

**SEDEC Commission Meeting, Committee of the Regions  
Brussels, 20 April 2016**

# **Linking the Digital Agenda to rural and sparsely populated areas to boost their growth potential**

## **Consortium:**

Progress Consulting S.r.l. (IT) (coordinator)  
Fondazione FORMIT (IT) (partner)

**Rossella Soldi  
Progress Consulting S.r.l.**

## **Framework Contract**

CDR/DE/56/2013/1

# Rationale of the study

## **Main investigated topic**

**The financing of broadband networks deployment/upgrading by LRAs in those areas considered unprofitable by private operators (i.e. rural, remote and sparsely populated – RRS – areas)**

## **Framing background**

- **DAE targets: by 2020, 100% coverage of broadband above 30 Mbps ('fast'), and penetration of 'ultra-fast' broadband (i.e. subscriptions above 100 Mbps) in 50% of European households**
- **EUR 22 billion of EU public funds are potentially available for the upgrading/deployment of ICT infrastructures (2014 - 2020)**
- **Estimated funding gap of at least EUR 13 billion.**

## **What is important?**

- **Efficient access to and effective use of EU funds, including for the leveraging of private investments**
- **Appraise the need for new initiatives aimed at boosting and/or enhancing access to/use of EU funds**

# Main parts of the report

## 1. State of the art of broadband connectivity in rural areas

**NGA broadband coverage, NGA technologies, broadband access...evidence clearly points to a urban-rural digital divide and to a differentiated condition across rural areas**

## 4. How to boost access to and use of EU funds?

**A few suggestions on entry-points on the top of what is already available or done**

## 2. Characterising broadband deployment in RRS areas

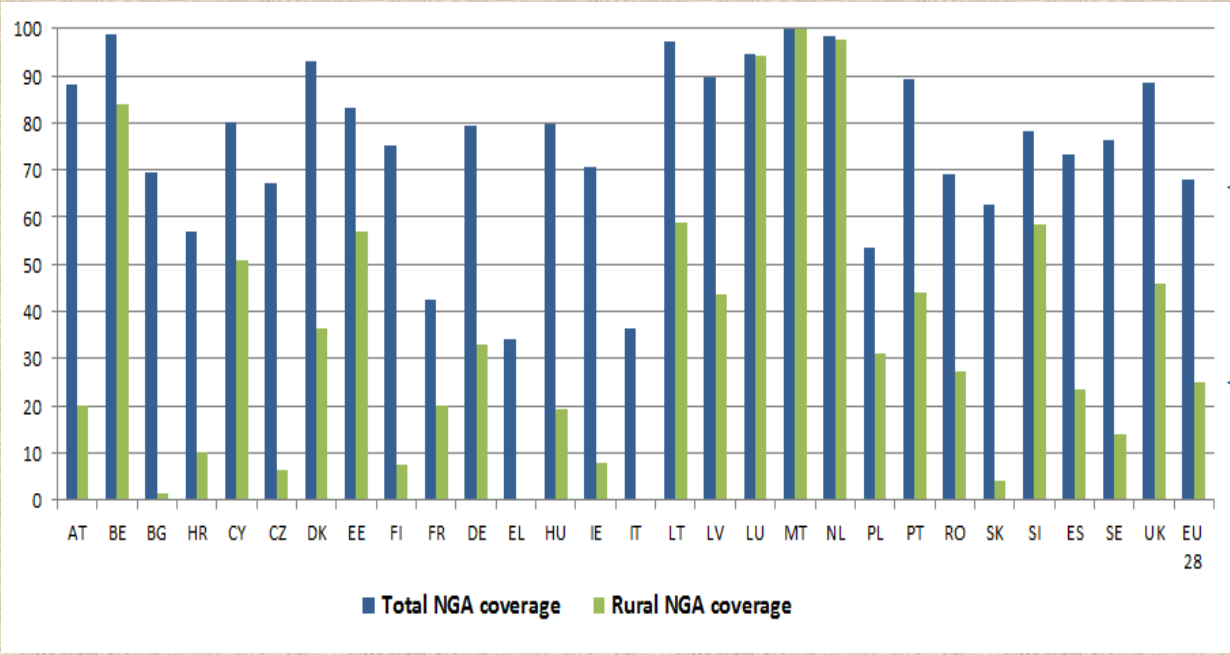
**Challenges to deployment, barriers to investments...but also new opportunities (growth potential) for businesses and citizens as confirmed by literature**

## 3. Ways of financing the deployment of broadband infrastructure by LRAs

**Contractual arrangements, multi-stakeholders engagements, strategic frameworks, EU funding instruments...some suitable instruments are underused**

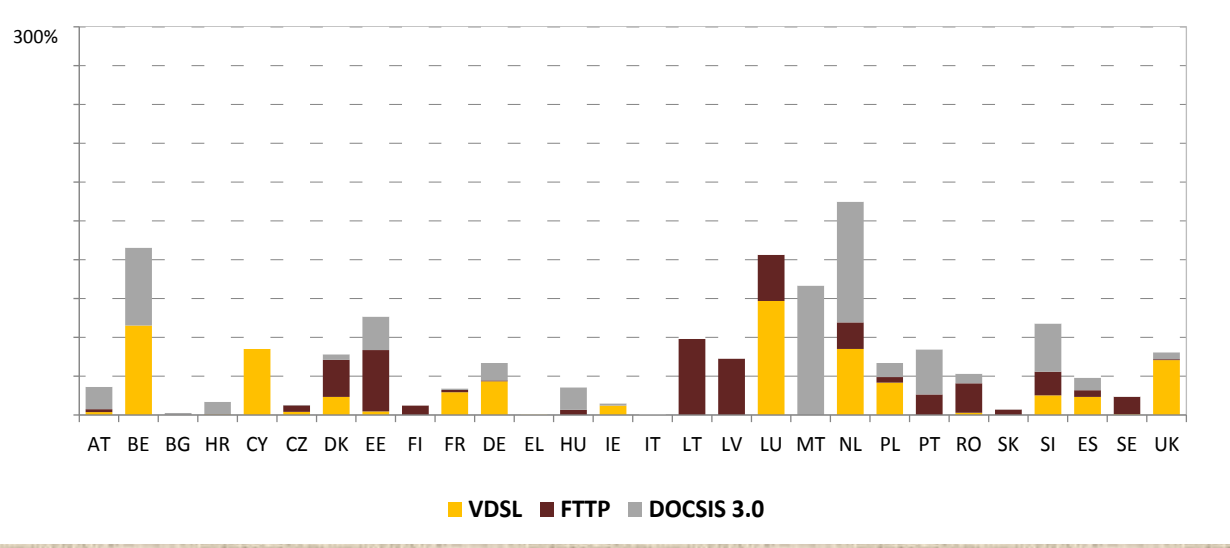


# 1. State of the art: the urban/rural digital divide



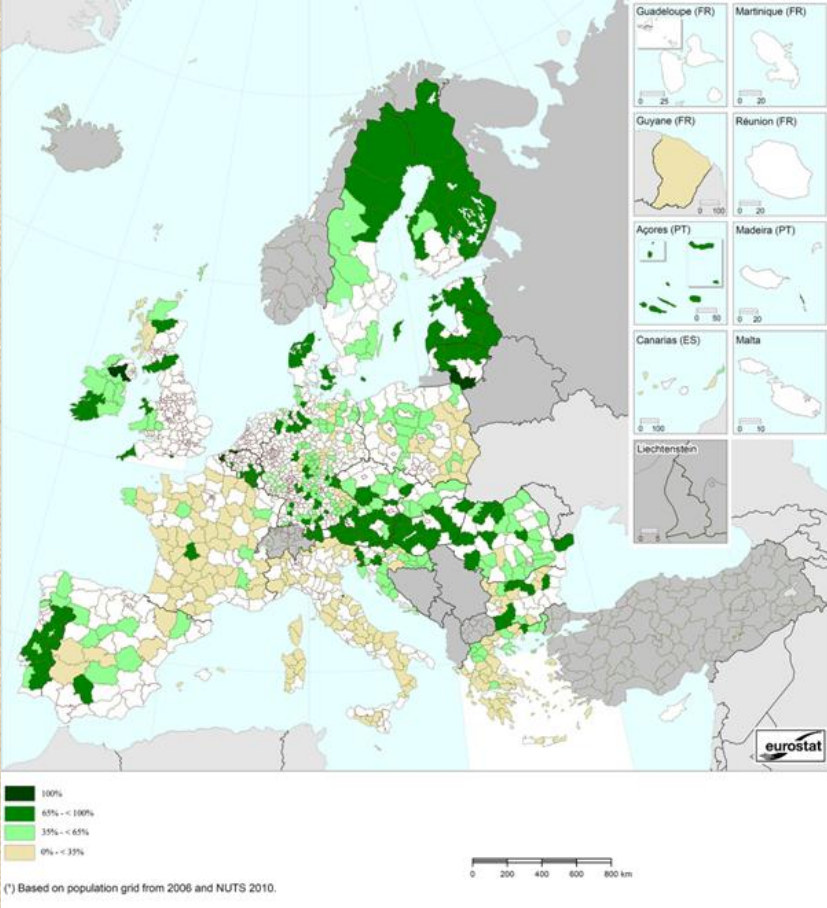
68%

25%

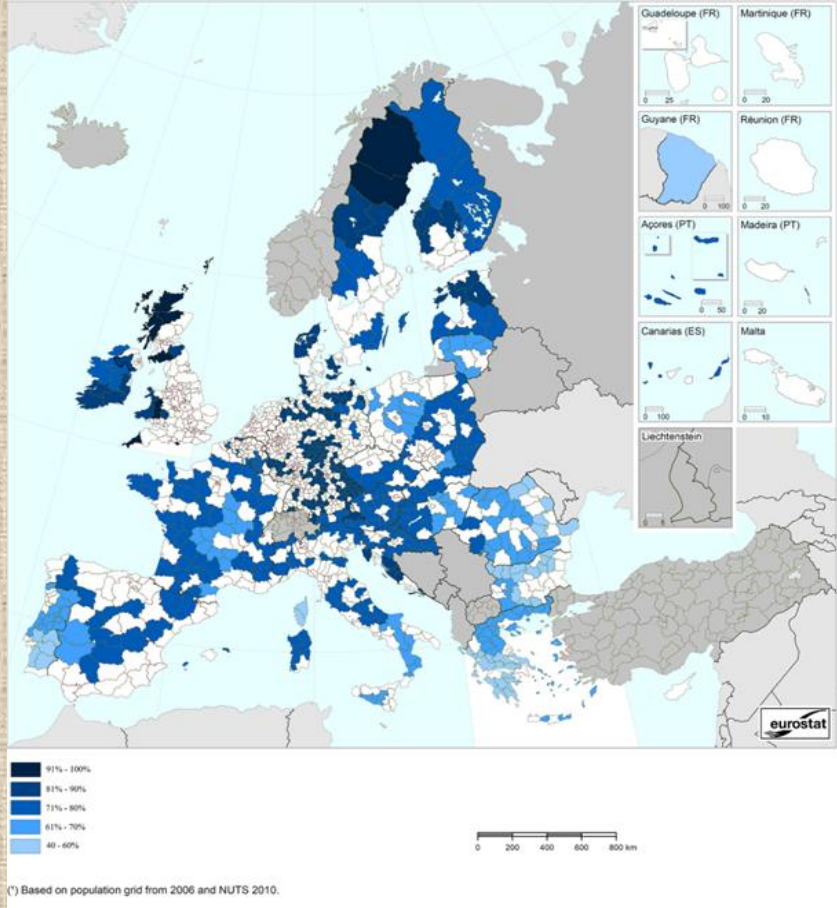


Contribution of main NGA technologies to rural coverage, by country, end of 2014

# 1. State of the art: differentiated situation across RRS areas (NUTS3)



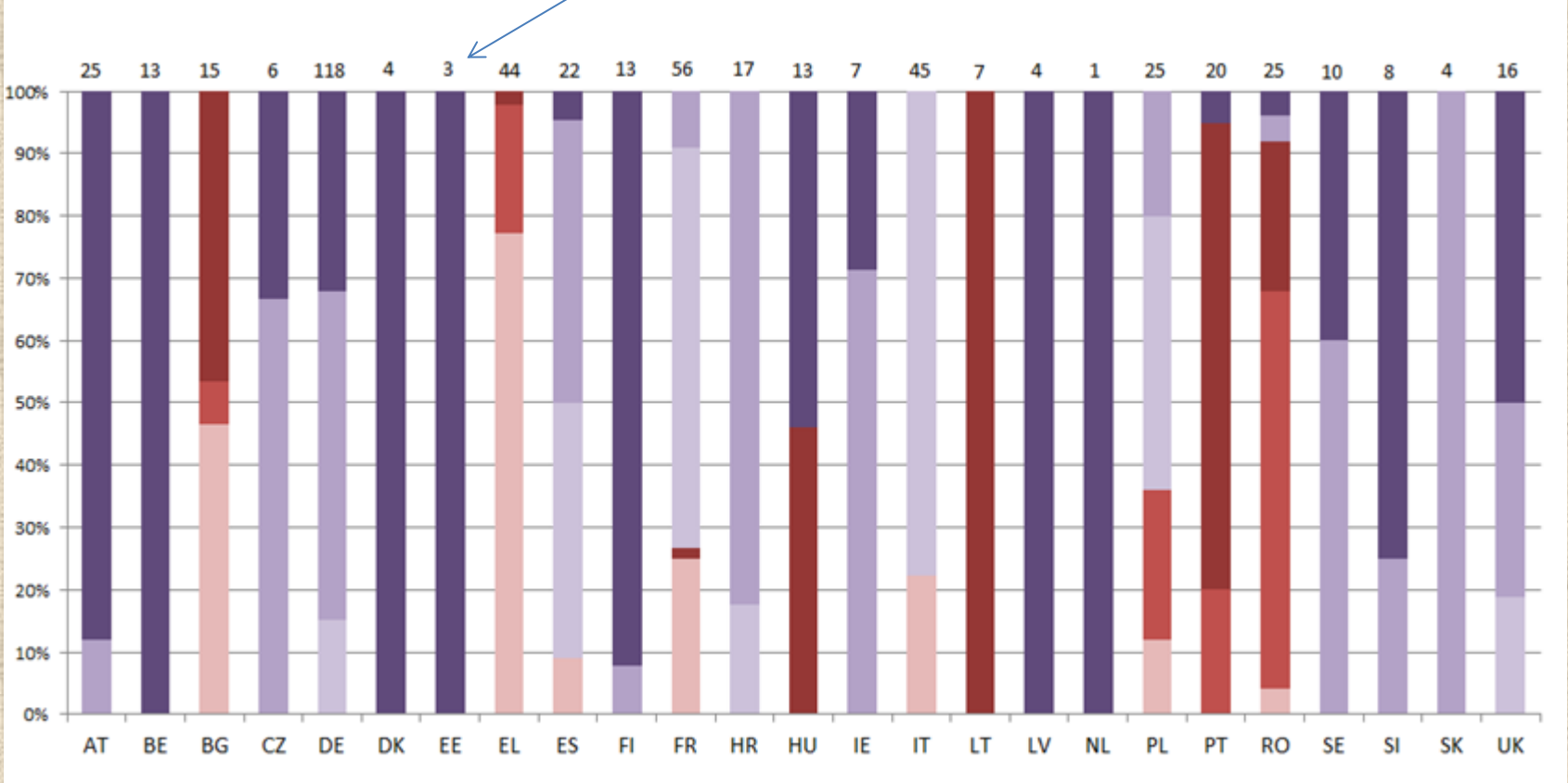
NGA coverage in rural, remote and sparsely populated areas (NUTS3), 2014



Share (%) of households with broadband connection (broadband access), 2015, NUTS3

# 1. State of the art: our classification of RRS areas

n° of NUTS3 per country classified as RRS areas



We identify six groups of areas →

High ICT preparedness: share of households having a broadband connection > 70%		
NGA coverage < 35%	35% ≤ NGA coverage ≤ 65%	NGA coverage > 65%
Low ICT preparedness: share of households having a broadband connection ≤ 70%		
NGA coverage < 35%	35% ≤ NGA coverage ≤ 65%	NGA coverage > 65%

## 2. Characterising broadband deployment in RRS areas

**RRS areas face challenges to infrastructure deployment and barriers to ICT infrastructure investments...**

Challenge	Barrier
Lower demand	Capital intensive
Fragmented demand	Size of the market (niche markets)
Higher deployment cost	Lower revenue
More difficult selection of the technology	Higher risk
Higher maintenance costs	Longer pay-back period
Lower availability of other existing infrastructures	The competition dilemma

**...but the few evidence points to a positive socio-economic territorial impact of broadband deployment on both businesses and citizens → growth potential**

Businesses (impact variable depending on sector)	Citizens
Employment (short-term/long-term)	More high-paying jobs → higher incomes
Growth in GDP	Improved technological skills
Incremental revenues	Costs savings
Improved competitiveness	Access to better services
Increased innovation	Social inclusion and civic engagement

### 3. Main tools & instruments to finance broadband deployment by LRAs

- **Contractual arrangements**

- Public Design, Build and Operate
- Public outsourcing
- Subsidy to a network operator
- Joint Venture

- **Multi-stakeholders engagements**

- Community broadband
- Federation of LRAs
- Crowdfunding

- **Strategic frameworks**

- RIS3 → ESIF

- **EU funding instruments**

- The European Fund for Strategic Investments (EFSI)
- The Connecting Europe Facility (CEF)
- The EIB Project Bond Initiative
- European Bank for Reconstruction and Development (EBRD)

Some of the examples included in the report



*Norrbotten (SE), Wielkopolska (PL)*  
*Nordhessen (DE)*  
*North Karelia (FI)*  
*Pays de la Loire (FR)*

*Scotland (UK)*  
*Evora (PT), Siena (IT)*  
*(Rural Nottinghamshire (UK))*



## **4. Conclusions: general remarks**

- **Higher spending in RRS areas for broadband infrastructures deployment/upgrading is justified by social – besides economic – considerations.**
- **Some of the contractual arrangements and multi-stakeholders engagements reviewed for ICT investments in RRS areas by LRAs work better than others in including social considerations (e.g. Public DBO, Federation of LRAs).**
- **The use of Structural Funds is still significant for ICT investments (considering also the General Block Exemption Regulation) but there is room for improvement of LRAs' capacity to use these funds.**
- **Some other tools/instruments may benefit from higher take up by LRAs (e.g. equity crowdfunding) or from the design of supportive schemes (e.g. for accessing EFSI).**

## 4. Conclusions: our suggestions (by type of regions)

- **Pooling of small financial shares through equity crowdfunding**

Fitting areas with a good awareness of the benefits brought about by fast or ultra-fast broadband, i.e. RRS with broadband access > 70%.

*Structuring and aggregating internal demand, involving a myriad of external (small) investors.*

- **Support scheme for securing EFSI finance for ICT infrastructure in RRS areas**

Fitting better those areas characterised by a (very) low level of NGA coverage, i.e. the so called 'white areas'.

*EFSI perfectly matches the characteristics of ICT infrastructures projects in RRS areas, i.e. having a **higher** than the average **risk** profile and addressing strategic areas of the real economy.*

- **Publicly-sponsored venture capital for leveraging market capitals**

Fitting better RRS areas which are characterised by a low level of NGA coverage and therefore needing a substantial investment in terms of size.

*'Professionalising' the venture capital approach and creating/raising demand are essential to secure a return on investment.*

## 4. Conclusions: our suggestions (by type of regions) (cont.)

- **Identification of non-conventional broadband investors**

Fitting RRS areas which are characterised by a low level of coverage of NGA, i.e. the so called 'white areas'.

*Taking advantage of the increasing dependency of the management of physical infrastructures through ICT (i.e. remote mode) and involving utilities companies (this is apparently the way Italy is going to pursue the 2020 DAE targets in terms of fast and ultra-fast broadband).*

- **Maximising the efficiency of public financial support within the public DBO**

Fitting RRS areas which are characterised by an average level of coverage of NGA, hence areas belonging to 'intermediary' groups.

*Public DBO is particularly suited for RRS areas as it easily allows the consideration of social benefits. However, it implies the mobilisation of a large pool of public funds. Higher reliance on EU instruments such as the Project Bond Initiative (PBI) of the EIB may boost the positive potential of this approach.*

**SEDEC Commission Meeting, Committee of the Regions  
Brussels, 20 April 2016**

**Thank you!**

**Rossella Soldi  
Progress Consulting S.r.l.**