



Broadband Investment in rural areas

A new momentum

atene KOM Governmental Day Workshop

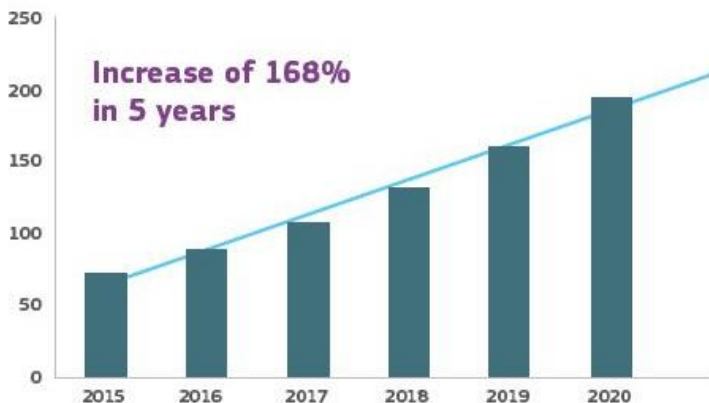
FTTH Conference, Valencia, 13 February 2018

Carlota REYNERS FONTANA
Head of Unit B5
Investment in High-Capacity Networks
DG CONNECT - European Commission

EU telecoms rules have brought *basic* broadband to all Europeans at low prices

Price for 12-30 Mbps broadband has dropped by **57%** since 2007

At the same time, internet traffic continues to grow at an unprecedented rate



Global mobile internet & internet traffic 2015- 2020

* 1 ExaByte = 10^{12} MegaBytes – Source: CISCO

Fixed internet connection



- In 2016, **76%** of European households had access to a **fast fixed internet connection (NGA)**
- But this goes down to **40%** for households in rural areas
- **FTTP** is catching up but still reaches only **24%** of EU households
- Some MS are amongst **global leaders in very high capacity** while others have focused on **incremental upgrades**

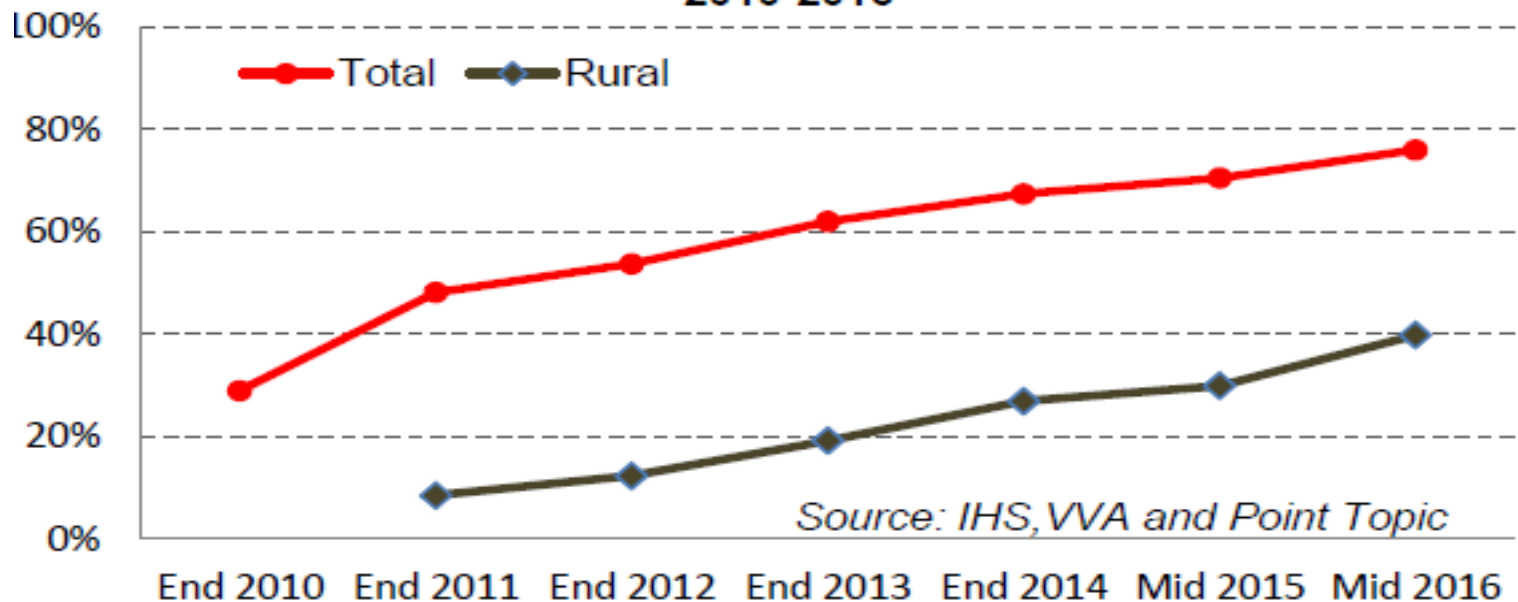
4G mobile coverage

- In 2016, the EU average of **4G mobile coverage** is **96%** but **80%** for households in rural areas



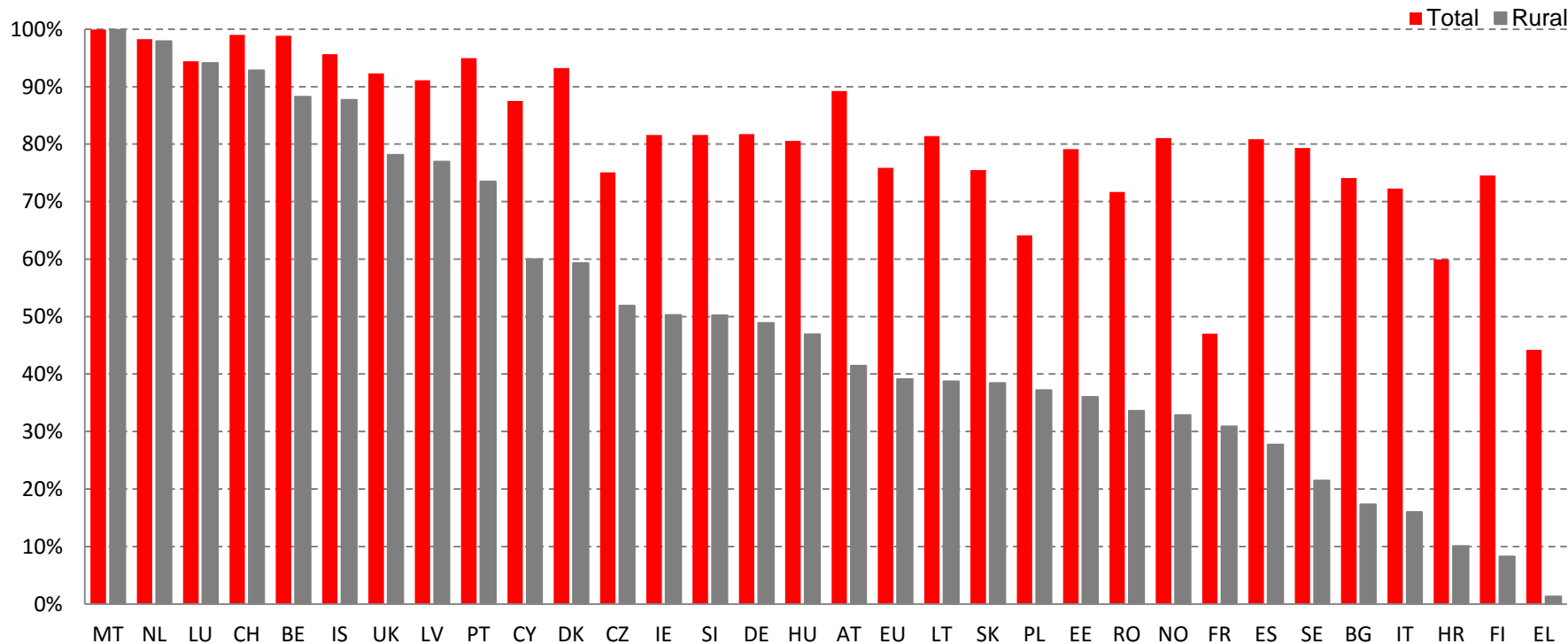
Development of NGA coverage gap

Next Generation Access (NGA) broadband coverage in the EU, 2010-2016

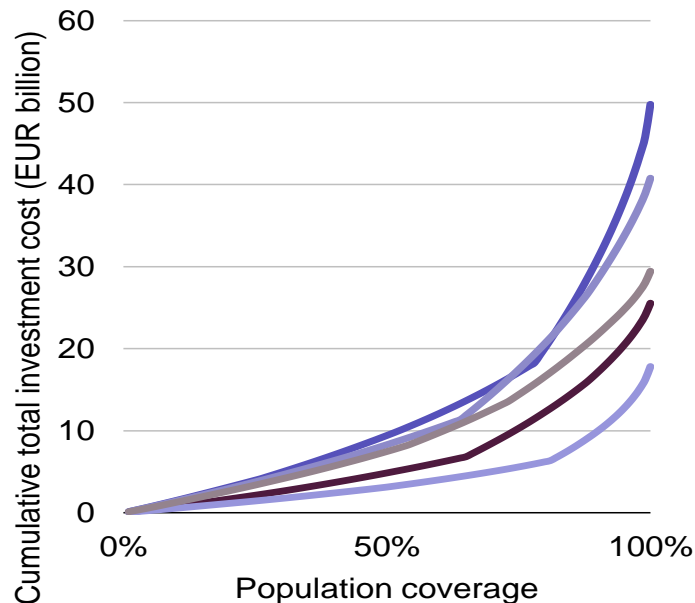


Ranking of NGA coverage total versus rural

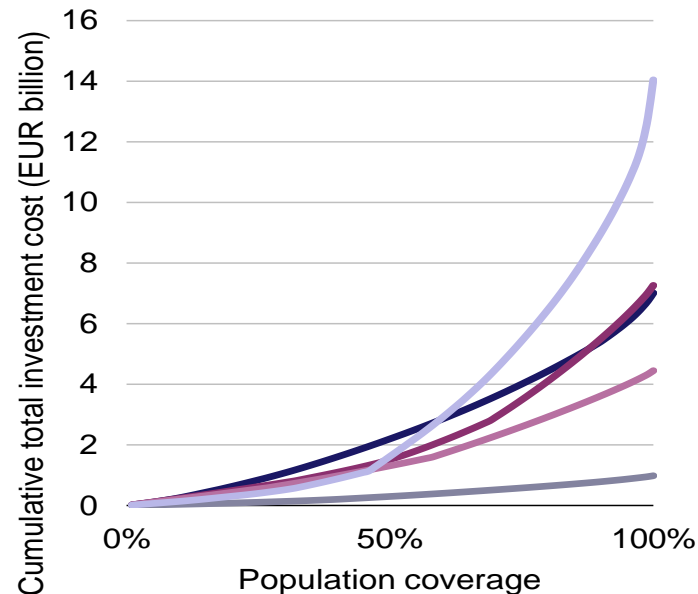
Next Generation Access (FTTP, VDSL and Docsis 3.0 cable) coverage, June 2016



Extrem increase of broadband investment cost (CAPEX) for last 20 % of population coverage



France Germany Italy
Spain UK



Belgium Poland Romania
Slovenia Sweden

Source : Analysis Mason, SWD(2016)300, 14 September 2016

September 2016: A multi-faceted strategy (I)

- ❑ **Policy.** A common vision and **strategic objectives**, which we call for the European Council and the European Parliament to endorse.
- ❑ **Regulation.** Creating an **investment friendly regulatory environment**:
 - ❑ Proposal for a European **Electronic Communications Code**;
 - ❑ **Cost Reduction Directive** for broadband deployment.
- ❑ **Funding.** Complementing existing funding (ESIF, EFSi...) and facilitating implementation:
 - ❑ Launch of a new **Connecting Europe Broadband Fund (CEBF) in 2018**;
 - ❑ Voucher scheme to support **free connectivity in public spaces (WiFi4EU initiative; first call May 2028)**;
 - ❑ **State Aid's "step change"** assessment taking new connectivity goals into account.

☐ **Support.** Establishment of

- ☐ **Communication tools:** e.g. **Broadband Europe website**, monthly **Broadband Newsletter** (over 5900 subscribers), yearly **B-Days** conference with stakeholders and a **European Broadband Awards** competition
- ☐ The **network of Broadband Competence Offices (BCO)** and launch of a participatory **Broadband Platform with the Committee of the Regions.**

☐ **Planning.**

- ☐ Launch of the **5G Action Plan** to foster European industrial leadership
- ☐ Study on **National Broadband Plans** published on 13 March 2017
- ☐ Call on MS to review and update **National Broadband Plans** by end 2018

Mutually supportive elements, harvesting commitment and providing longer-term reference point for policy makers, market players, regulators and investors.

3 strategic connectivity objectives for 2025

1. **All main socio-economic drivers** should have **access to gigabit connectivity**: schools, business parks, universities, research centres, hospitals, etc.
2. **All urban areas and major roads and railways** should have **uninterrupted 5G coverage**; 5G should be commercially available in at least one major city in each EU Member State by 2020
3. **All European households**, rural or urban, should have access to connectivity offering a **download speed of at least 100 Mbps**, upgradable to gigabit speed

**National
Broadband
Plans**

Review and
Update

**Investment gap
of € 155 billion
over 10 years**

**Post-2020
Multi-Financial
Framework
(MFF)**

Key elements of EU strategy for 5G

Gigabit Connectivity
Objectives 2020-2025



5G Action Plan for Europe

EU level

Proposed Revised EU
Regulatory Framework
(CODE)

Harmonisation 5G spectrum

5G Public Private
Partnership 2014-2020

"Soft" measures

- Accompany national 5G roadmap
- Pre-commercial trials
- Standards policy
- Public services as "lead user"
- Stimulate demand: VC

Member States*

Close cooperation
between
Member States

- Spectrum authorisation
- Facilitate 5G deployment, (e.g. smaller cells, 5G corridors)
- Pull: Public-driven investment in applications (e.g. PPDR, CAD)
- Push: Public financing of infrastructure (incl. broadband backhauling)
- 5G Ministerial Declaration Tallinn and agreed roadmap

Industry

5G Manifesto by
Industry (July 2016)

- 5G Standards
- Pre-commercial trials
- Increase investment
- Innovation, beyond traditional mobile markets

*MS implementing their national 5G roadmap

Promote unconstrained connectivity - Very High Capacity networks

- ☐ Support **co-investment deployment** reducing the risk faced by single operators.
- ☐ Simplified regulatory model for **wholesale-only networks** with dominance, facilitating deployment of VHC networks deeper into suburban and rural areas.
- ☐ Systematic **mapping of the state of broadband networks and investment intentions** to identify '**digital exclusion areas**' where no VHC network deployment is planned.
- ☐ Facilitate **access to civil infrastructure**, such as ducts, poles etc., held by dominant operators, to support greater infrastructure competition.

Fin



Financial support

Several complementary sources

Structural and Investment Funds (ESIF)

- European Regional Development Fund (ERDF)
- European Agricultural Fund for Rural Development (EAFRD)
- **€ 6 billion for digital networks**

Connecting Europe Facility (CEF) – Telecoms strand

- **EUR 17.5 million** commitment under the **CEF Debt Instrument** reserved for broadband
- Connecting Europe Broadband Fund (CEBF), with an expected leverage of **€ 1-1.7 billion** 
- **WiFi4EU** initiative **€ 120 million for equipment** 

European Fund for Strategic Investments (EFSI)

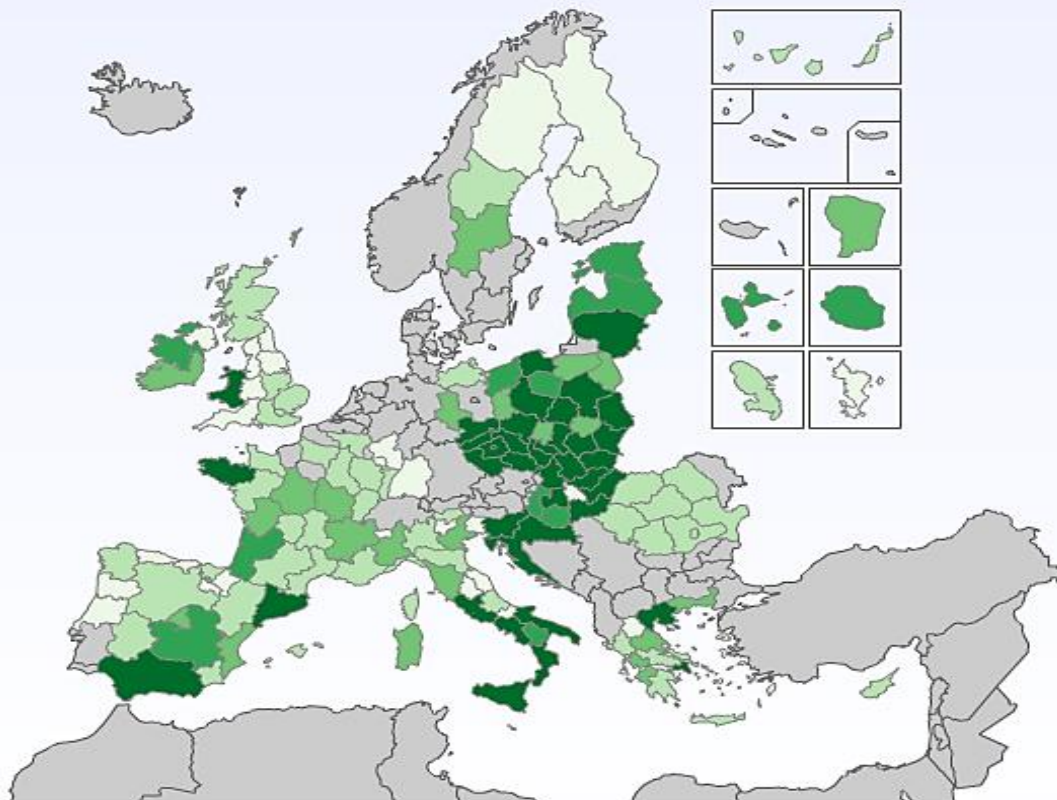
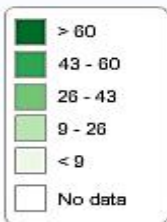
- An initiative launched to help **overcome the current investment gap** in the EU by **mobilising private financing** for strategic investments
- As of Dec. 2017, EUR 2.38 bn EFSI guarantee having unlocked **total related EFSI investments of EUR 8.43 billion into pure broadband projects**

Europe 2020 Project Bond instrument
Axione Infrastructures EUR 189.1 million in bond finance
European Investment Bank loans

€6 Billion in Structural and Investment Funds (ESIF)

- European Regional Development Fund (ERDF): **€ 5.149 million for digital networks**
- European Agricultural Fund for Rural Development (EAFRD): **€922 million for ICT in rural development**

Million €



Source: [ICT Monitoring Tool](#), S3 Platform.

- ❑ **Permanent dialogue with the industry:**
 - ❑ Current investment projections?
 - ❑ Remaining market failure areas?
- ❑ **Ultra-high capacity connectivity for key European digital projects:**
 - ❑ 5G cross-border corridors for connected & automated driving;
 - ❑ international interconnection;
 - ❑ potential similar initiatives in sectors like energy, hospitals ..
- ❑ **Seed funding aimed at maximising the geographical reach of private investments**, for instance connecting areas for which the business case is insufficient for private investors alone, including connecting all administrations, hospitals, schools etc. in those areas.
- ❑ **Connectivity vouchers for key/anchor consumers**, such as schools, administrations, doctors' surgeries etc. in underserved areas. Respect **technological neutrality**.
- And... sufficient amounts of the **European Structural and Investment Funds** for broadband rollouts in **rural areas**.

Member States have been invited to designate BCOs

- ☐ *Contact points* informing and giving advice to citizens and businesses on broadband.
- ☐ They provide *technical support* to representatives of local and regional authorities on ways to plan and invest effectively in broadband networks.
- ☐ BCOs can therefore contribute to support ERDF/EAFRD/EFSI and CEBF broadband investment: 77 ERDF OPs and 42 RDPs, of which 27 National and 82 regional
- ☐ They are set up at NATIONAL and REGIONAL level
- ✓ **Launch of the Network was:** 20 November 2017
(Broadband-Days conference)

2018 Action Plan for broadband deployment in rural areas

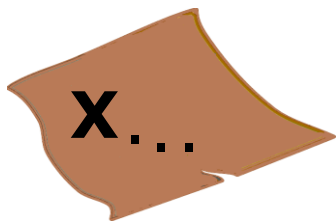
- *Concerted action by DGs CONNECT, REGIO, AGRI and COMP*
- *Objective: to maximise the impact of existing funding and technical assistance support to roll-out broadband in rural areas within the current period*
- ❑ Action 1: Setting up more regional Broadband Competence Offices.
- ❑ Action 2: "**Broadband missions**" to Member States and regions with low levels of rural broadband coverage **to unlock the administrative and financial bottlenecks to broadband rollout.**
- ❑ Action 3: A "**Common Methodology**" for planning, reporting, monitoring of **broadband investments**, which should be a **useful indicator** and resource for regions that wish to increase rural broadband coverage.

2018 Action Plan for broadband deployment in rural areas

- ❑ Action 4: A "**Rural Proof Test**" which will **prioritise rural broadband in the reprogramming of any structural and investment funds.**
- ❑ Action 5: **Update of Commission's Guide to high-speed Broadband Investment** to help local communities to plan and implement successful projects.
- ❑ Action 6: **Design a "Rural Broadband Project Framework"** to define key elements that any rural broadband project should contain with regards to procurement, state aid and cost structure to assist local authorities.

Mapping broadband services: towards an EU integrated platform
<https://www.broadbandmapping.eu/>

Mapping



The ongoing **Broadband mapping project** (SMART 2014/0016) will:

- **Develop a methodology to aggregate existing measurements of quality of service (QoS)** broadband connectivity data collected by data providers (NRAs and MS Ministries).
- **Create a public portal for the (GIS) mapping** this information at least at NUTS3 level;
- **Support BEREC discussion on methodologies to measure QoS** through an expert portal accessible to data providers (including BEREC Members and Ministries).

WiFi4EU- Promote free Wi-Fi connections in the main centres of community life

Support Wi-Fi equipment in public spaces (public administrations, libraries, parks, town squares, etc.) to

- **allow all Europeans experience the benefits of the Gigabit Society**, in line with the DSM connectivity objectives;
- **encourage and promote innovative digital services** developed locally: eGov, eHealth, eTourism, etc.



COMMISSION PRIORITY

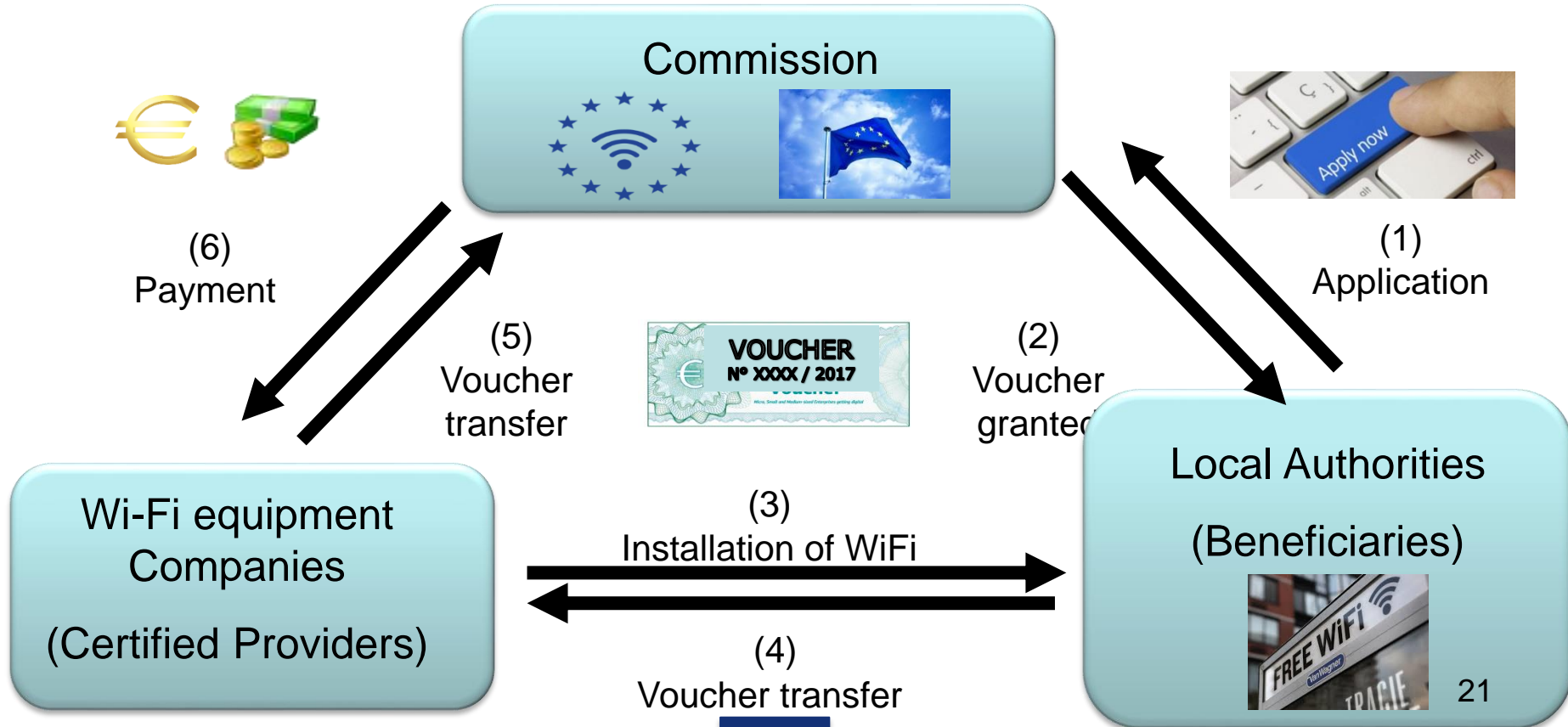
Digital Single Market



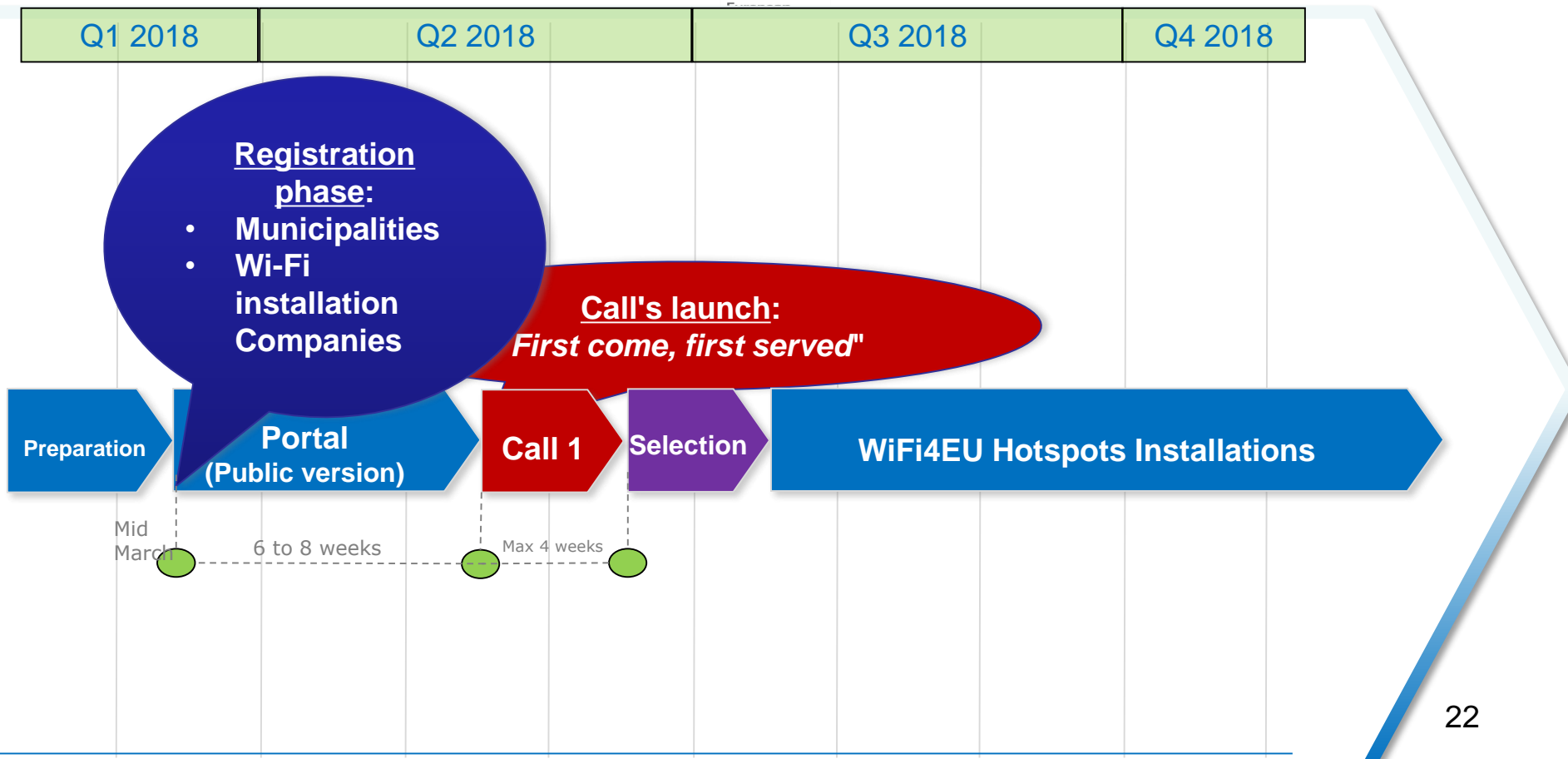
Direct impact on EU citizens and communities



- Investing
€ 120 million by 2020
- Connecting
6.000-8.000 communities
- Providing a single authentication
system across Europe



Expected timeline



Conclusion



An important momentum....

- WiFi4EU
- Regulatory developments (implementation of cost reduction Directive, eCode review)
- ESIF implementation – new MFF
- CEF Broadband Fund
- New tools ("Action Plan") and new platforms ("BCO network") to inform, share and advise

... a key condition for the success of Broadband Deployment and the Digital Single Market