POLICY BRIEFING

A DIGITAL EUROPE

New Direction
the foundation for european reform

New Direction

A Brussels-based free market, euro-realist think-tank and publisher, established in 2010 under the patronage of Baroness Thatcher.

We have satellite offices in London, Rome and Warsaw.

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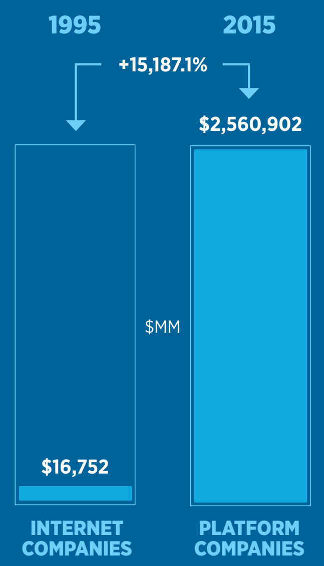
REGISTERED OFFICE: Rue du Trône, 4, 1000 Bruxelles, Belgium. EXECUTIVE DIRECTOR: Naweed Khan.

ONLINE PLATFORMS

With a host of promising start-ups based in Europe, and thirteen European ‘unicorns’ – billion dollar companies – together with a market of 500 million consumers across the continent, platforms operating in competitive and well-managed market present a real opportunity to smaller businesses looking to reach out beyond their home country. These benefits for businesses translate into benefits for consumers, and make it easier for them to engage actively in the digital economy.

MARKET CAP VALUATIONS



INTERNET VS. PLAFORM COMPANIES

INTERNET COMPANIES
Apple, Axel Springer, Copart, Fox Communications, IAC/InterActive Corp, iLive, iStart Internet, Live Microsystems, Netcom Online, Netscape, PSINet, RenPath, Storage Computer Corp, Wave Corporation, Web.com

TECH COMPANIES AND BORN-DIGITAL ORGANISATIONS
Alibaba, Alphabet, Amazon.com, Apple, Baidu, eBay, Facebook, JD.com, LinkedIn, Netflix, Priceline.com, Salesforce, Tencent, Twitter, Yahoo!

TAXONOMY OF PLATFORMS BASED ON CONSUMER ACTIVITIES

COMMUNICATION PLATFORMS
- communicate and stay in touch with friends, family and other contacts
- meet and get to know people

ENTERTAINMENT PLATFORMS
- access and share content such as music, videos or photos, and online gaming

ONLINE MARKETPLACES
- buy, sell or share products and services

INFORMATION PLATFORM
- look up information
- search for opportunities

COMPARISON PLATFORM
- find, compare or review products and services

LOWERING TRANSACTION COSTS FOR BUSINESSES BY PROVIDING READY-MADE INFRASTRUCTURE

Collecting, organising and evaluating data to eliminate search costs.

Facilitating interactions with a larger base of consumers.

Boost cross-border activity and stimulate the growth of new and diverse business models.

The market value of platforms estimated to be over $4.3 trillion to the global economy.

Sector employs millions directly and indirectly.

176 platform companies worldwide are estimated to be worth a billion dollars or more.

Asia has the largest number of leading platforms with 82, exceeding those in North America

Top hubs for platform formation and operation include San Francisco, Beijing, London, and New Delhi.

THE DIGITAL REVOLUTION IS CHANGING EVERY ASPECT OF WORK AND LIFE - AS MANY OF THESE INFOGRAPHICS SHOW - VAST PARTS OF OUR ECONOMY AND SOCIETY ARE NOW OPERATING IN A DIGITAL WORLD.

TAXONOMY OF PLATFORMS BASED ON BUSINESS ACTIVITIES

RECRUITMENT
- tasks from the identification of a staff requirement up to the offer and acceptance of new staff

EXAMPLES
LinkedIn, Xing, Skype

FUNDING
- tasks from idea generation to projects inception

EXAMPLES
Crowdcube, Startnext

MARKETING
- tasks from product / service development to the start of the marketing campaign

EXAMPLES
adwords, Facebook, Pinterest, Twitter

E-COMMERCE
- tasks from making products and services available to customers to he after-sales follow-up

EXAMPLES
iTunes, GooglePlay, Not on the High Street, Sagepay, Opineo

Note: *This study has focused on the main platform categories, but this list is not exhaustive.* ***Source:*** *Oxera*

EUROPE'S ICT SECTOR PROBLEMS & SOLUTIONS

WE NEED TO RAISE THE NUMBER OF STUDENTS IN ICT – ESPECIALLY WOMEN

The number of **ICT graduates** has **decreased** by **13%** between 2006 & 2013.

There are **twice as many male as female graduates** in STEM (science, technology & mathematics).

Students in **all domains** need to be **educated** in **digital skills**, **not just those** who choose an **ICT career**.

DIGITAL TECHNOLOGIES CREATE NEW JOBS

There is **rising demand** for **ICT professionals**. These jobs are in **all sectors** of the economy.

Every job in **ICT** creates **3 more jobs** elsewhere in the economy.

With **high unemployment** in Europe, these jobs aresorely **needed**.

THE WHOLE WORKFORCE NEEDS TO BE DIGITALLY TRAINED

32% of the **EU workforce** have **low** or **no digital skills**.

15% of the workforce in the EU has **never used** the **internet**.

The **lack of graduates** in **ICT** is leading to a **gap** estimated at **825 000 unfilled jobs** by **2020**.

PROVIDE TRAINING & SUPPORT FOR THE UNEMPLOYED TOWARDS A CAREER IN DIGITAL DOMAINS

ONLINE LEARNING

CODING CLUBS

APPRENTICESHIPS

Digital firms employ 25% more people than non-digital firms.

Whole 3/4 of Europeans use the internet on a daily basis, only 15% shop online from another European country.

40% of Europeans lack basic digital skills.

Will create 3.8 million jobs.

Could result in a minimum 4% increase of EU GDP.

01 BETTER ACCESS FOR CONSUMERS AND BUSINESSES TO DIGITAL GOODS AND SERVICES ACROSS EUROPE

UNLOCKING E-COMMERCE POTENTIAL

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

€11,7
EU consumers could **save € 11.7 billion** each year if they could choose from a full range of EU goods and services while shopping online.

7%
Only **7% of SMEs** in the EU sell cross-border.

€9,000
Small online businesses whishing to trade in another EU country face around **€9,000 extra costs** for having to adapt to national laws.

57%
If the same rules for e-commerce were applied in all EU Member States, **57% of companies** would either start or increase their online sales to other EU countries.

AFFORDABLE PARCEL DELIVERY COSTS

90%
More than **90% of e-shoppers** consider **low delivery prices** and **convenient return options** as important when buying online.

62%
62% of companies that are willing to sell online say that too high delivery costs are a problem.

SIMPLIFYING VAT ARRANGEMENTS

€5,000
Small online businesses whishing to trade in another EU country face a VAT compliance cost of at least **€5,000** annually for each Member State where it wishes to supply.

TACKLING GEO-BLOCKING

52%
In **52% of all attempts** at cross-border orders the seller does not serve the country of the consumer.

Less clients, less revenues for companies.

MODERNISING COPYRIGHT

1 in 3 Europeans is interested in watching or listening to content from their home country **when abroad**.

1 in 5 Europeans is interested in watching or listening to content from **other EU countries**.

An opportunity not to be missed: **Images, films or music and games** are the most popular online activities and digital spending on entertainment and media has double digit growth rates (around **12%**) for the next five years.

02 SHAPING THE RIGHT ENVIRONMENT FOR DIGITAL NETWORKS AND SERVICES TO FLOURISH

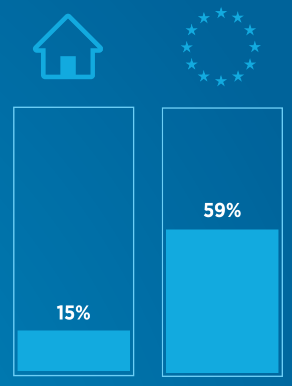
STRONG EUROPEAN DATA PROTECTION RULES TO BOOST THE DIGITAL ECONOMY

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

ROLLING OUT FAST BROADBAND FOR ALL

Take-up of fast broadband is low: only **22.5% of all subscriptions** are fast ones (above 30 Mbps) and Europe has witnessed significant time lags in the roll-out of the latest 4G technology due to the non-availability of suitable spectrum.

Spectrum reforms can decrease prices of mobile services and boost productivity over time (estimated EU-wide GDP increase **between 0.11% and 0.16% over 5 years**).



Only **59%** of Europeans can access **4G**, dropping to **15%** in **rural areas**.

03 CREATING A EUROPEAN DIGITAL ECONOMY AND SOCIETY WITH GROWTH POTENTIAL

BIG DATA AND CLOUD

20%-40%

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

€425

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

€206

Studies estimate that, by 2020, big data analytics could boost EU economic growth by an additional **1.9%**, equalling a **GDP increase of €206 billion**.

AN INCLUSIVE E-SOCIETY

90%

Almost half of the EU population (**47%**) is not properly digitally skilled, yet in the near future, **90% of jobs** will require somelevel of digital skills.

€10

A strategy of 'digital by default' in the public sector could result in around **€10 billion of annual savings**.

5G VISION

5G will be the most critical building block in creating a digital society in the future. The benefits of a 5G network are not just limited to individual users. It is likely that 5G infrastructure will serve a wide range of professional uses, these include:

- *Assisted living*
- *eHealth*
- *Energy management*

5G will also be capable of providing ultra-high-speed links for HD video streaming, as well as low-date-rate speeds for sensor networks.

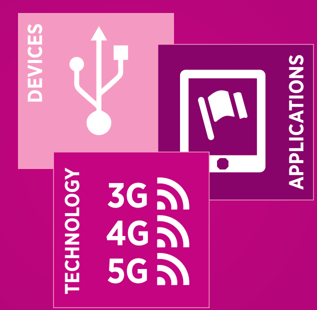
At the Mobile World congress in 2016, the EU revealed it has started working on an action plan to deploy 5G in the EU by 2020. However, if the EU plans on being successful with this goal, it must prioritise improve ICT standardisation.

WHAT IS AN **ICT** STANDARD?

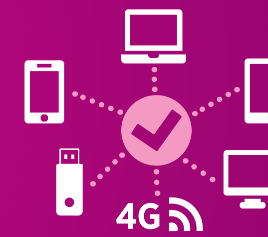
STANDARDS ENSURE

INTER OPERA BILTY

BETWEEN



THEY ARE A TOOL TO MAKE THINGS **WORK TOGETHER**



SPECTRUM HARMONISATION

Radio frequency is an essential resource for telecommunication services such as mobile phones, TV and radio broadcasting, satellite, and broadband communications.

There is intense debate between member states on which services should be a priority and how countries can conduct spectrum auctions around the same time to make sure the roll out creates an even playing field.

When it comes to spectrum, all member states have very different regulations.

THIS IS NOT A SINGLE MARKET

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

	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

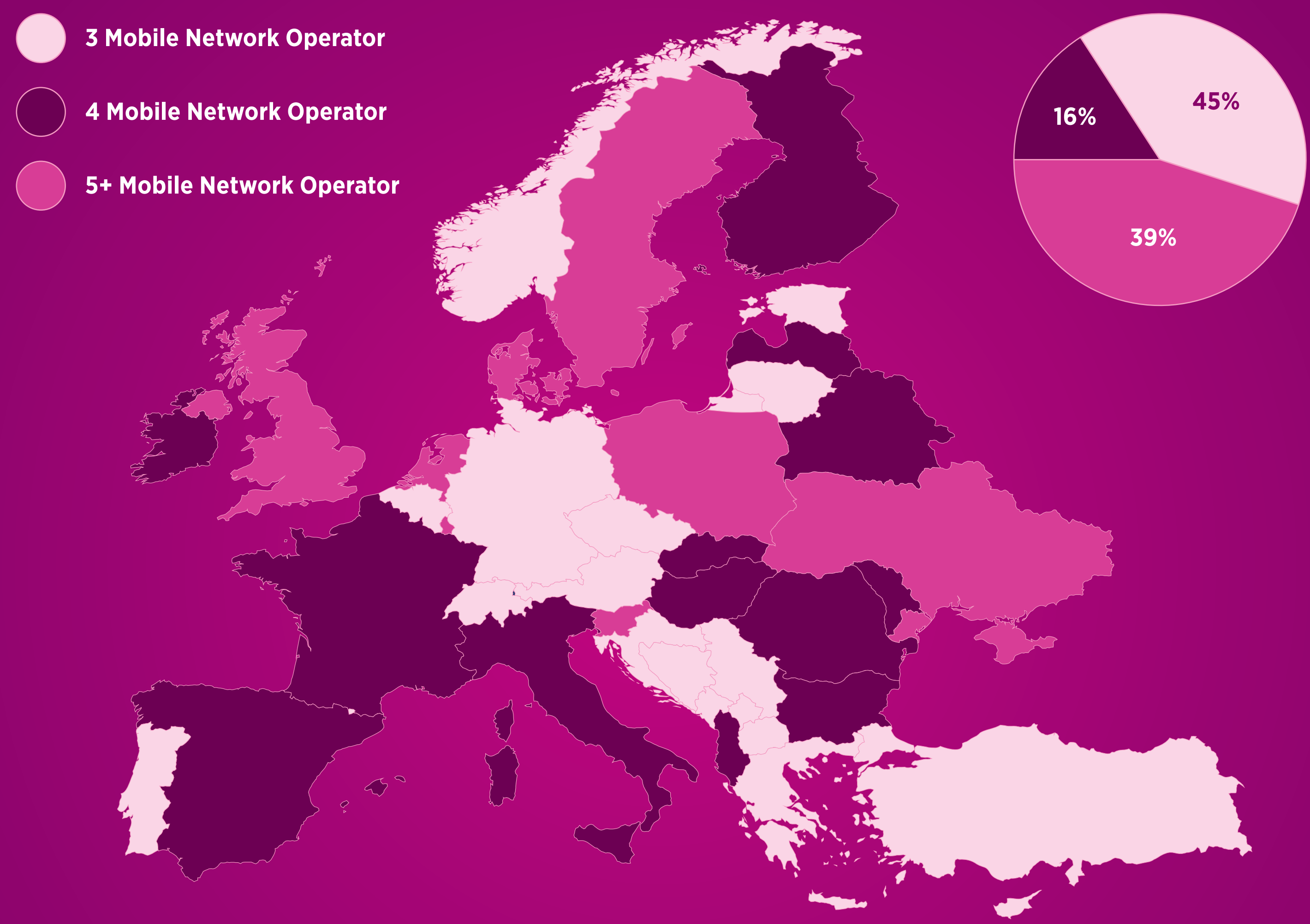
* That's why we're planning to change it

DIVERGENCE IN EUROPE'S MARKETS

- Operating licence fees range from €0 to €3000
- Some countries even specify which font needs to be used in consumer contracts
- Administration fees for holding a licence range from €5,000 to €15,000 Between EU countries there is 774% revenue differential per call minute
- The price of spectrum rights varies by up to a factor of 50 (2600 GHz band)
- Wholesale copper access prices which network owners may charge to competitors leasing the network range from 4 to 14 euros per month (333% difference)
- There is a different approach to regulation of wholesale broadband markets in virtually every member state

TELECOM CONSOLIDATION

What policy option should the EU take?



For the EU to achieve to Europe-wide telecom consolidation, instead of each member country having three-plus operators, the goal should be an EU-wide market with four to six major carriers.

Four to six carriers would provide effective competition and likely supply enough capacity to see an unregulated wholesale market like the US.

As seen in the map above, the majority of the countries in Europe naturally have three or four carriers dominating the markets within them. The goal should be this same number spanning across all member states to achieve telecom consolidation.

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