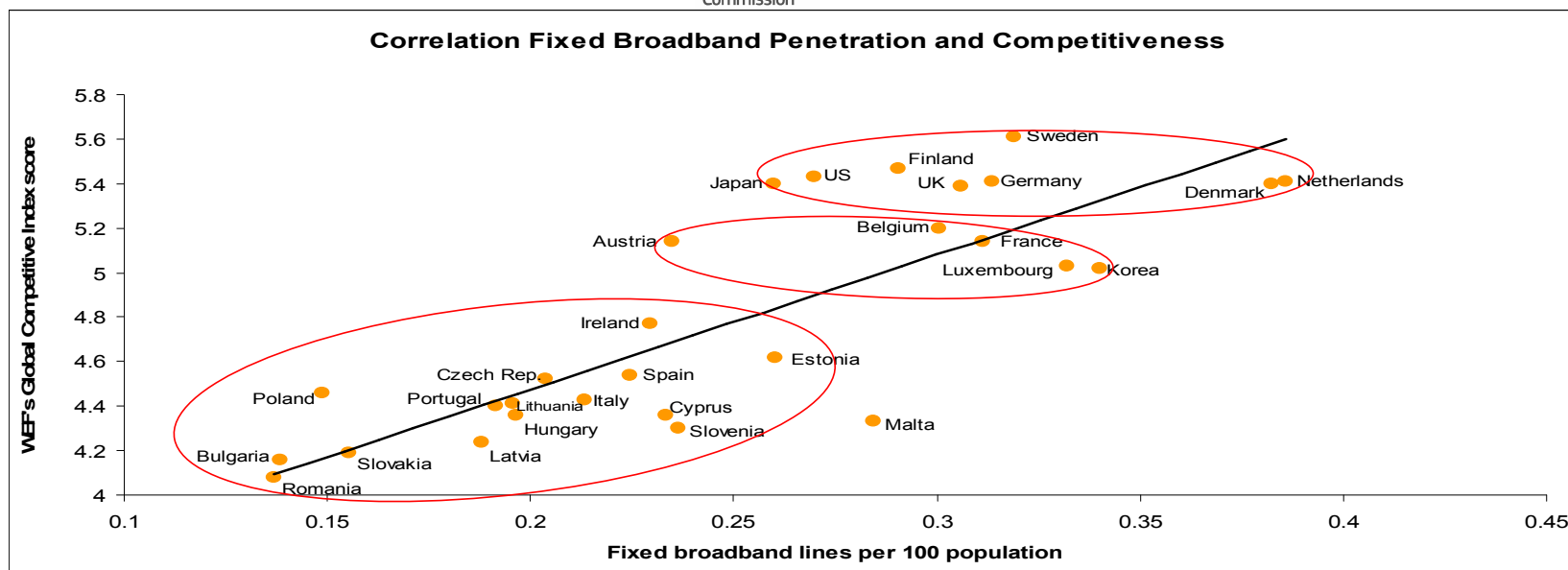




EU Broadband Policy

Broadband drives competitiveness



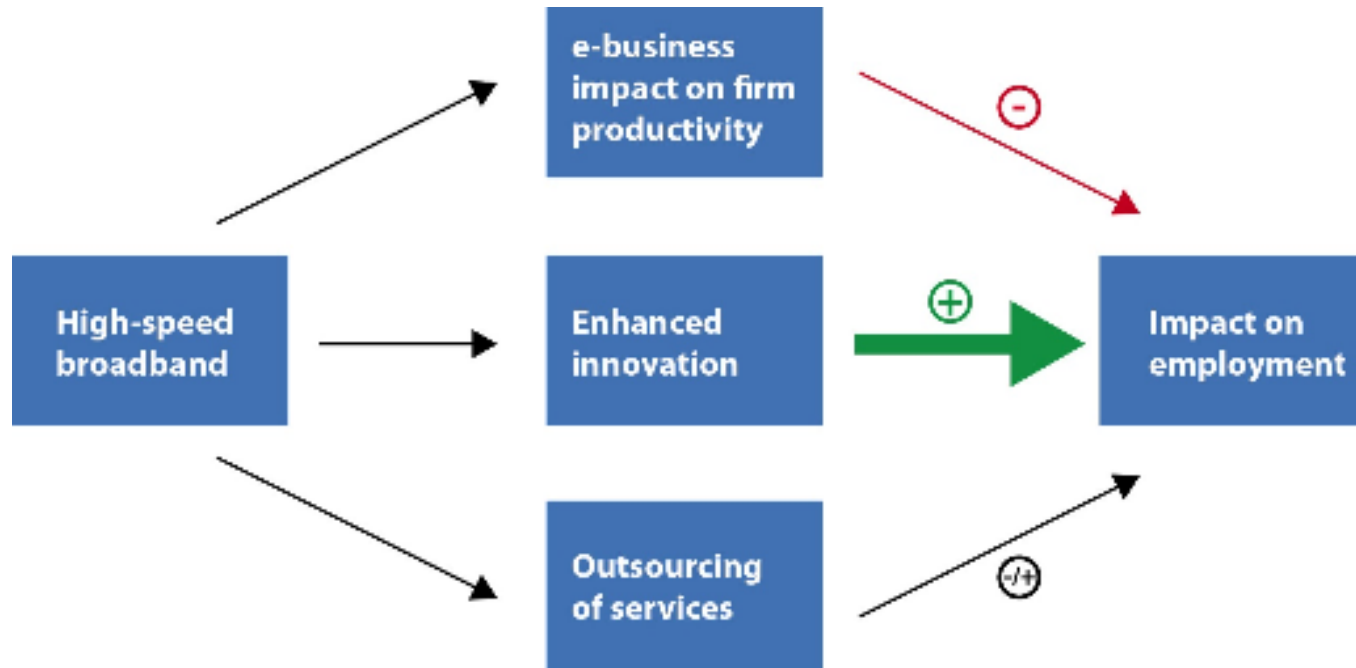
"An increase in the broadband penetration rate by 10 percentage points raises annual growth in per-capita GDP by 0.9 to 1.5 percentage points". More broadband (NGA) = higher growth.

(Czernich et al. - CESIFO WORKING PAPER NO. 2861, Ifo Institute for Economic Research, 2009)

The digital economy is by definition trans-border with strong network effects. The more people have a better access to the network, the more broadband is likely to boost the economy, and the more people have a better access to services, the more they will demand new services.

OECD - governments can achieve a 10-year return on fully funding a national, point to point, open access FTTH network

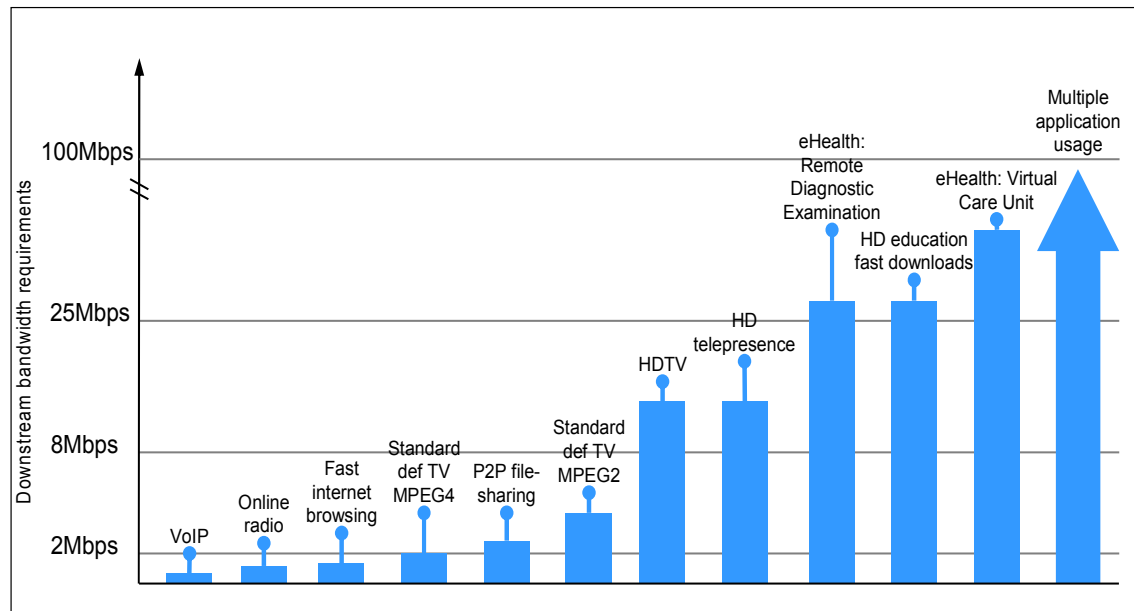
Broadband creates jobs



2.6 jobs are created by the Internet for every job lost
(McKinsey, 2011, SME survey)



Digital infrastructures are a key backbone of the EU economic and social development



Source: Analysis based on Broadband Stakeholder Group

- Current networks are usually OK for early and simple digital technologies.
- They are not enough for emerging technologies in fields such as TV and Health, or for using multiple devices on the same connection point.
- Faster networks are needed to EU businesses to compete and for citizens to get the content they are expecting

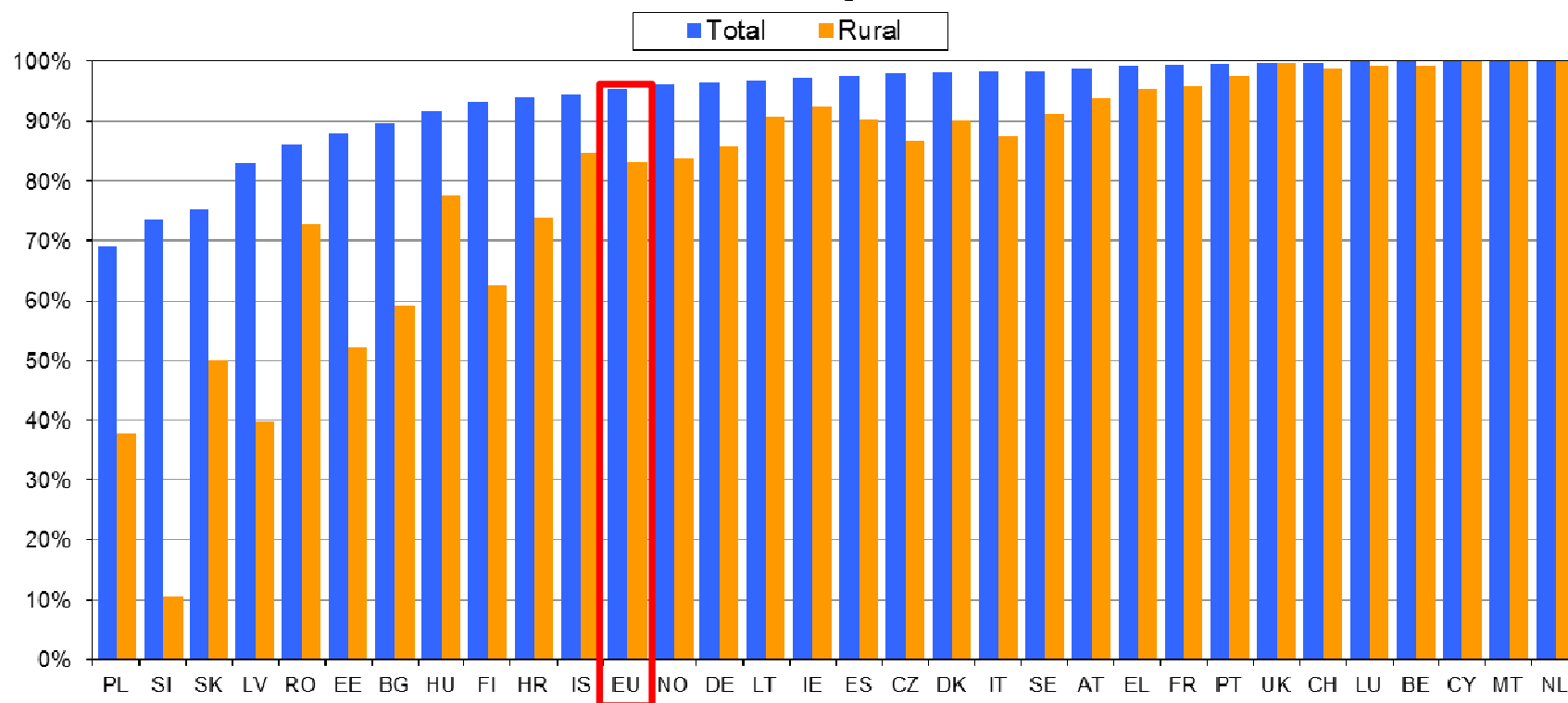
Basic broadband for all by 2013



Standard fixed broadband* availability

adding wireless, EU coverage is 99.97%

Standard fixed coverage, end of 2012



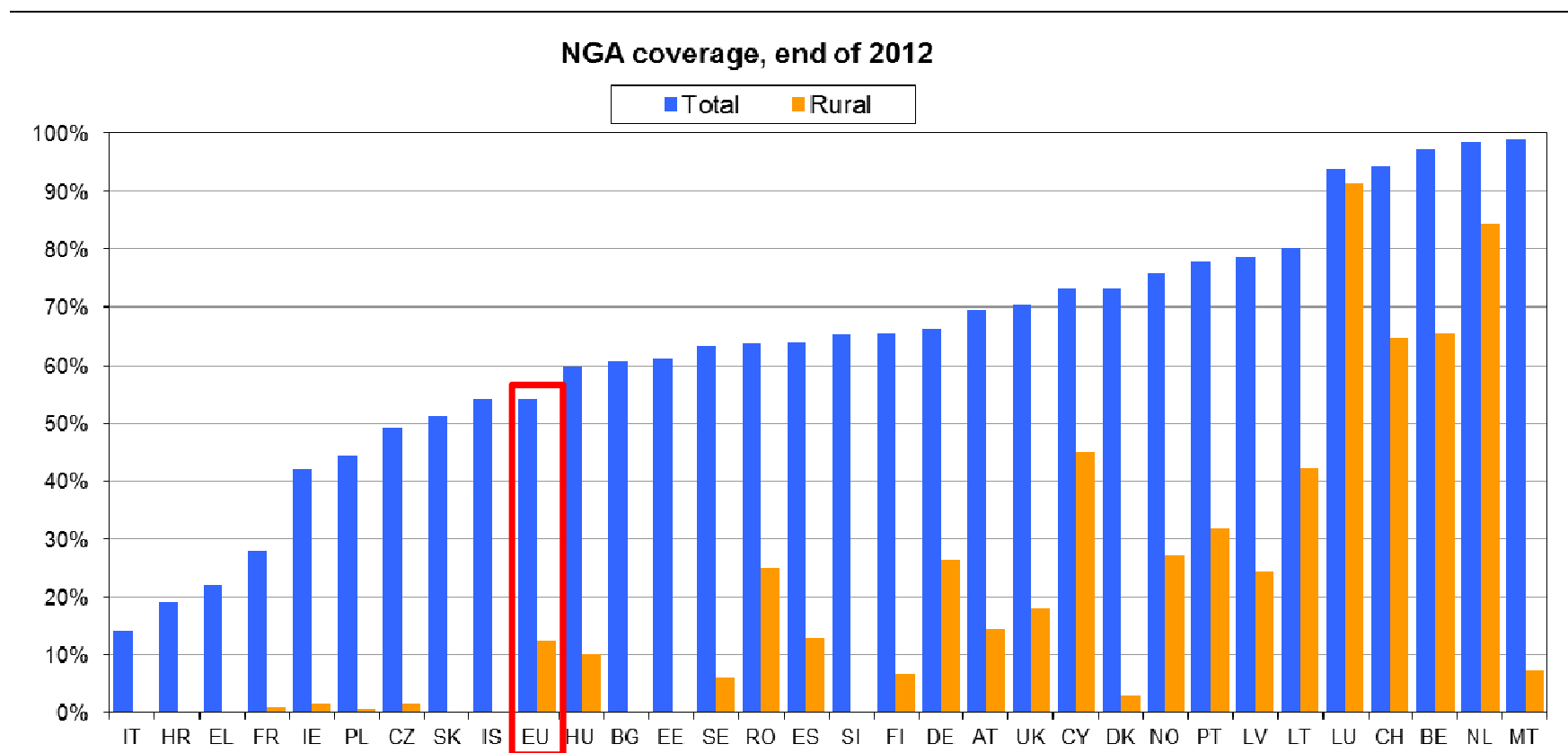
*xDSL, Cable, FTTP and WiMax; Source: Point Topic

At least 30 Mbps for all by 2020



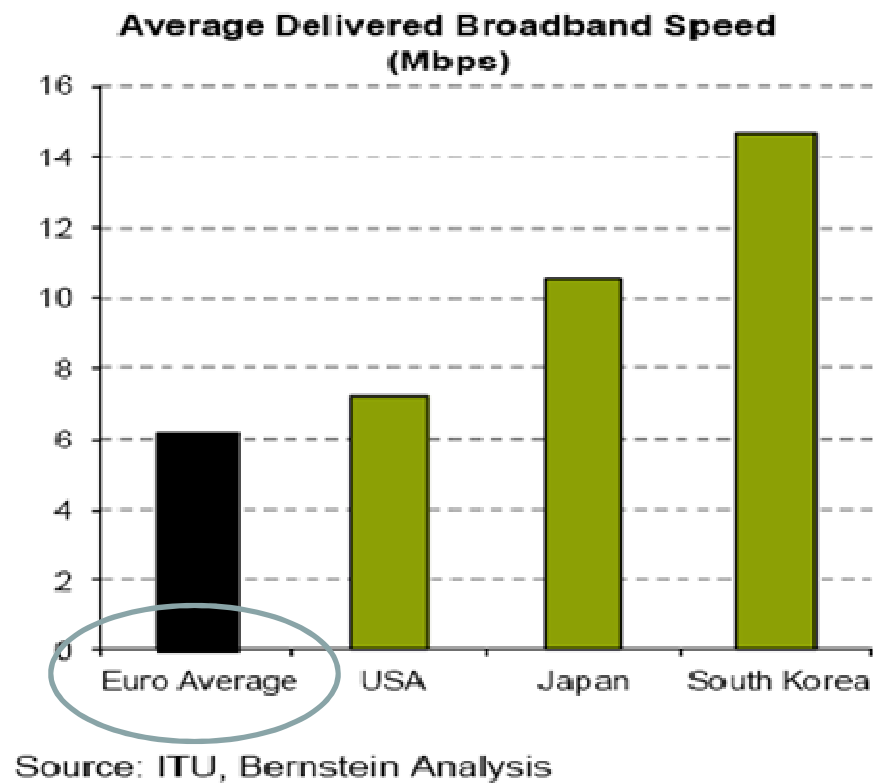
NGA* availability (54% of EU homes)

But only 12% of EU rural areas are covered

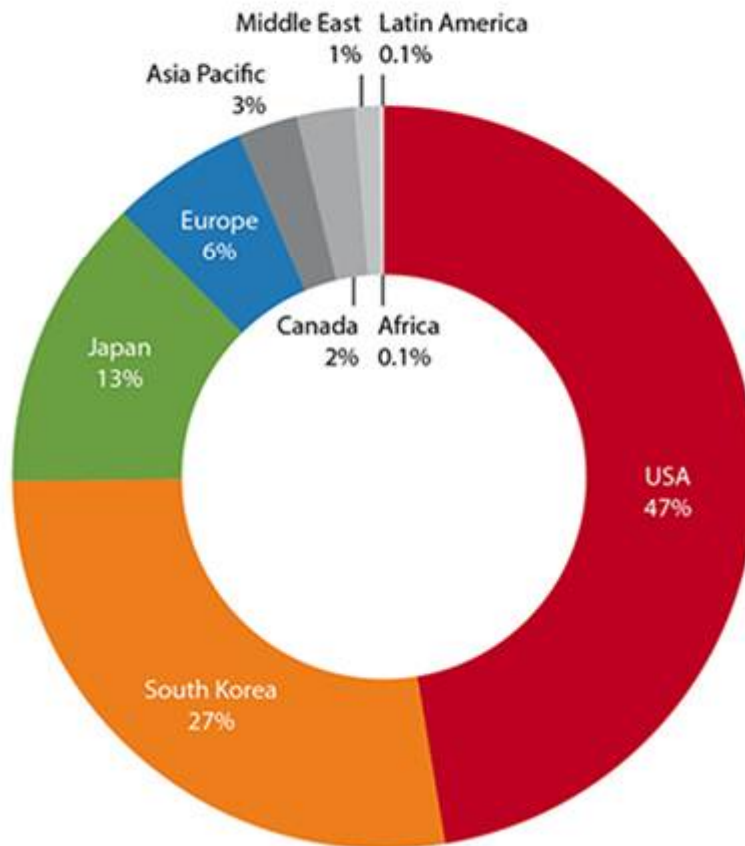


* Next Generation Access (NGA): VDSL, Cable Docsis 3.0 and FTTP. Source: Point Topic

European fixed broadband networks are getting faster..
....but not fast enough to keep up with our main competitors



Europe used to lead in the mobile sector....



In Mid 2012 USA had 47% of the world LTE connections, South Korea 27 and Japan 13%...

...Europe had 6% of the world LTE connections.



Market frictions in long-term funding for NGA infrastructure

- Long-dated NGA infrastructure projects are risky investments
- 2 categories depending on project's expected cash flows (CF):



CFs **sufficient** to cover risk-adjusted cost of capital



Market-driven investment, but: impeded by **financial market frictions**



CFs **not sufficient** to cover risk-adjusted cost of capital



Public support:

- Risk-taking without compensation
- Grants (mainly Structural Funds, national schemes)

Troubled waters



- Elements with influence on the ability and willingness to invest:
 - **Competitive pressure**
 - **Strict regulatory conditions**
 - **Weak demand for NGA**
 - **Financial and general economic conditions (dividends, toughening borrowing conditions)**
 - **Structural inefficiencies i.e. high overheads (OPEX) and high debt ratios and for some operators focus outside the core business**



EC strategy



- To stabilise certain conditions favouring investment thus improving risk-return trade-off

Recalibration of regulatory instruments
Streamlining of cost reduction measures

Increases private investor **returns**

EU enhanced project-financing facilities

Reduce private investor **risk**

- **supporting new actions to stimulate demand for high speed services**



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 more of what they need and want
- EU-scale networks supporting a competitive digital single market
- Making Europe an attractive home for web entrepreneurs, device makers, and all international businesses.



EU broadband policy – key areas



Market framework

- Cost reduction initiative
- eComms regulation, e. g. Recommendation on non-discrimination and costing methodologies
- Demand Stimulation
- **Single EU authorisation**
- **European inputs:** Spectrum and access products
- **Single consumer space:** Net neutrality, harmonised end user rights, roaming

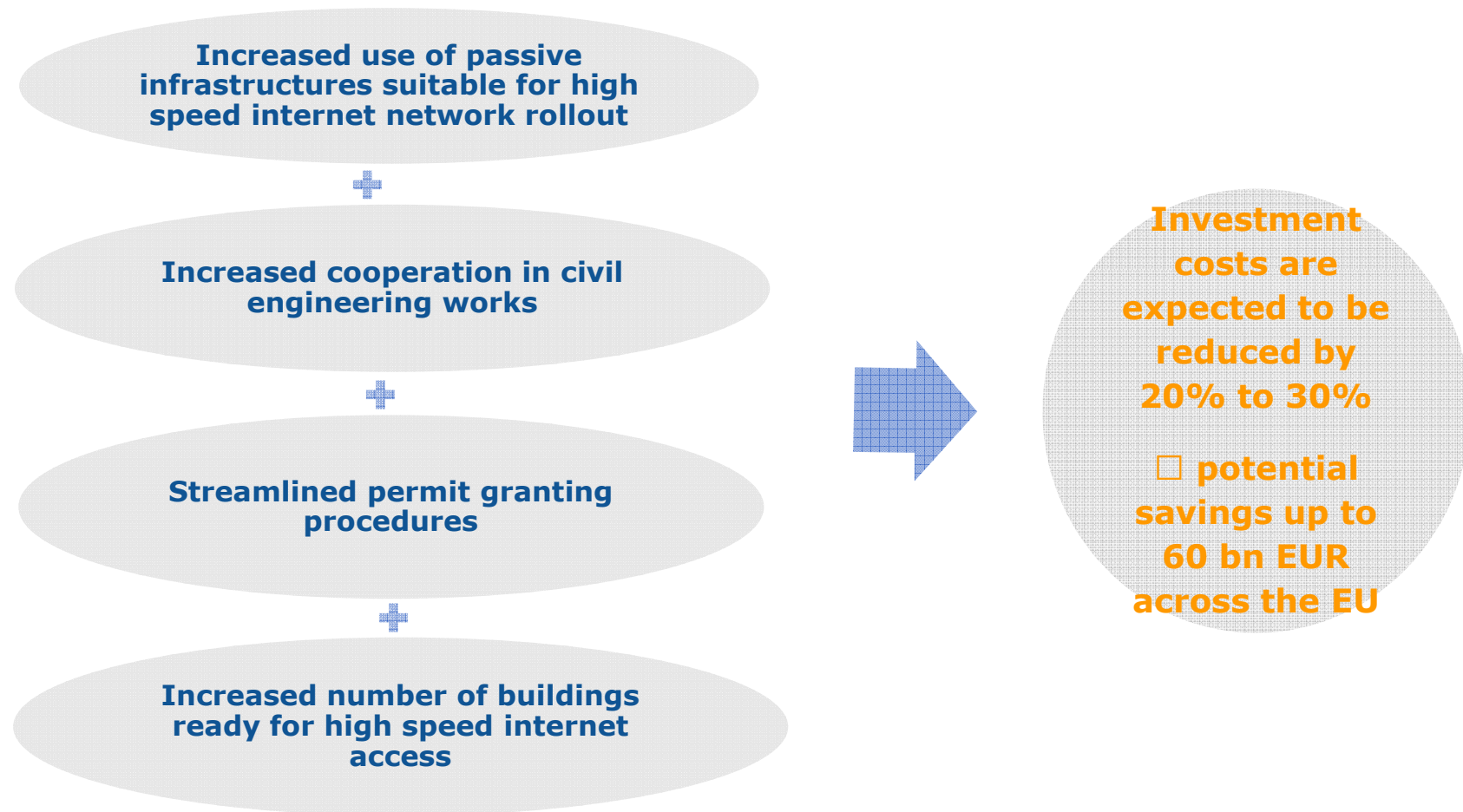
Financing and funding

- European Structural and Investment Funds (ESIF)
- Connecting Europe Facility (CEF)
- Broadband state aid guidelines

Single market for eComms



Reducing the cost of broadband deployment



Demand stimulation



- EC is preparing a number of initiatives with a view to introduce legal certainty and create environment supportive to demand build-up (audio-visual content, internet of things, social networks and online business):
 - **Cloud strategy**
 - **Connected TV**
 - **Guidance on net neutrality**
 - **M-payments**
 - **E-Commerce directive**
- And those already adopted:
 - **Data protection**
 - **Online dispute resolution**
 - **Online sales contracts**



Financing Broadband in the EU – Current Developments



EU-level funding

*2014 - 2020: ICT a priority in the **European Structural and Investment Funds***

Connecting Europe Facility (CEF):** Some complementary EU support by means of **financial instruments

*Currently **project bonds pilot – open** for project proposals*

*Possibly **greater EIB lending activity** in ICT/broadband following capital increase*

EU/EIB impact – additional factors



- Project appraisal benefits from sector-specific expertise
- EU involvement has strong **signalling effect** for other investors/lenders
- Although risk-based, **pricing takes into account economic benefits/ externalities**
- More favourable pricing can give additional boost to project viability





State aid: new guidelines

Achieving the right mix between public and private investment: public interventions targeted at market failures; faster decisions.

Principles:

- ***Technological neutrality.***
- publicly financed infrastructure can only be allowed if it provides a ***substantial improvement*** ("step change") over existing networks.
- ***public funding*** of ultra-fast broadband networks (of more than 100 Mbps) will be ***possible also in urban areas*** subject to very strict conditions.
- when network is realised with taxpayers' money, competitors will benefit from a truly ***open network*** for the benefit of consumers.
- ***Transparency*** has been reinforced: publication of documents, a centralised data base for existing infrastructure.





Cohesion policy 2014-2020

After the reduction of the Connecting Europe Facility, the Structural Funds will be the main sources of funding for broadband

Member State authorities are currently preparing their Operational Programmes, to be agreed with the Commission

EP and Council decided that ICT and broadband is now a 4th priority in the 2014-2020 Operational Programmes



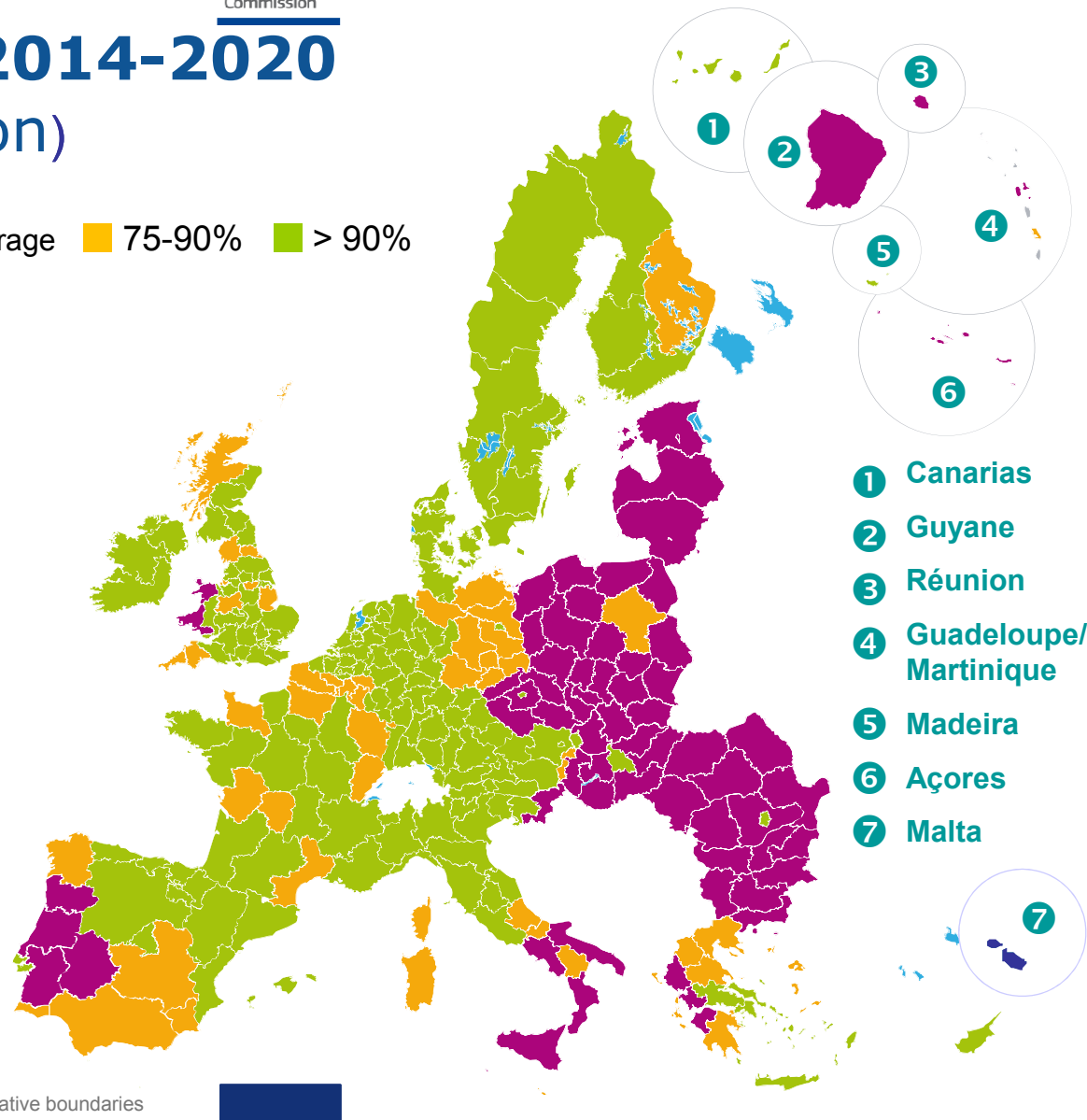
Cohesion policy 2014-2020 (eligibility simulation)

GDP/capita* ■ < 75% of EU average ■ 75-90% ■ > 90%

*index EU27=100

3 categories of regions

- Less developed regions
- Transition regions
- More developed regions



Regional GDP figures: 2006-07-08

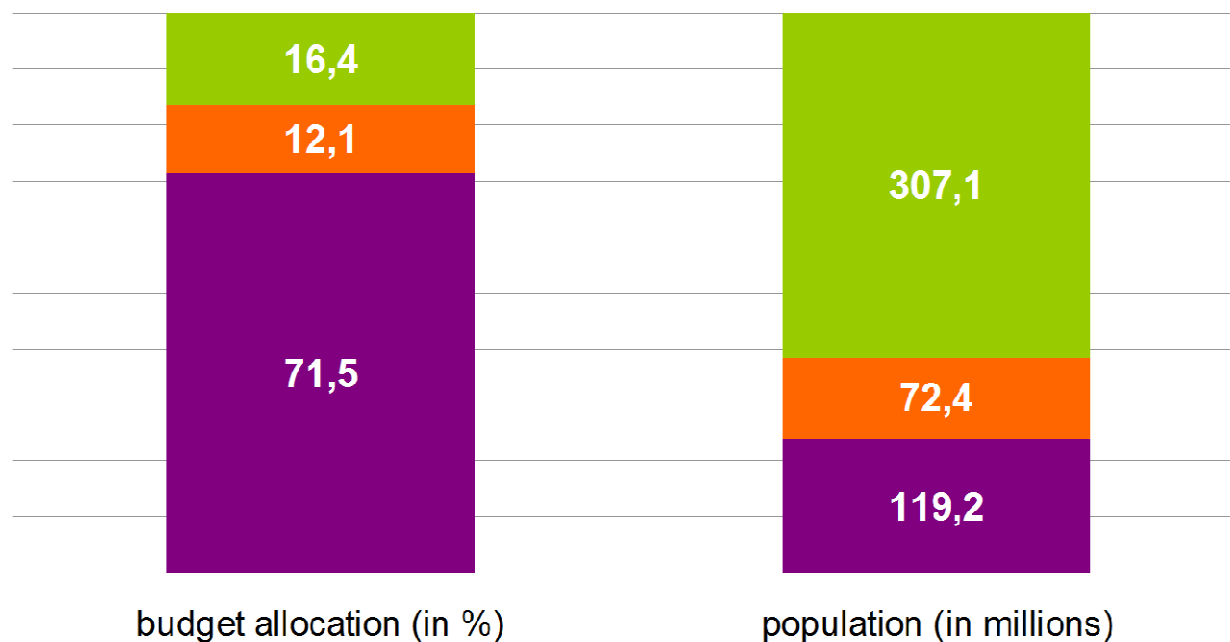
GNI figures: 2007-08-09

© EuroGeographics Association for the administrative boundaries

Cohesion policy post 2013

How will funding be allocated?

■ Less developed regions/MS ■ Transition regions ■ More developed regions



Cohesion policy 2014-2020

Special case ERDF: 11 thematic objectives, 3 priority

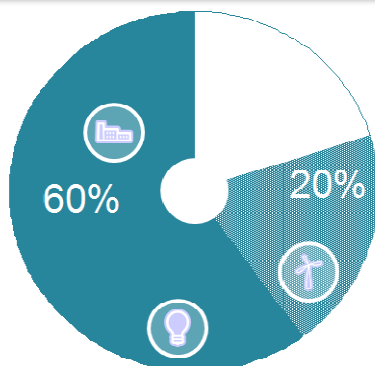
 **Energy efficiency and
renewable energy**



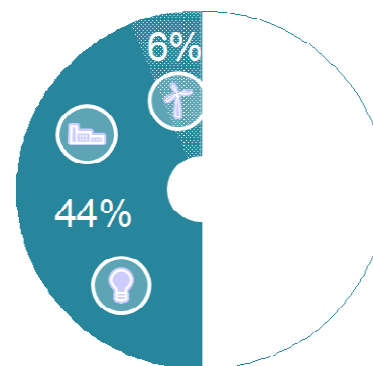
Research and innovation



SME competitiveness



**Most developed and
transition regions**



Least developed regions

Specific modalities for the old Convergence Regions

But – EC and Council decided: ICT and BB is now 4th priority!