expected increase of European GDP by 2020] --> C((Growth & Jobs)); B[1.2 million jobs to be created in infrastructure construction in the short term, rising to 3.8 million jobs throughout the economy in the long term] --> C;
```

Growth
& Jobs

Stakeholder Engagement



Going Local 2013



DAE Member State implementation survey

National Digital Agendas



Digital Agenda – widely emulated in the EU

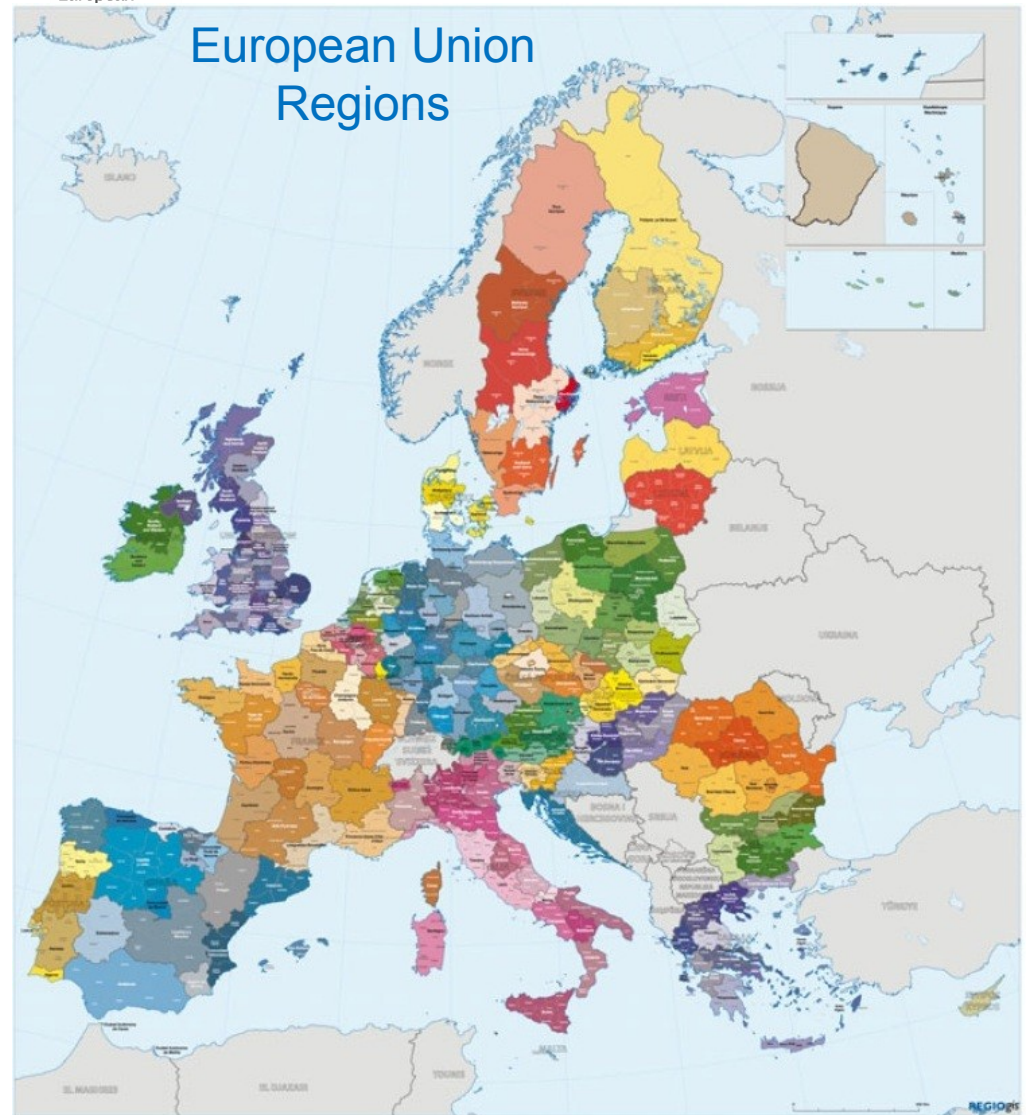
National Digital Agenda or compatible policy framework adopted	CY, EE, FI, DE, IT, LT, MT, NL, PT, RO, ES, SE, FR, (CH, TR)
National Digital Agenda or compatible policy framework under way	BE, BG, CZ, GR, HU, LV, SI, (NO)
Coordinated or aggregated/combined approach of specific digital national initiatives, but no single overarching strategy	AT, DK, IE, LU, PL, SK, UK

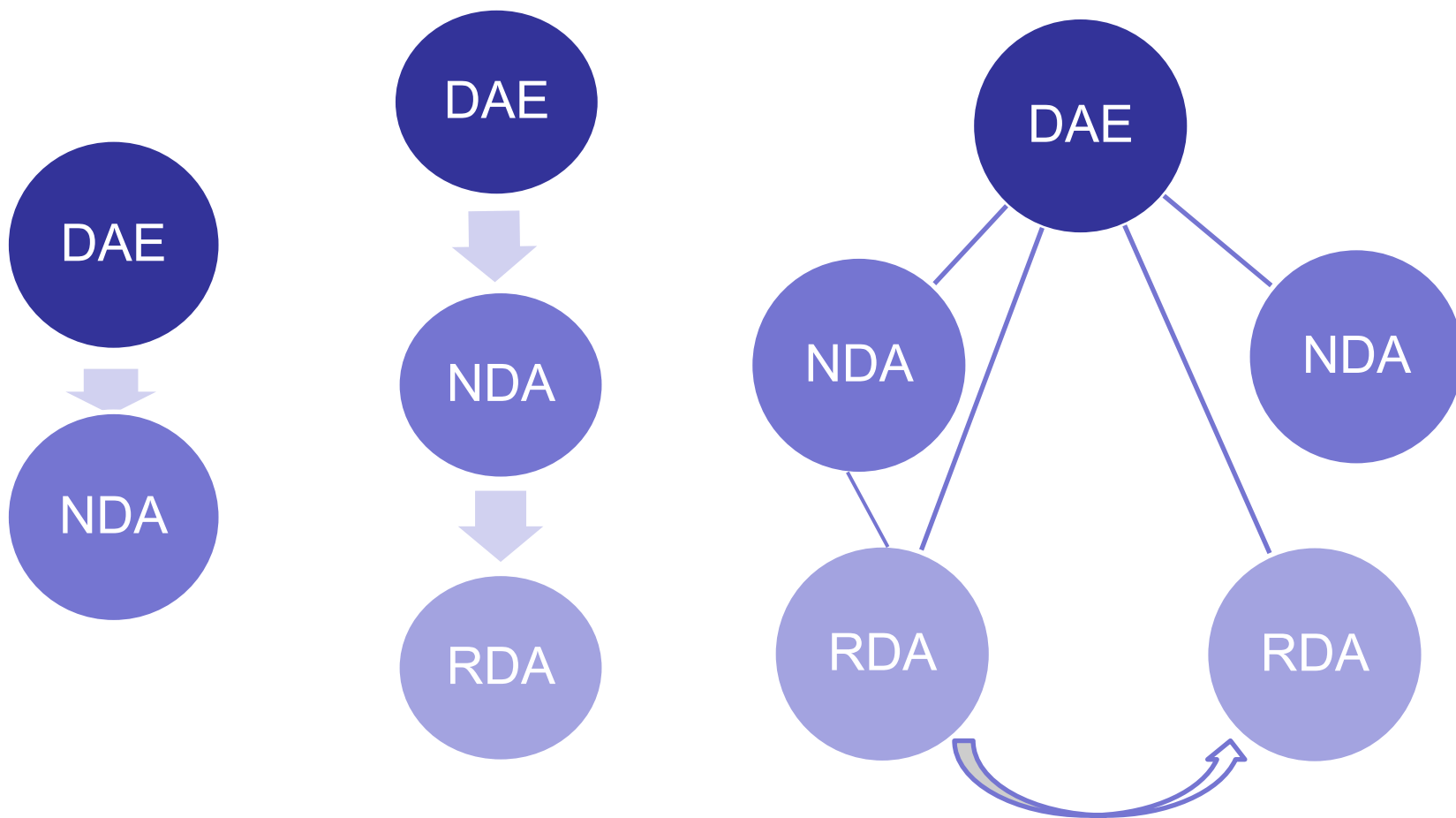
Regional Digital Agendas

Many regional and local authorities have implemented digital strategies

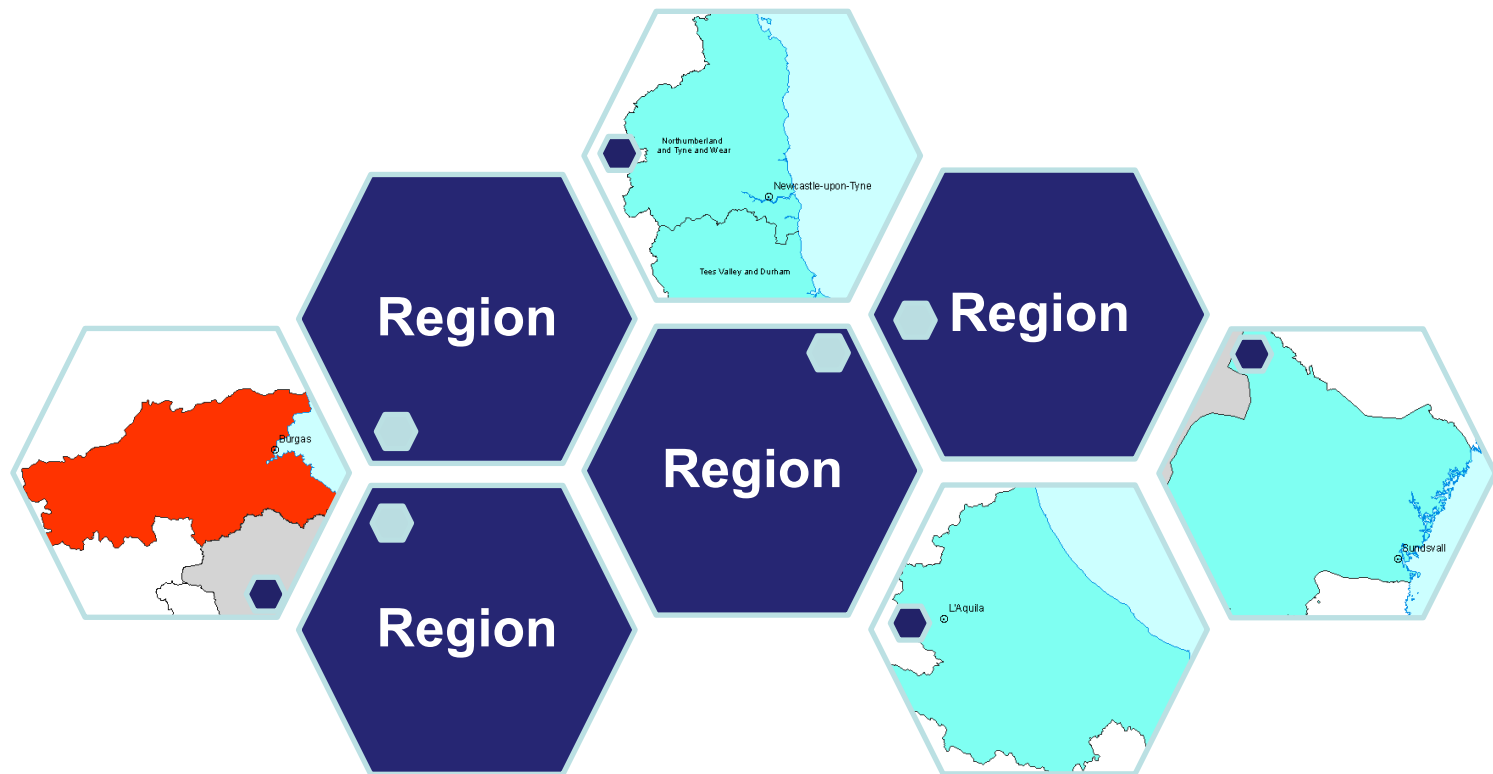
They reflect key DAE priorities:

- investment in broadband infrastructure
- ICT enterprises
- e-Government
- e-Health, inclusion and accessibility.





Development of digital strategies at national and regional/inter-regional/transnational level.



Regional Digital Agenda Seminar: March 2014 with Committee of the Regions



The opportunity for regions across Europe to meet, share best practices and exchange innovative ideas.

Thank you



ec.europa.eu/digital-agenda



DigitalAgenda



blogs.ec.europa.eu/digital-agenda/

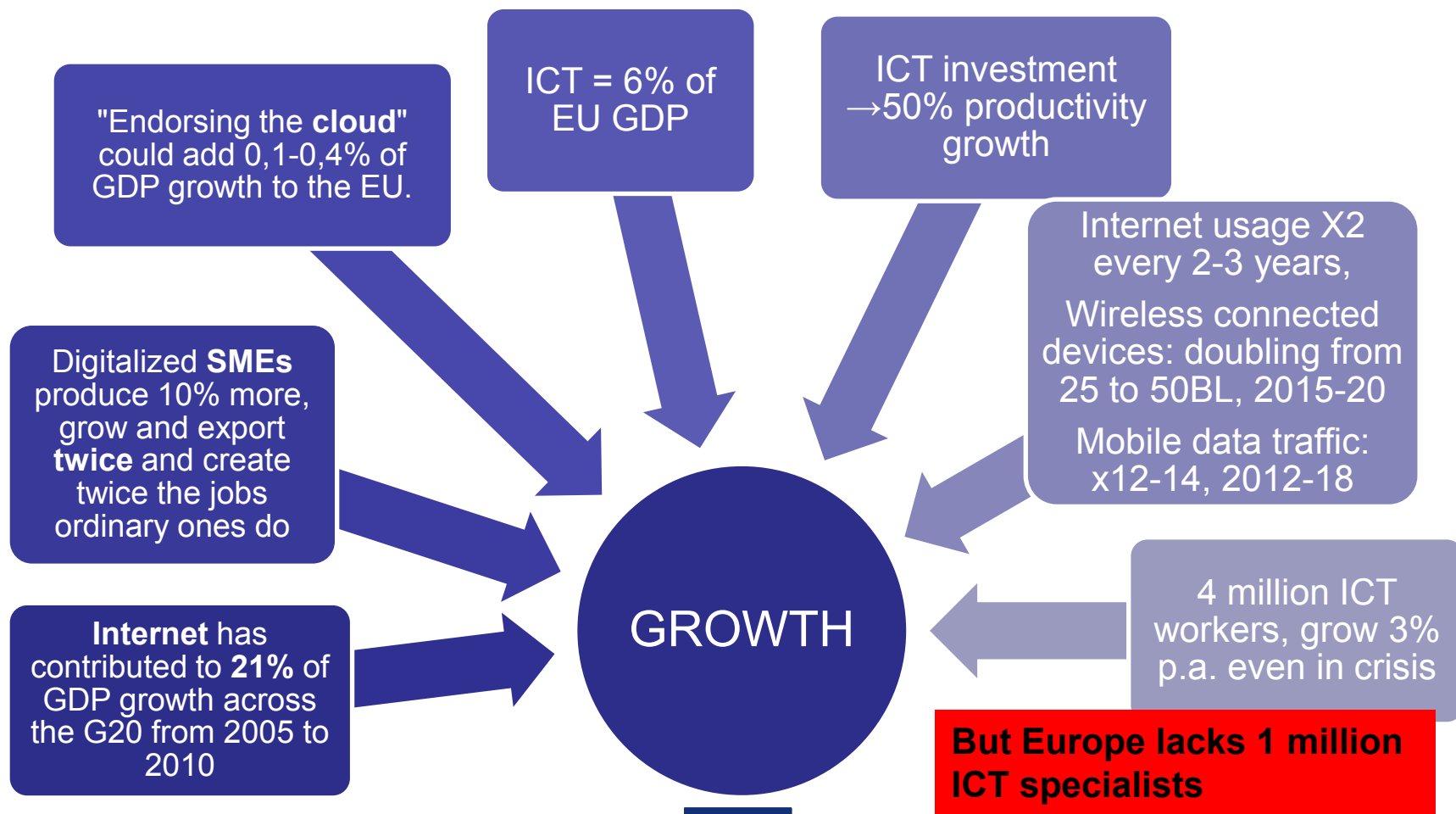


@DigitalAgendaEU

<http://ec.europa.eu/digital-agenda/>

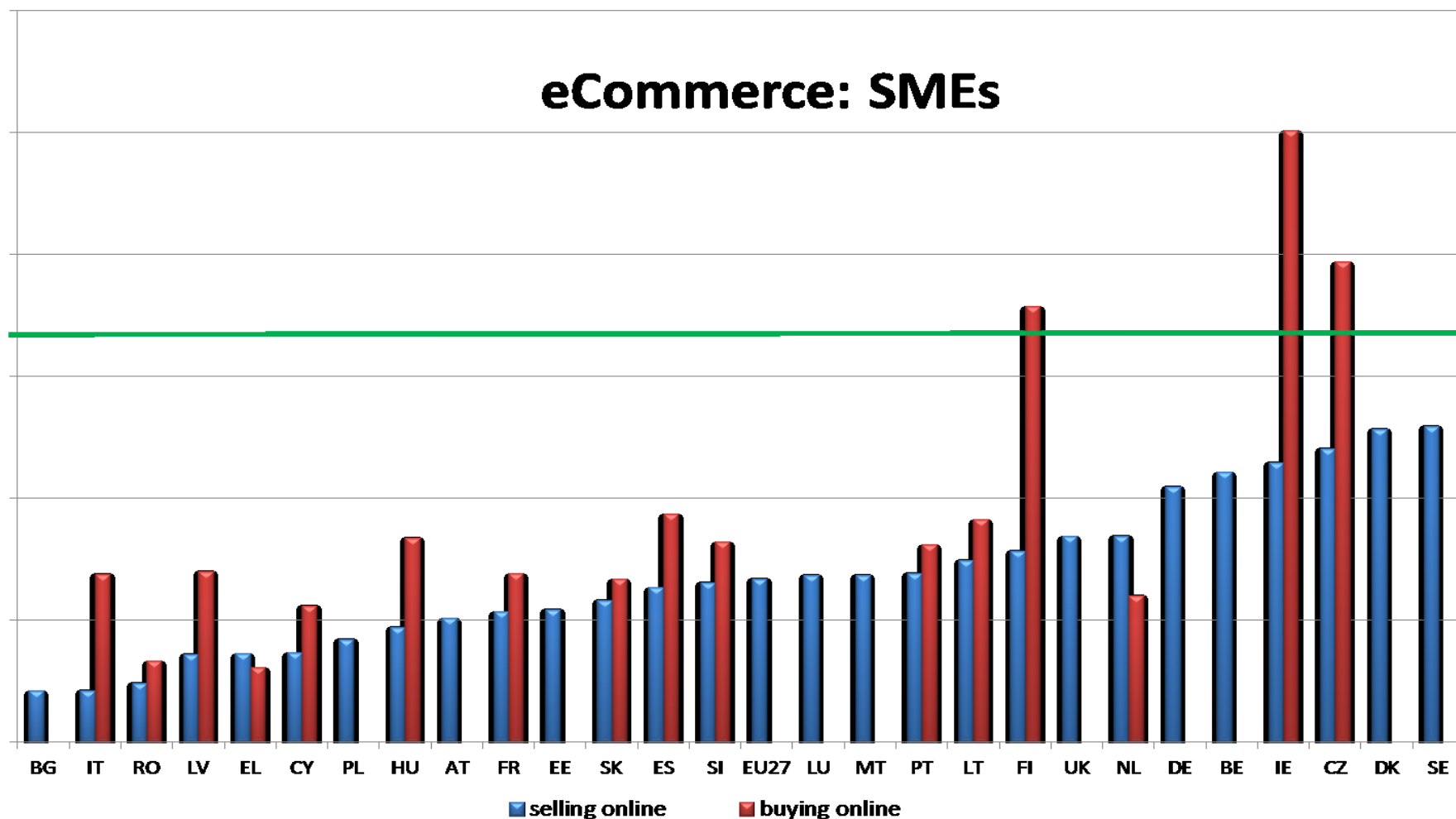
<http://www.daeimplementation.eu>

Why ICT matters



SMEs selling online remains a rare sight

eCommerce: SMEs



What does a Connected Continent mean for...

...ICT companies & startups?

- The chance to innovate and develop – knowing operators can't block or throttle your bright ideas
- A connected home market where your innovations can grow and succeed
- A more aligned spectrum market – for wireless services and gadgets that work perfectly across the EU

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– without unfair roaming charges

The guaranteed right to the full, open Internet – no blocked services

Easier, more consistent consumer protection – wherever you are

...telecoms providers?

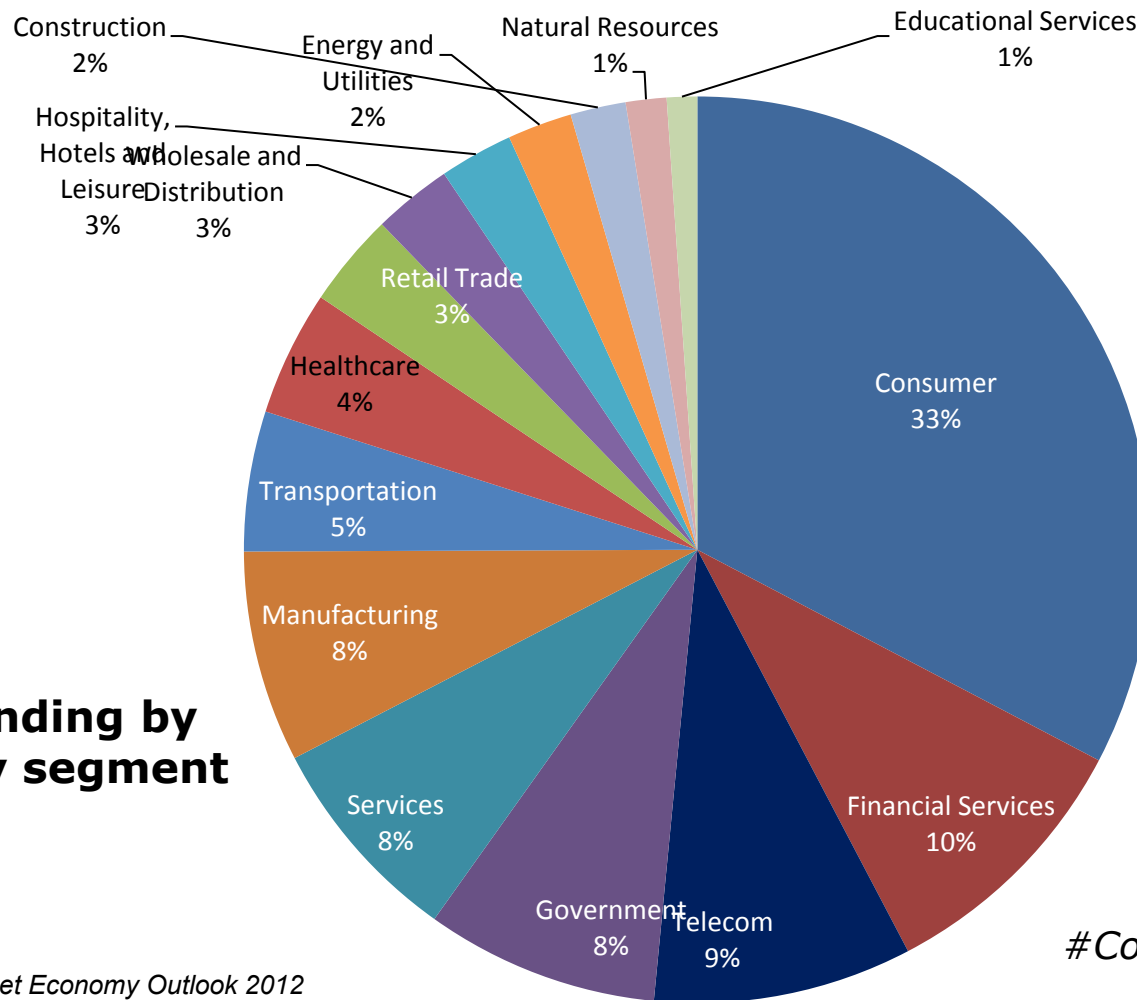
- A stronger sector for a connected continent
- The chance to work between countries with consistent rules, regulators & remedies
- Easier to plan and bid across borders
- The chance to think big and compete globally
- The chance to provide innovative services
- Stable, consistent rules for investment
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...Europe?

- 21st century digital infrastructure – like they have in the US and Asia
- More growth and jobs from the broadband boost
- More competitiveness for every sector that depends on connectivity – *from transport to television.*

#ConnectedContinent

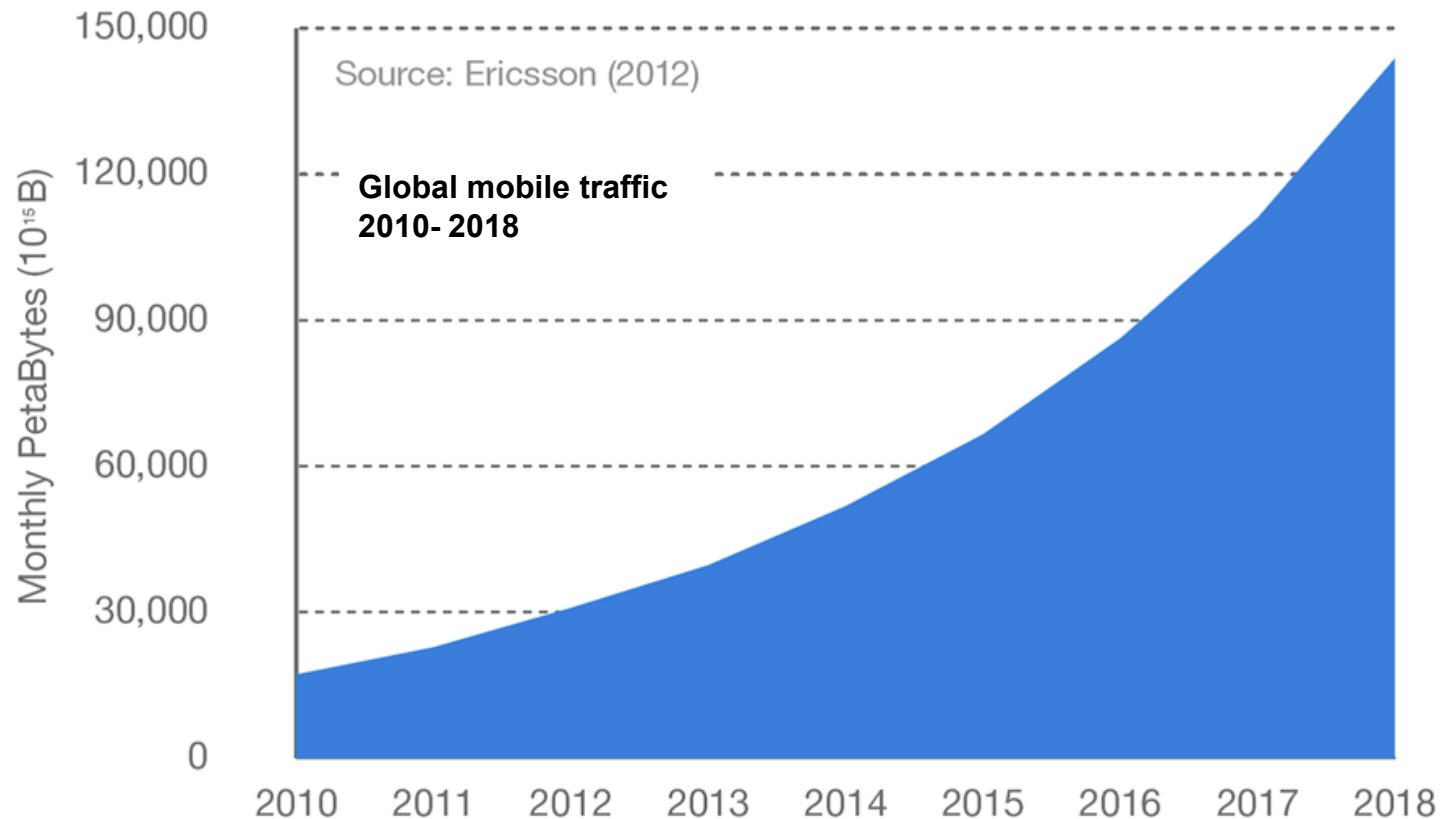
It's not just Telcos - the whole economy needs the ICT sector fixed.



**ICT spending by
industry segment
2012**

#ConnectedContinent

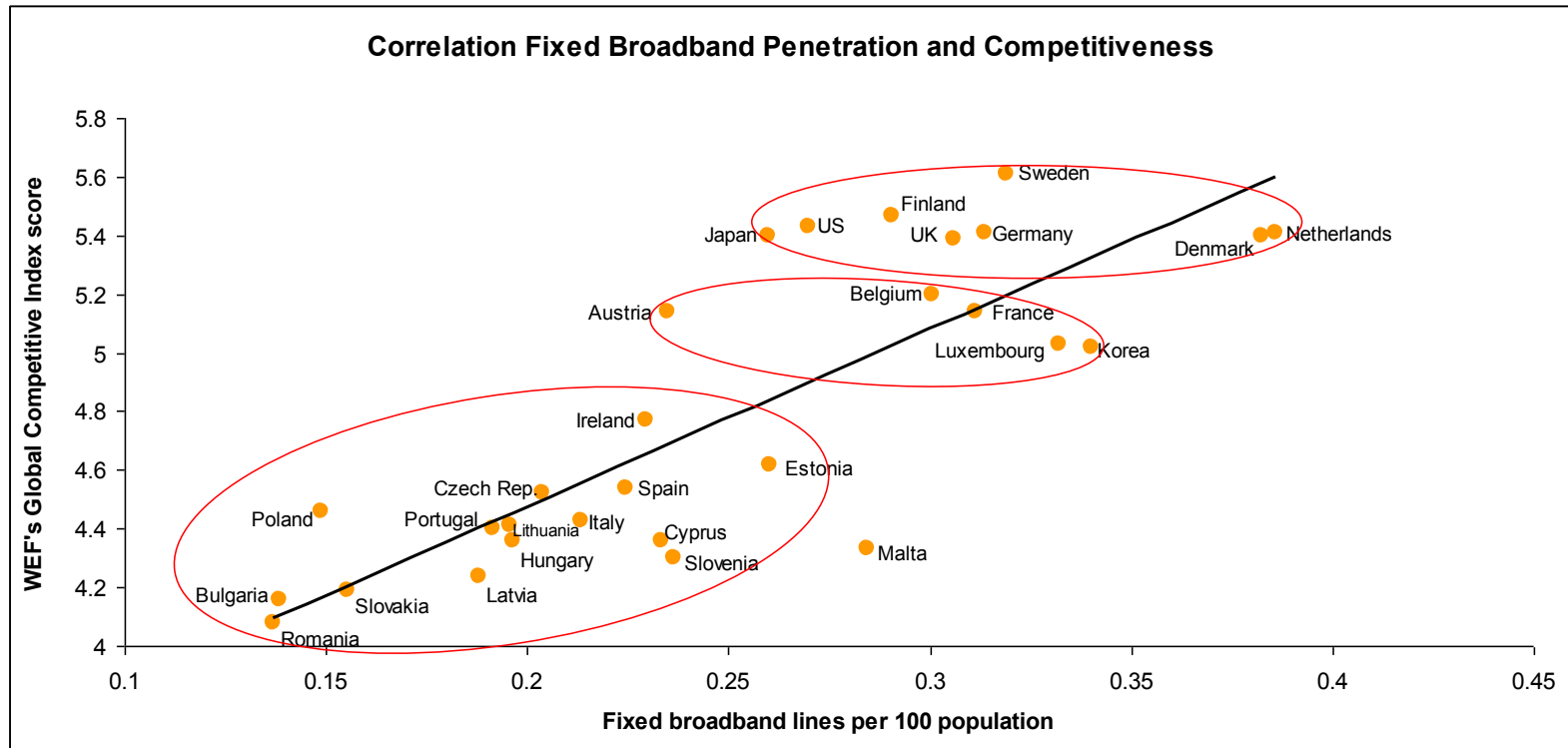
The demand for telecoms services will keep growing



Source: Ericsson Mobility Report Nov 2012

**This means low investment is becoming a chronic problem.
Regulators bear some responsibility to make investment easier**

Very fast internet supply and demand



A 10% increase in the broadband penetration rate results in **1 to 1.5%** increase in annual GDP per-capita. Faster broadband = higher GDP growth. (Czernich et al. - University of Munich, 2009)

Access to next generation (fast) broadband ranges from 14% to 100% across EU*

** This is why we're
planning to change it*

