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The Digital Platforms: balance on services provision

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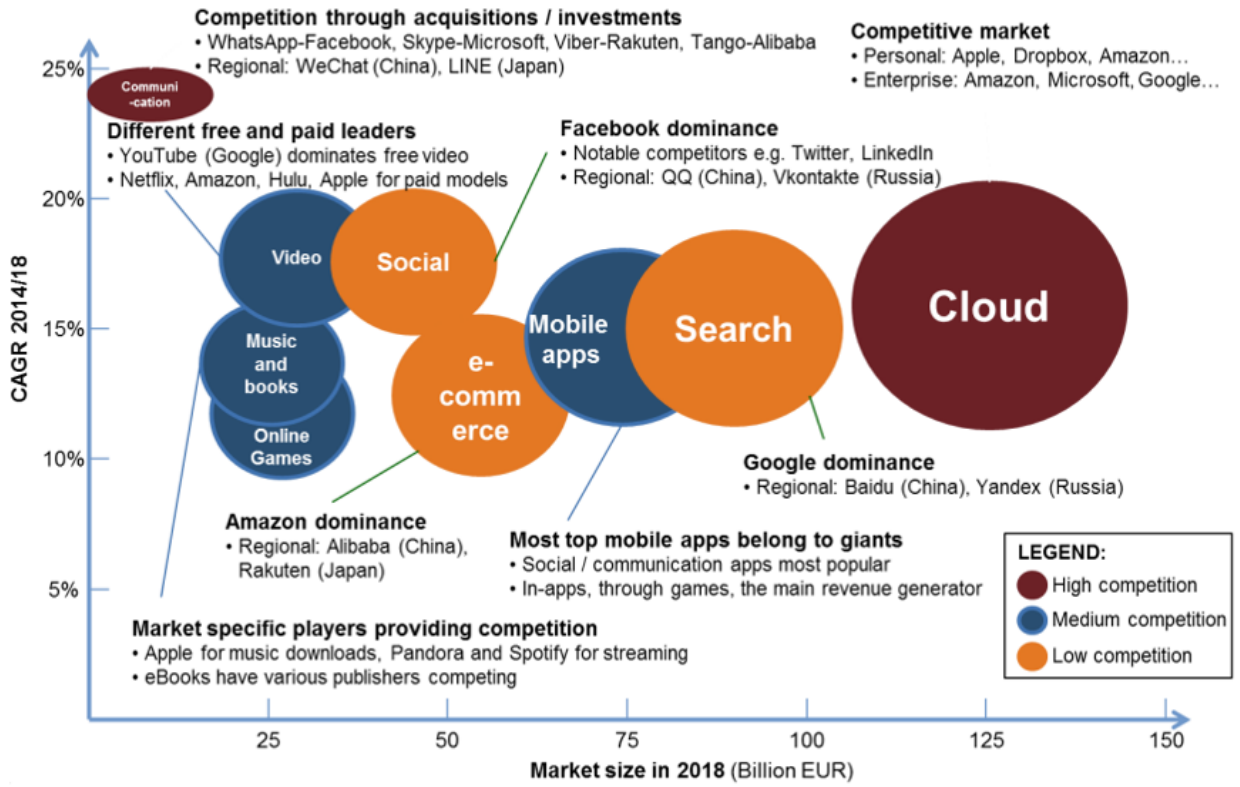
Agenda

- The digital value Chain?
- Is the App Economy affecting or encouraging technology developments?
- How do we measure the App Economy?
- Possible regulatory approaches and recommendations

Content and Applications market Size

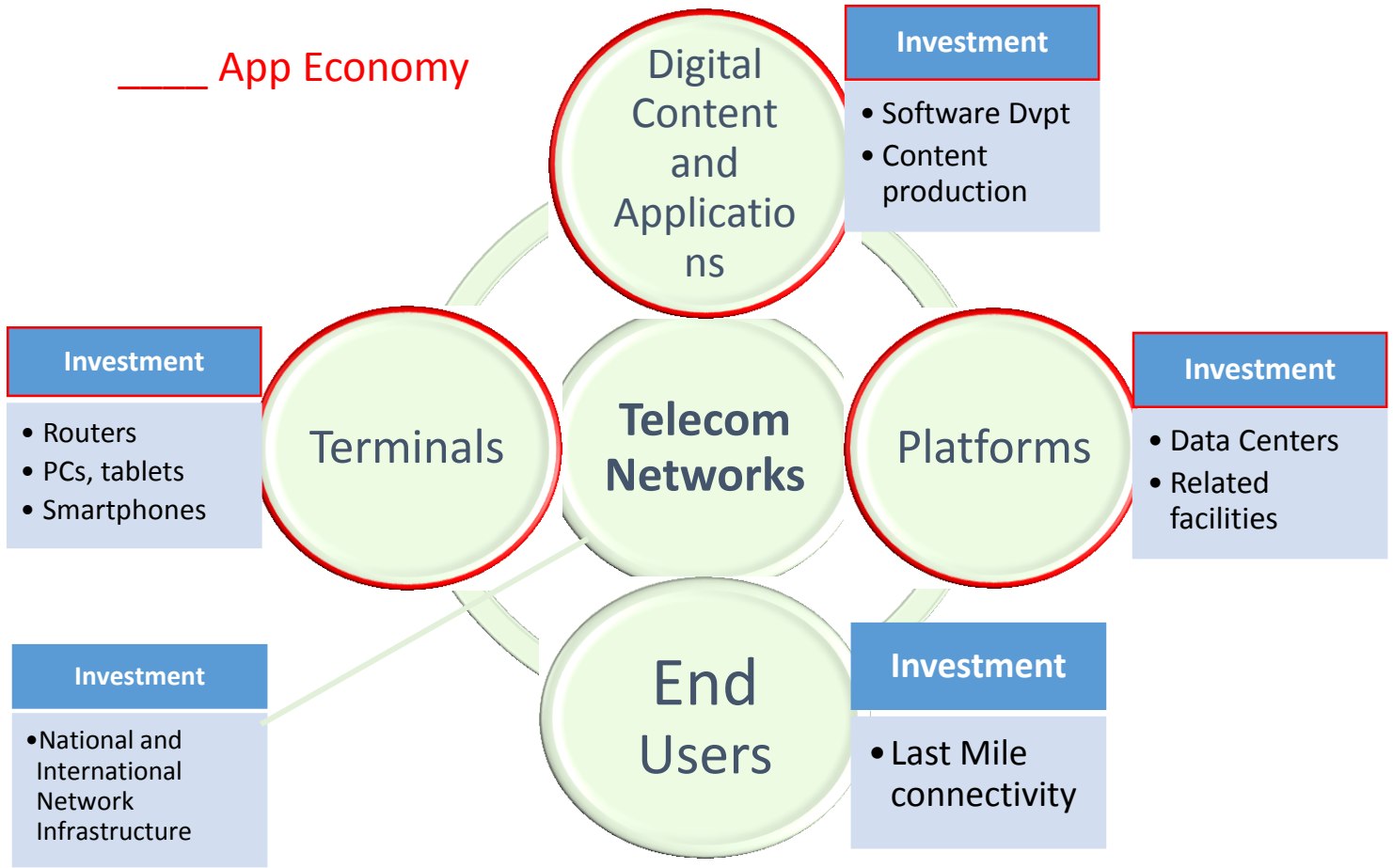
Figure 8: Online services and applications: Market size in 2018 (bn Euro), CAGR 2014-2018 and degree of competition



Source: IDATE (2014): State of Internet services worldwide, December.

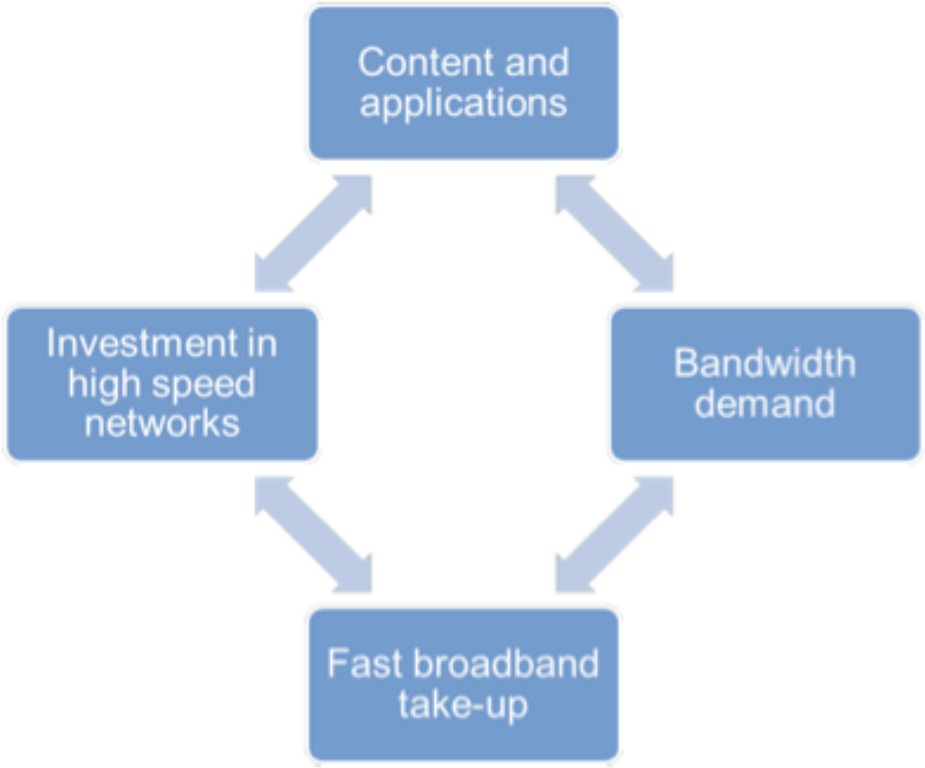
The Digital Value Chain

The digital value chain incorporates many players
Infrastructure operator is no longer the exclusive provider of services.



Virtuous circle of networks and applications

Applications and content generate user demand – offer services that make connectivity desirable – thereby boosting broadband take-up and leads to new network investment.



CAPs help push for an alternative revenue model based on data rather than voice services

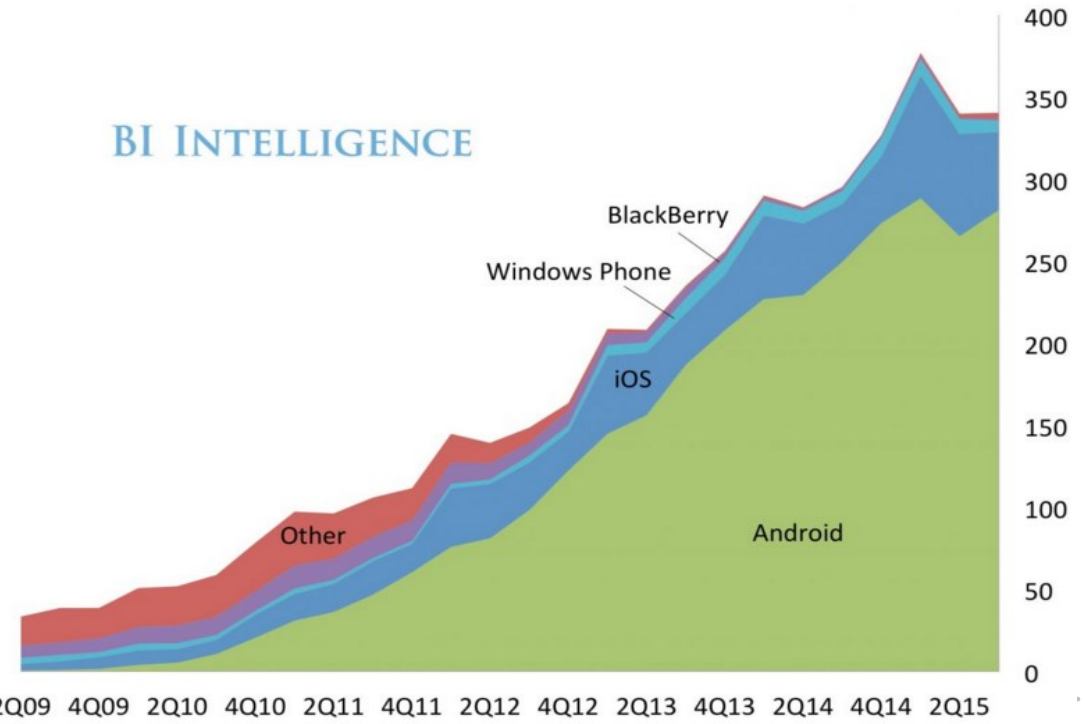
Both sides of the value chain – networks and applications providers – offer value to each other.

- **Should content providers contribute in the investment in telecoms infrastructure?**
- **Is there a trade-off between increased usage of applications and content, and investment in telecoms infrastructure?**

Source: WIK-Consult, Applications and networks: the chicken and the egg, 2015

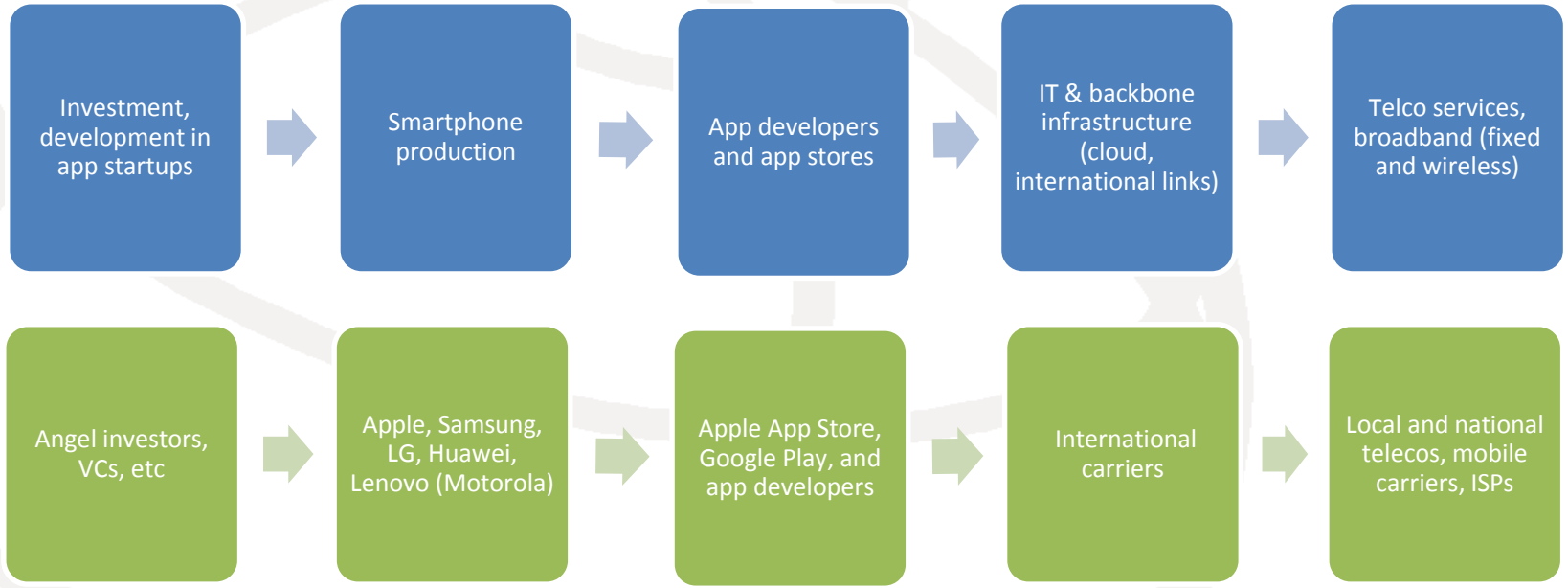
Structure of the App Economy: Market Concentration

- The dominance of the existing big app companies as the home to the two dominant app platforms may prove to be a barrier to the growth of the app economy in developing countries.
- However, despite this concentration, other countries such as, in Asia have shown that a vibrant national app economy can be developed based on the specific preferences of the domestic market (e.g. China).



The App Economy Value Chain

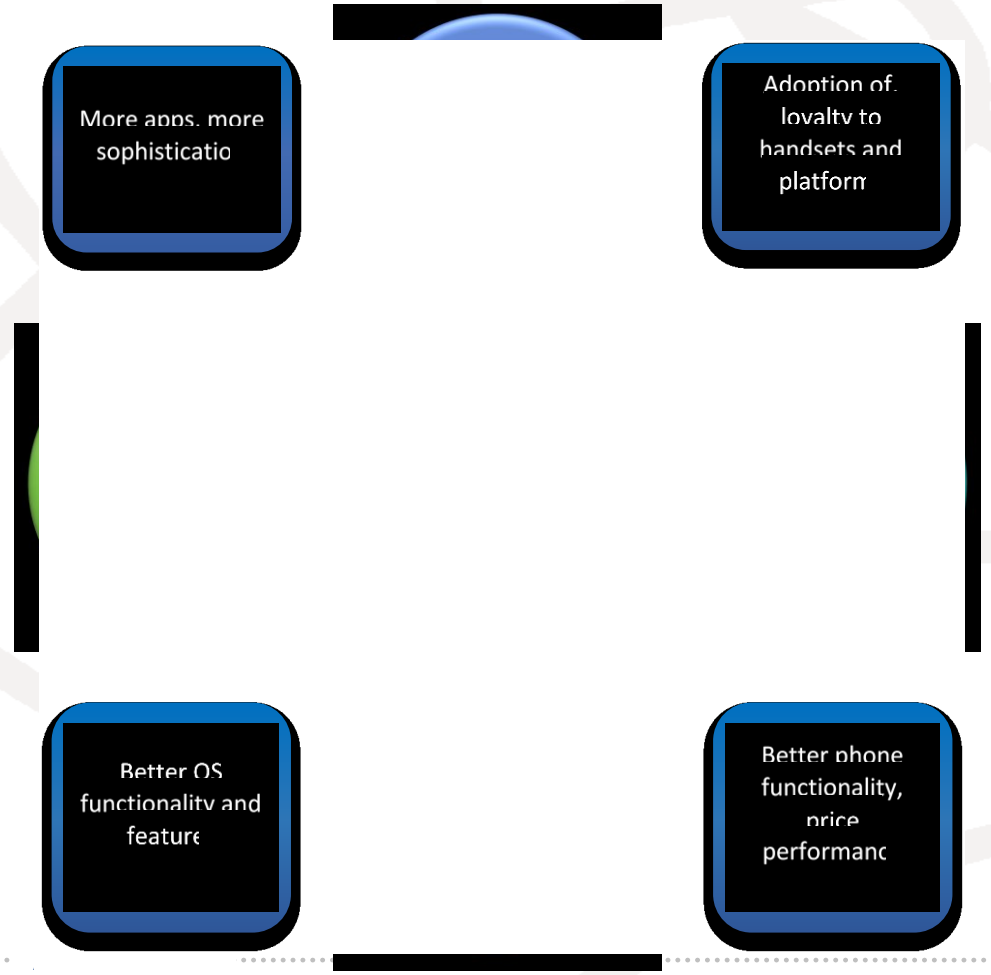
One starting point for developing a definition of the app economy is to understand the app value chain.



Source: Systems Knowledge Concepts (www.skc.net.au)

All the economic activity in the app value chain that is required to deliver apps and their associated network functionality to end users.

The 'virtuous cycle' of the App Economy ecosystem



Consumers want high-quality handsets at the lowest price, a large selection of apps and operating systems with extensive feature sets…

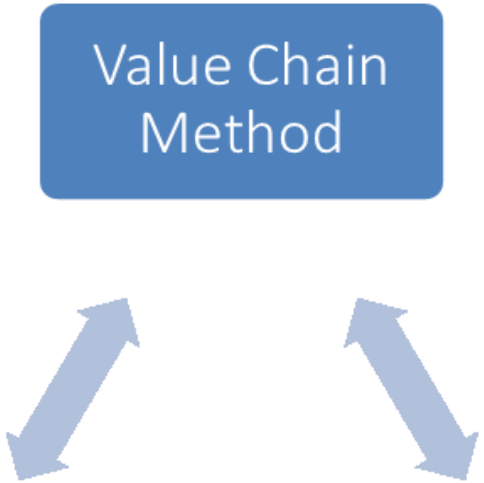
Developers want as large a market as possible of profitable consumers, high-quality development tools and to minimise problems associated with devices incompatibility…

How do we measure the App Economy?

How do we measure the App Economy? (1)

- The traditional measure of economic benefit or increases in social welfare is 'value added'.
- The apps economy is about a 'barter economy' – app companies offer services and functionality in return for attention and personal information.
- Since the statistical collections that directly measure the value of the app economy are not available, it is suggested three different ways in which the impact of the sector can be measured:
  - The Value Chain and Consumer Surplus Method
  - Capital Value Method
  - Productivity Method
- The emergence of the App Economy has prompted widespread industrial change. However, quantifying the scale and scope of these changes is complex.
- There are significant economic impacts of the App economy especially when is it estimated that in Europe up to 2% of the labour force (depending on the market) is already engaged in the App Economy.

How do we measure the App Economy? (2)



method is aimed at
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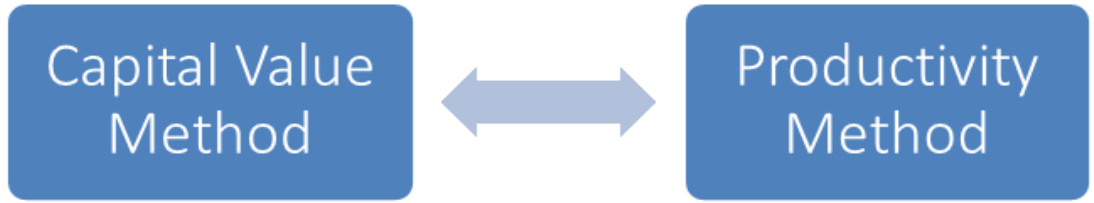


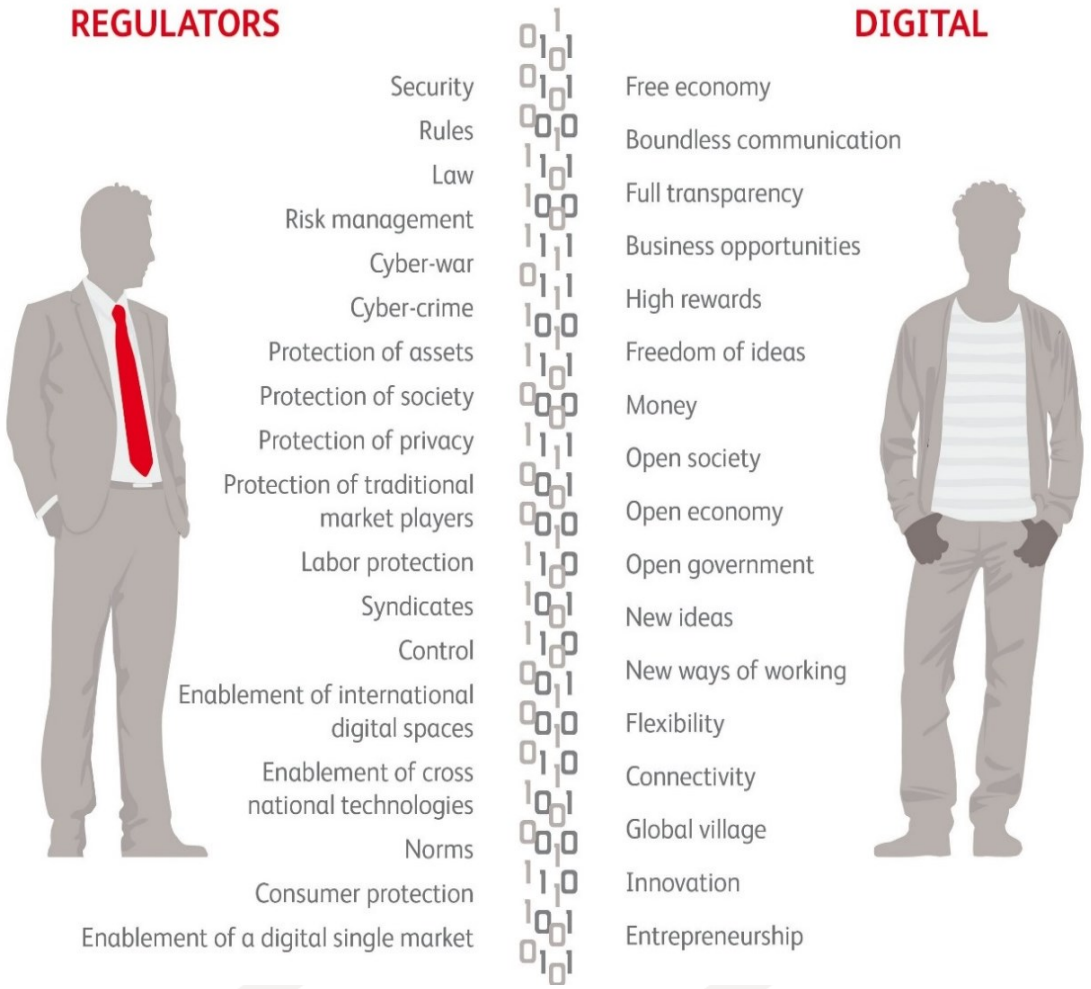
The capital value method measures the value of equity – which in turn is dependent on investors perspective of the future profit streams that the sector may generate.

The productivity method measures how the output of the app economy will influence economic activity in other areas and facilitate new industries and activities.

Possible regulatory approaches

The debate on optimal regulatory approaches

Different perspectives on the app economy and its regulation



Key regulatory questions for the telecommunication/ICT sector

How to **define appropriate legal and regulatory provisions** while at the same time recognizing that the applicable body of law **must not hamper the spread of innovation and progress within the digital economy?**

How to **ensure consumer security, product quality and other protections in transactions**, while at the same time **avoiding over-regulating new collaborative business models?**

Globally, a range of organizations are arguing the case for less rather than more regulation for the sharing economy. **Where is the market failure we need to address?**

Globally, a range of organizations are arguing the case for less rather than more regulation for the sharing economy. **Where is the market failure we need to address?**

Is *ex ante* regulation needed in the future or is *ex post* regulation sufficient for the app economy?

Ex post:
After the event regulation relating to specific allegations of market abuse

Advantages:

- Attempts to stop conduct only shown to be harmful
- Lower information and monitoring requirements
- Least disruptive regulatory approach for emerging markets

Disadvantages:

- Triggered only after anti competitive conduct has occurred
- Securing information from accused firm is difficult
- General competition provisions may be unsuitable for industry specific issues

Ex ante:
Anticipatory intervention mainly concerned with market structure

Advantages:

- Sets forward looking expectations for firm behaviour
- Provides industry certainty by setting clear rules
- Promotes a greater degree of transparency

Disadvantages:

- Can lead to excessive or unnecessary regulation
- Can create market distortions through regulatory arbitrage
- Regulatory processes are costly and prone to capture by regulated entities

Regulatory building blocks

- Central to the discussion of the growth and regulation of the sharing economy is the ***question of how to balance regulations for established businesses and new, innovative businesses***.
  - an inclusive dialogue is needed to discuss and define appropriate legal and regulatory provisions,
  - Regulators and policy makers must ensure consumer security, product quality and other protections in transactions, while at the same time avoiding over-regulating new collaborative business models.
  - Competition regulators will need to be watchful that the digital economies of scale and scope are not exploited contrary to law.

- Governments should not impose legacy regulations on new business models simply because they happen to fall outside of existing regulatory schemes. Nor should regulators give into claims by existing incumbents that merely seek to protect their own market position or the primacy of their businesses.

Recommendations (1/2)

- Undertake a r**eview of the regulations applicable to network operators and OTT players**
- **Update the licence conditions** and as required provide deeming provisions for non-resident OTT providers etc.
- **Assess and continually monitor** the state of competition in the market
- **Collaborate with tax authorities**
- **Promote and facilitate ubiquitous broadband** (especially wireless broadband)

Recommendations (2/2)

- Ensure adequate and up to date **data protection, privacy and cyber security legislation** based on global exemplars
- Establish **co-ordination procedures between other sector regulators**
- Engage in **greater public awareness and advocacy campaigns** in relation to digital/ICT services
- Regulators must **engage more broadly with education and training sector**

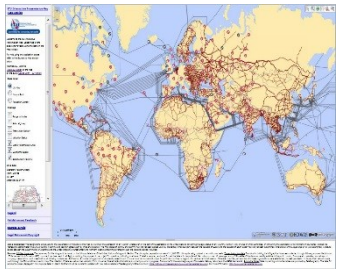
Studies on App Economy

- GSR 16 Discussion Paper :
  The Race for Scale: Market Power, Regulation and the App Economy available at: www.itu.int/en/ITU-D/Regulatory-Market/Pages/bestpractices.aspx
- Impact of the ICT App Economy/ OTT services on national socio-economic growth - Case study of South Africa and Ghana – under preparation
- ITU Study on Policy and Regulatory Aspects of the App Economy – under preparation

www.itu.int/treg/

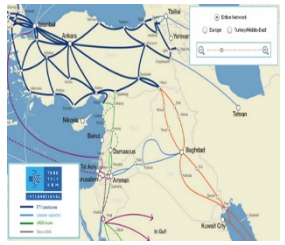
Introduction to the ITU Global Broadband Connectivity Project

The ITU Interactive Transmission Maps



ITU Interactive Transmission Maps 1

- With the landing of submarine cables in many countries and the expansion of national and cross-border fiber backbone networks in addition to mobile and wireless services, **broadband connectivity is achieving significant progress**
- Creating online Interactive Transmission Maps, taking stock of national backbone connectivity (optical fibers, microwaves and satellite Earth stations) as well as of other key metrics of the ICT sector, will serve as **a powerful tool for all concerned stakeholders for facilitating the development of the Broadband connectivity worldwide.** Thanks to collaboration between ITU and Regional Organizations as well as all related Stakeholders including Administrations and concerned Operators, **data collection and validation for building the online Interactive Transmission Maps is performed through a public and transparent process.**
- Data concerning submarine cables are also provided by TeleGeography. For more information: www.submarinecablemap.com

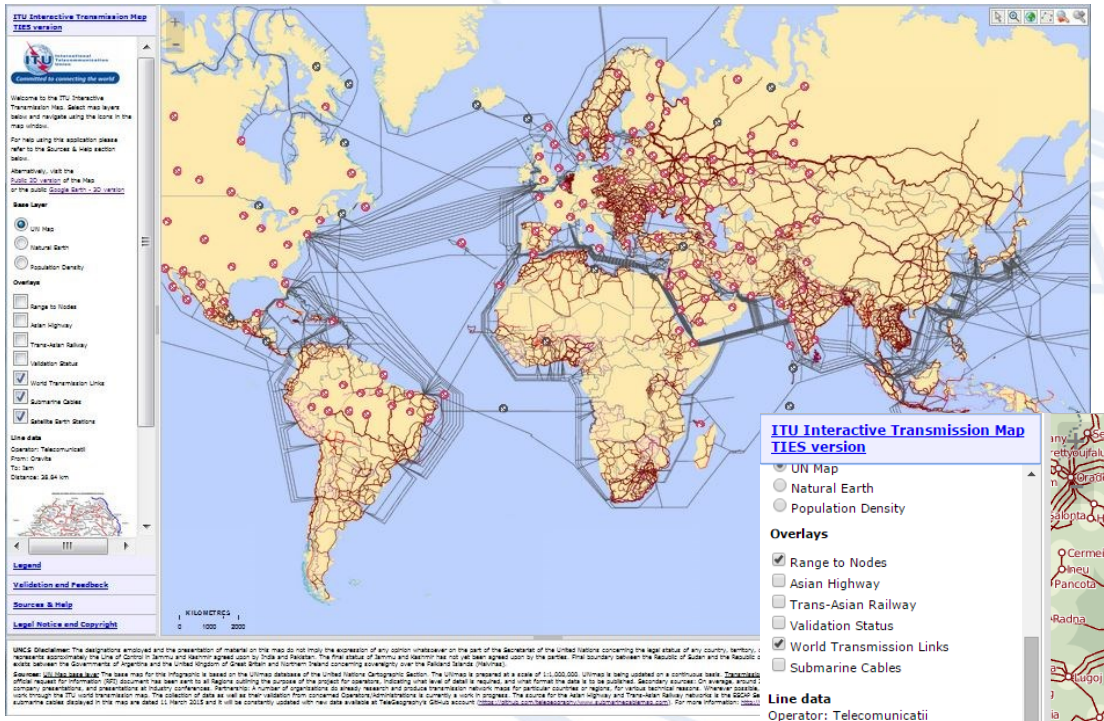


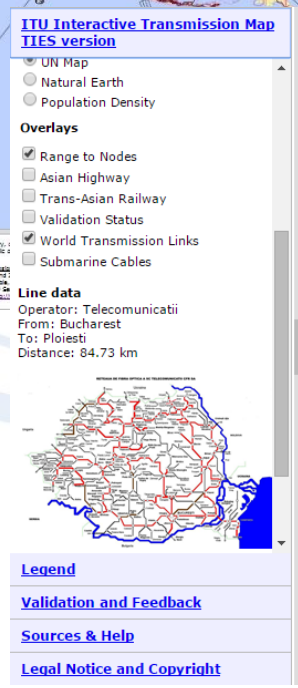
ITU Interactive Transmission Maps 2

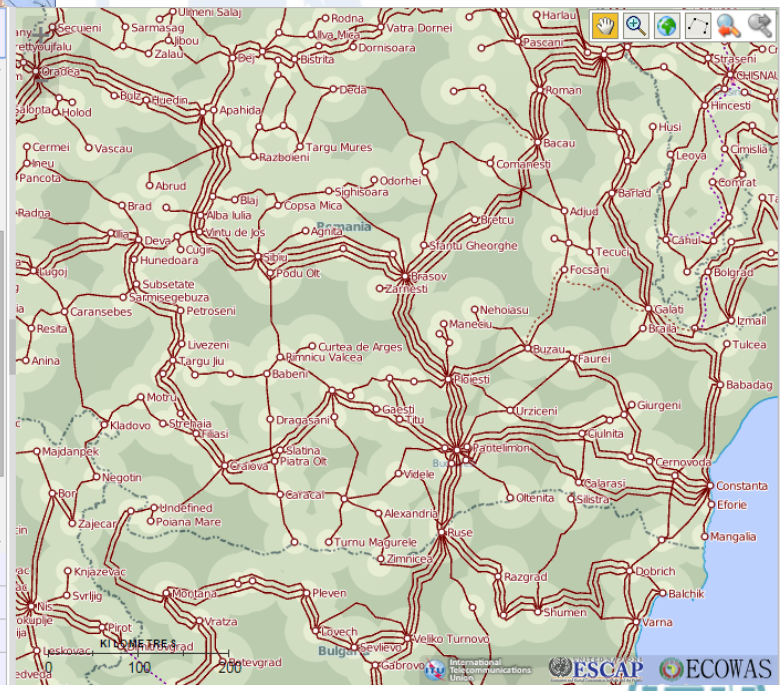
Many Advantages

- **Demonstrating ICT connectivity current status around the globe** + monitoring their evolution over time
- **Providing accessible multi-criteria analysis** based on robust and reliable evidence
- **Empowering network planners, policy makers and regulators from developing countries with tools to assess the status of national connectivity and to identify gaps**
  - ➔ possibility to design targeted strategies and implementation programs that expand the reach and increase the use of broadband
- **Providing industry with a powerful tool to assess market opportunities =** management tool for :
  - making investment decisions
  - promoting broadband
  - achieving universal connectivity
- **Offering an informed insight to abundant, current data on global ICT connectivity to all interested stakeholders**

Some Screenshots 1







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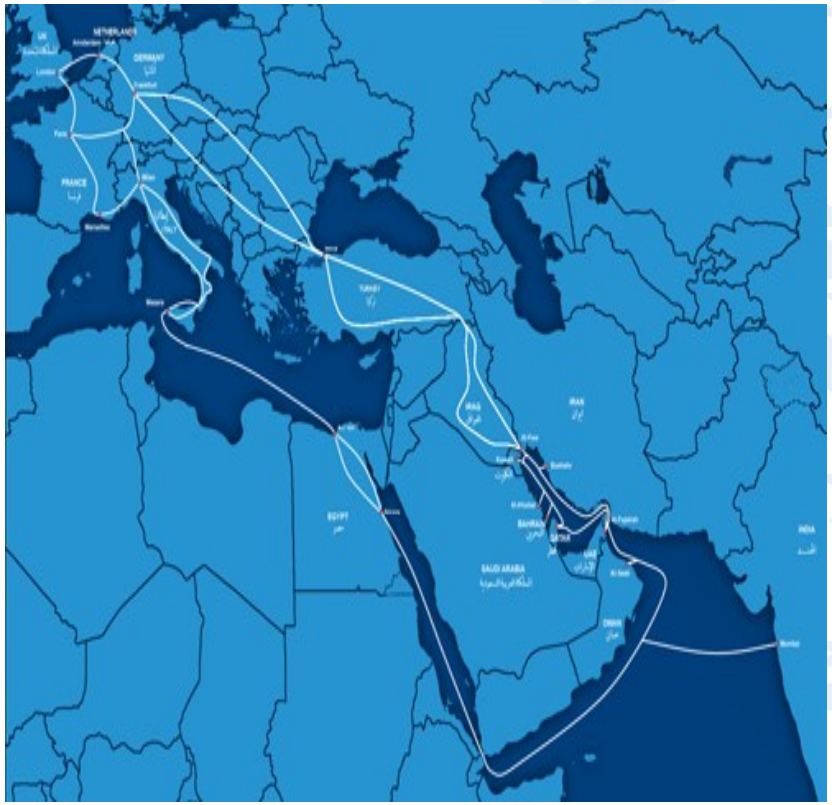

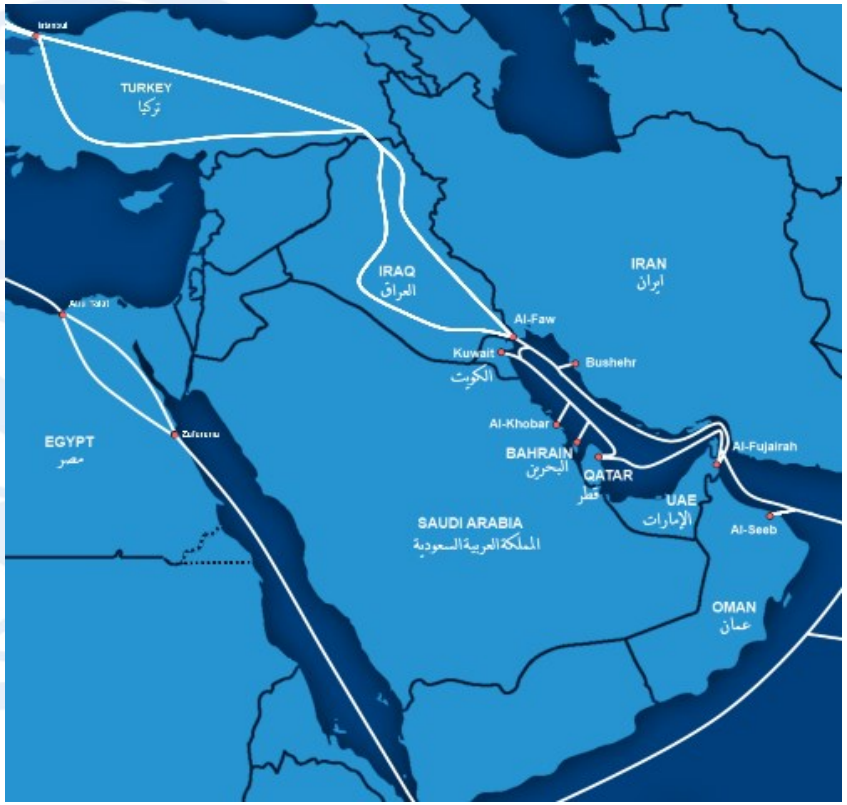

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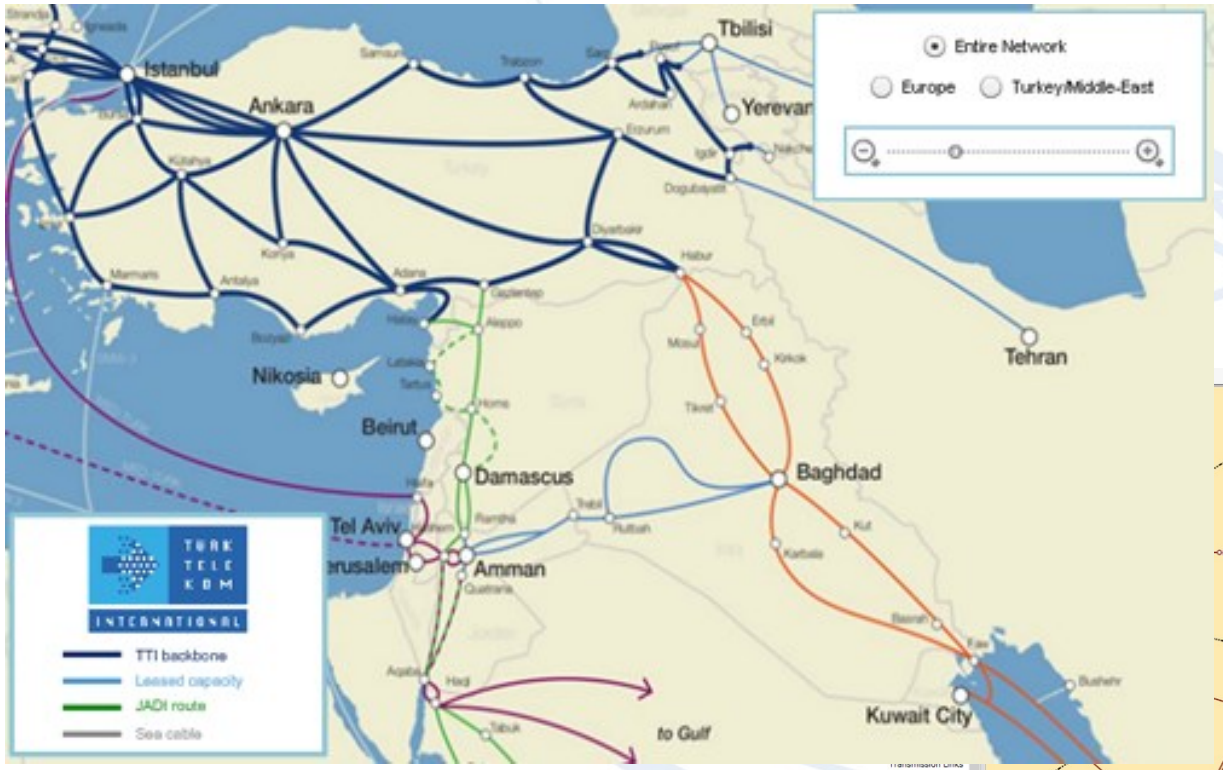

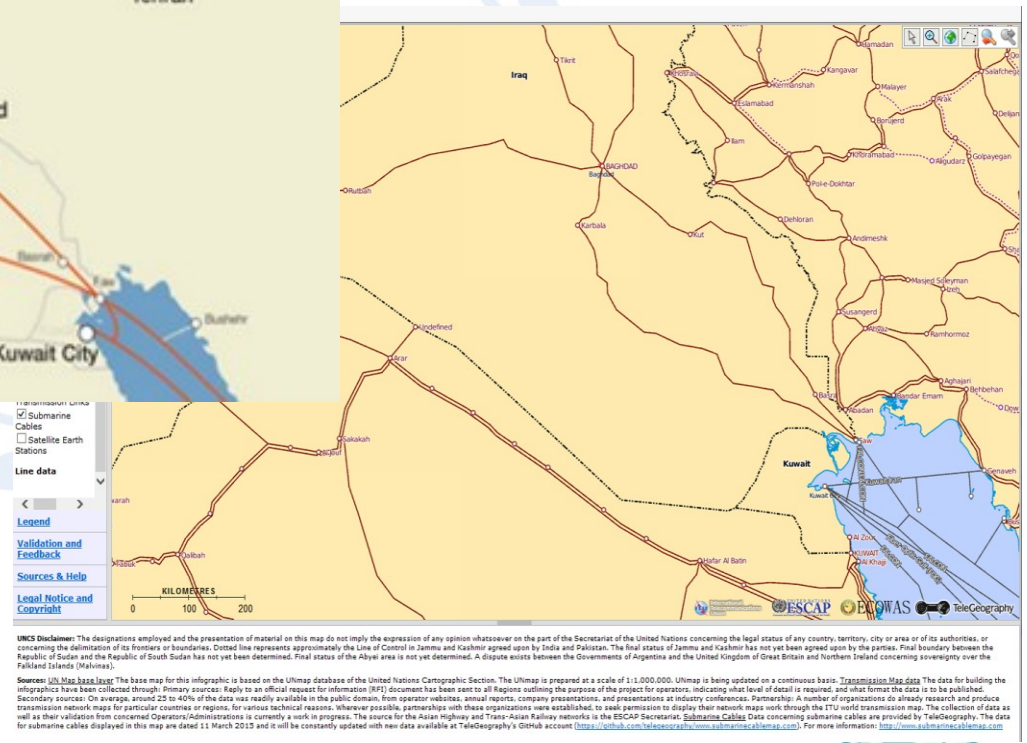

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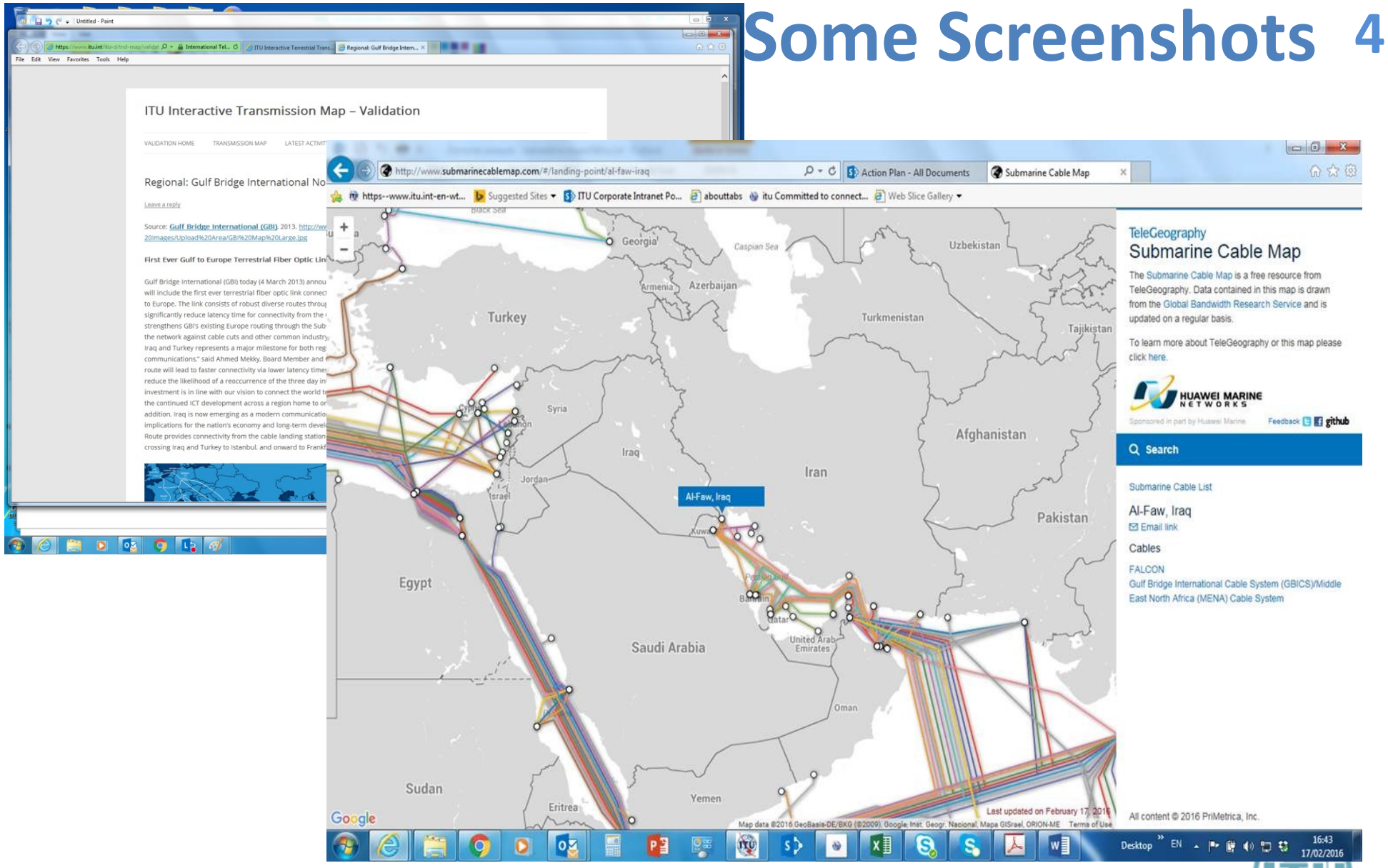

ITU Interactive Transmission Maps Project homepage
http://www.itu.int/en/ITU-D/Technology/Pages/InteractiveTransmissionMaps.aspx

ITU Interactive Terrestrial Transmission Map
https://www.itu.int/itu-d/tnd-map-public/

ITU TIES Interactive Terrestrial Transmission Map
https://www.itu.int/itu-d/tnd-map/

ITU TIES Validation Framework
https://www.itu.int/itu-d/tnd-map/validation/

Thank you

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