atene
KOM

Agency for Communication,
Organisation and Management

Chances and challenges of digitalisation in rural areas (CORA project)

Peyman Khodabakhsh – Project Manager

atene KOM GmbH | Agency for Communication, Organisation and Management

Introduction

atene KOM GmbH | Agency for Communication, Organisation and Management

- Management Consultancy and Project Management Company

- Headquarter in Berlin with offices in Brussels, Leipzig, Nuremberg, Hamburg, Wiesbaden

- Business Fields: Organisational Development, Technology and Funding Consultancy, Project Management, Studies, Evaluations

- Core Competencies: Broadband, Renewable Energy, Regional Development

- Public Bodies and Municipal Corporations as Customers

- „Federal Broadband Bureau" on behalf of the German Federal Ministry of Transport and Digital Infrastructure and administrative body of federalf funds for broadband roll-out

Digitalization, EU targets

Broad band

"… to deliver sustainable economic and social benefits from a digital single market based on fast and ultra-fast internet and interoperable applications"

2020

all Europeans should have access to internet speeds higher than 30 Mbps by 2020 (target II)

50 % or more of European households should subscribe to 100 Mbps or more by 2020 (target III)

atene **KOM**

B road band

"… The Commission's strategy on Connectivity for a European Gigabit Society, adopted in September 2016, sets a vision of Europe where availability and take-up of very high capacity networks enable the widespread use of products, services and applications in the Digital Single Market."

2025

Gigabit connectivity for all main socio-economic drivers

Access to connectivity offering at least **100 Mbps for all** European households

Uninterrupted 5G coverage for all urban areas and major terrestrial transport paths

Digital divide and rural areas

Digital divide and rural areas

Distribution of population, by degree of urbanisation, 2015

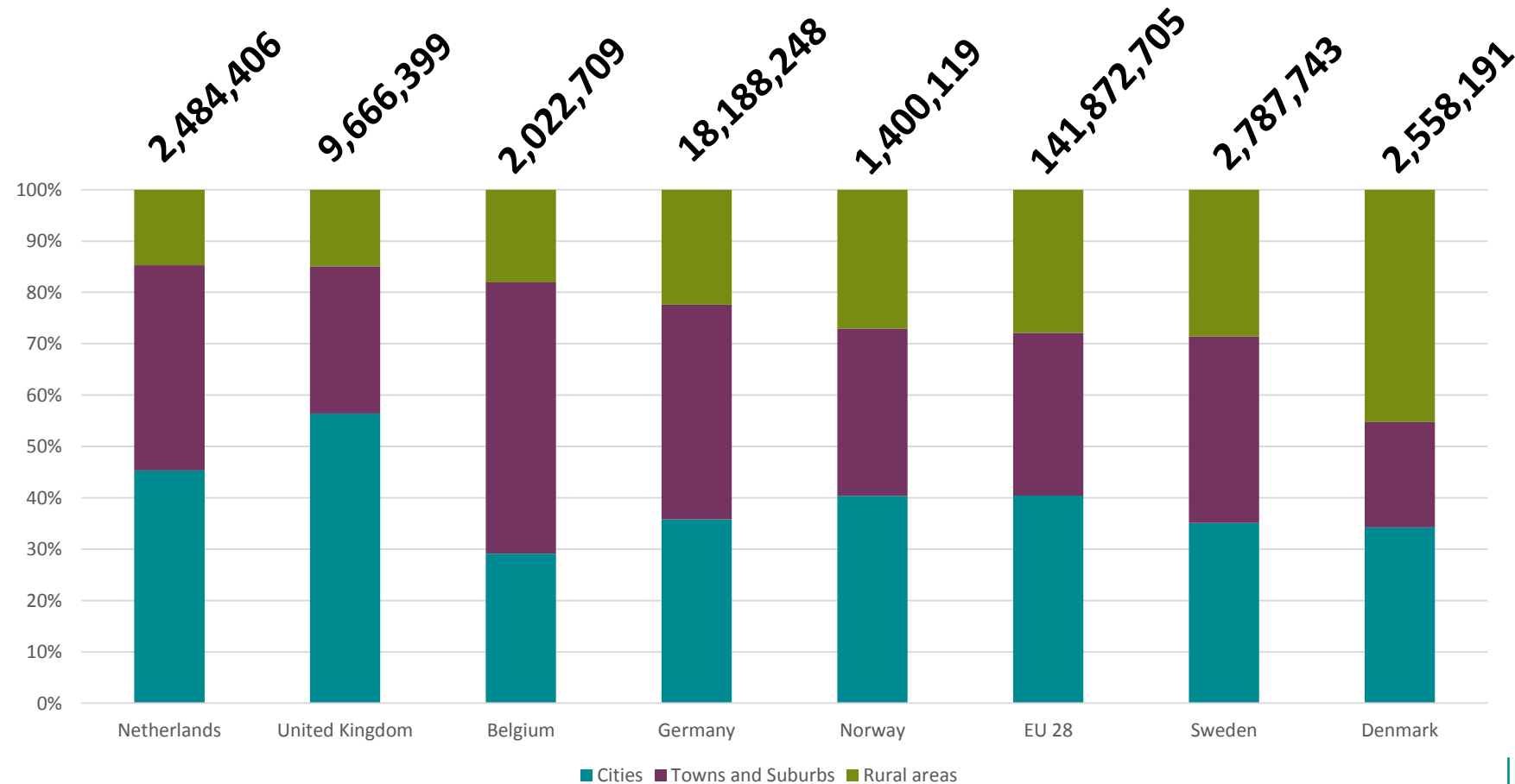|	
DK	45.2%
SE	28.6%
NO	27.1%
DE	22.4%
BE	18.0%
UK	14.9%
NL	14.7%

Cities Towns and Suburbs Rural areas

Source. Eurostat

Digital divide and rural areas

atene KOM

Distribution of population, by degree of urbanisation, 2015

NSR ➜ 39,107,818

EU 28 ➜ 141,872,705

Rural areas matter!!!

2,484,406 9,666,399 2,022,709 18,188,248 1,400,119 141,872,705 2,787,743 2,558,191

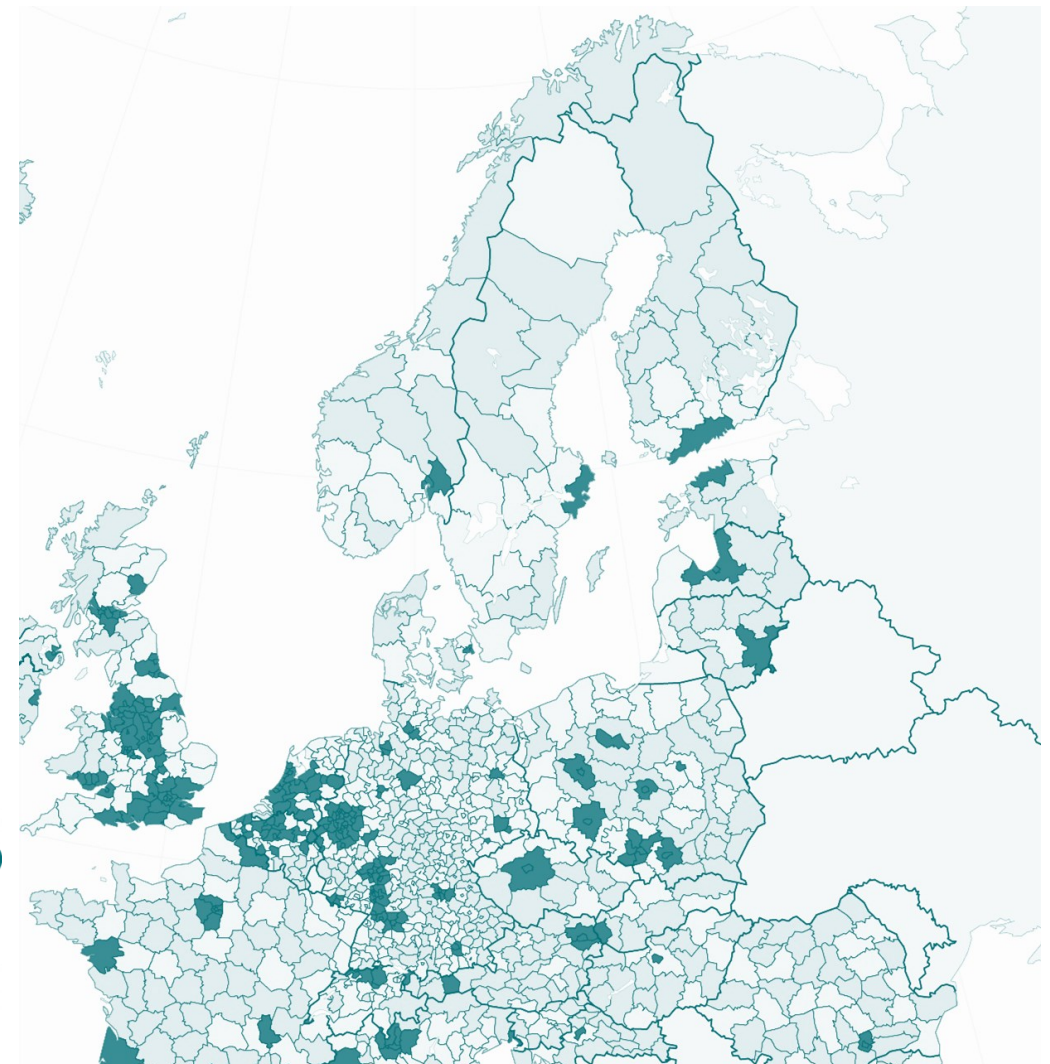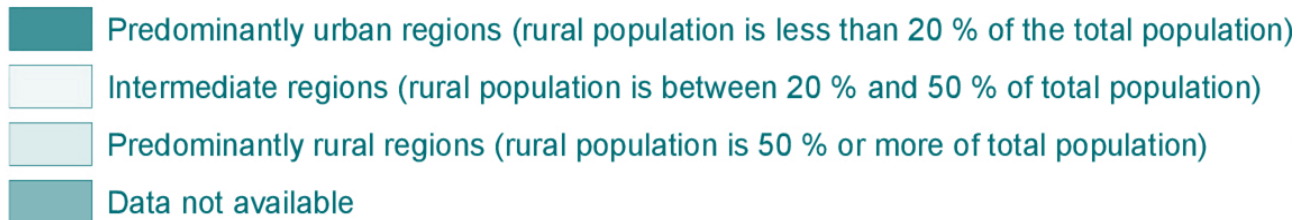| | Netherlands | United Kingdom | Belgium | Germany | Norway | EU 28 | Sweden | Denmark |

■ Cities ■ Towns and Suburbs ■ Rural areas

Digital divide and rural areas

Settlements structure (urban-intermediate and rural) regions

Rural areas matter!!!

Predominantly urban regions (rural population is less than 20 % of the total population)

Intermediate regions (rural population is between 20 % and 50 % of total population)

Predominantly rural regions (rural population is 50 % or more of total population)

Data not available
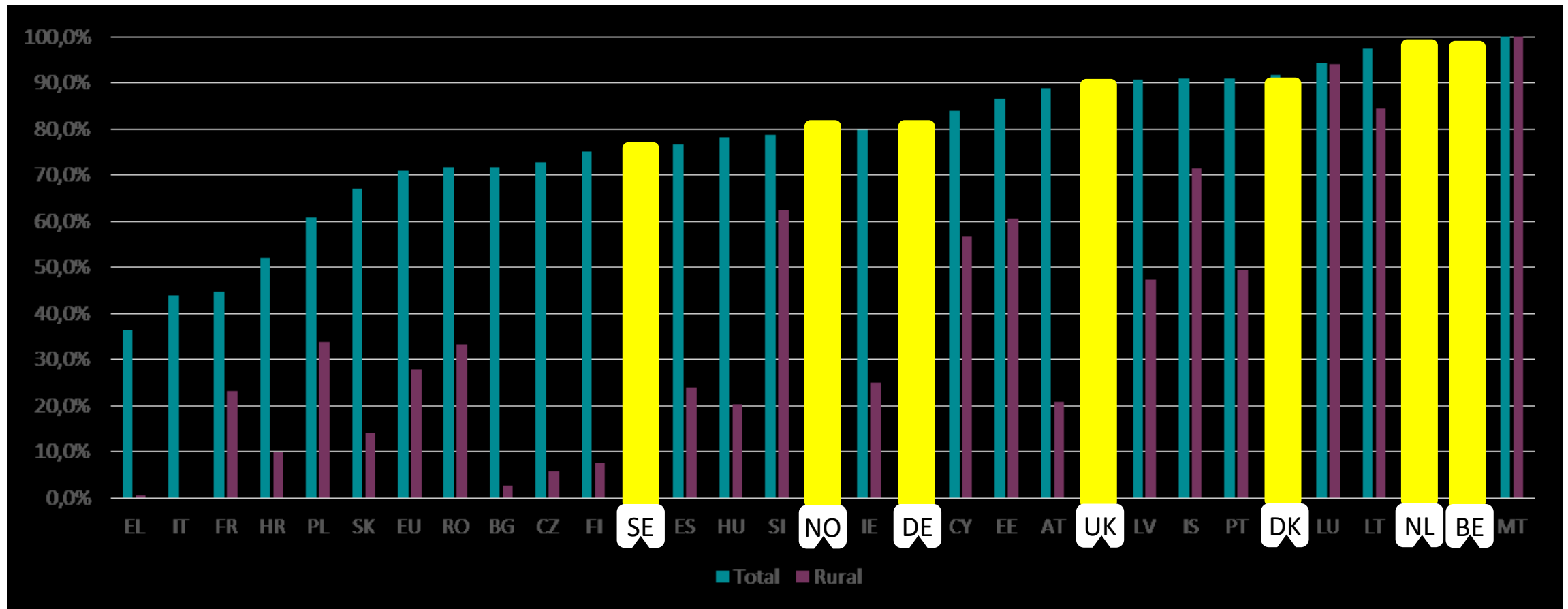
Source. Eurostat, JRC, EFGS, REGIO-GIS

Digital divide and rural areas

Fixed broadband coverage Mid-2015

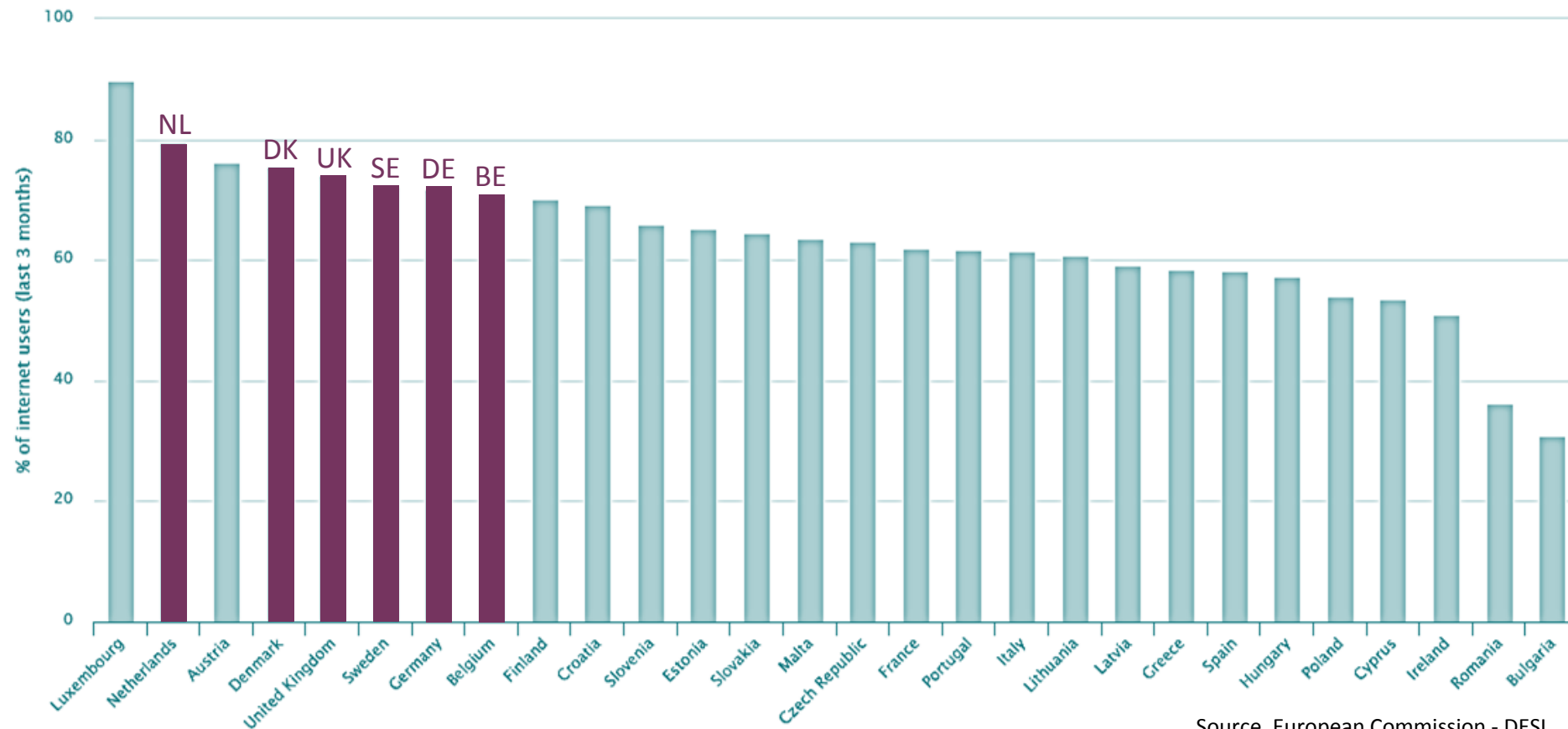Source. European Commission - DESI
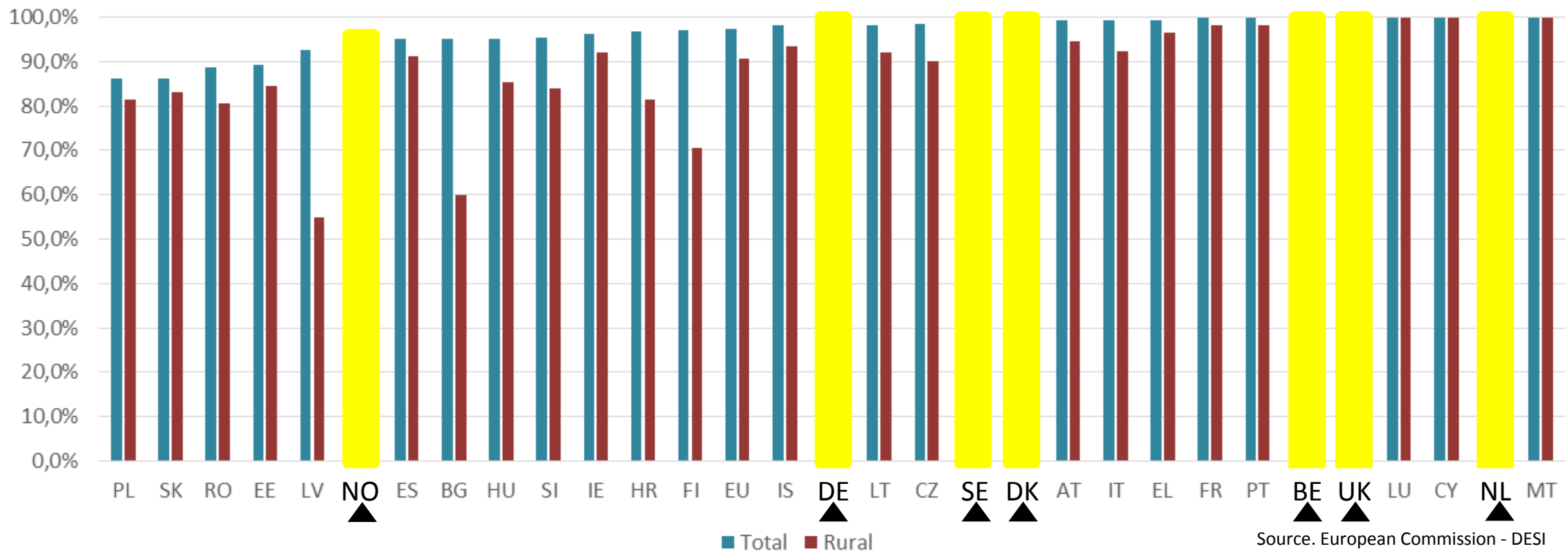
Digital divide and rural areas
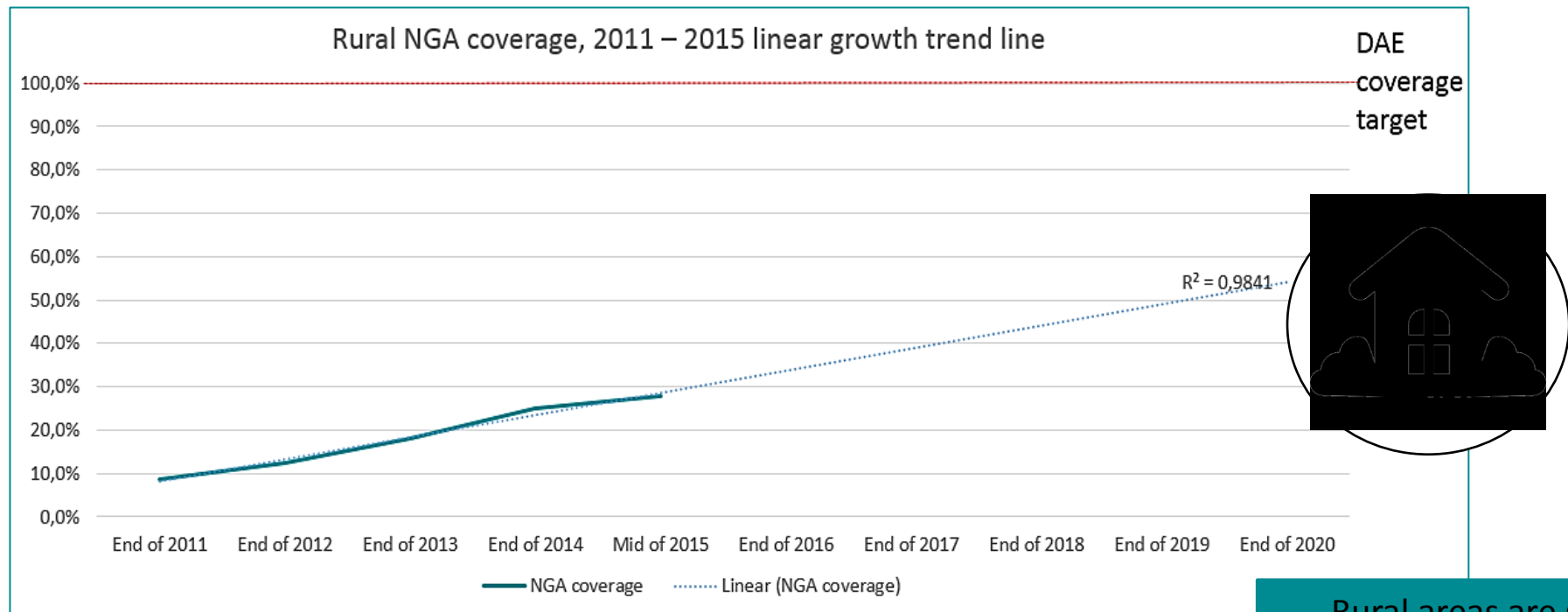
NGA coverage in Mid-2015

Digital divide and rural areas

Individuals with basic and above basic digital skills (in sparsely populated areas – 2016)

Source. European Commission - DESI

Next Generation Access (NGA): Rural areas

Rural NGA coverage, 2011 – 2015 linear growth trend line

DAE coverage target

$R^2 = 0,9841$

End of 2011	End of 2012	End of 2013	End of 2014	Mid of 2015	End of 2016	End of 2017	End of 2018	End of 2019	End of 2020

—— NGA coverage   .... Linear (NGA coverage)

Rural areas are still lagging significantly behind

? No chance left..?

13

CORA – COnnecting Remote Areas with digital infrastructure and services

atene KOM GmbH | Agency for Communication, Organisation and Management

CORA – Territorial challenges

- **Structural disadvantages of rural areas:**

  - Demographic transformation ➔ people (especially youth) are leaving rural areas

  - Lack of business vision for enterprises

  - Geographical barriers in terms of access to public services

Digitalization & digital innovation as a solution, however!!!

- **Very slow development pace due to market failure in NGA** development in rural areas:

  - high upfront investment in net infrastructure

  - high risks in investments

  - service uptake

- New Gigabit society targets of the European Commission for 2025

- Limited **knowledge about potential profits of NGA** among local actors (i.e. local authorities, businesses, and communities)

- Limited digital skills and competences

Current development pace is too low!

A transnational solution/initiative???

CORA – Territorial challenges

- Many regions beleive that the only challenge is providing the required financial sources!

- Genrally speaking ➔ financial issues are essential component, but DO NOT GUARANTY THE SUCCESS especially in rural areas with several many geographical and socio-economic challenges!

> There are many project with adequate financial sources ➔ which have not been successful

> There are some local initiatives without direct financial sources ➔ BUT SUCCESSFULLY IMPLEMNETD, with large socio-economic impact!
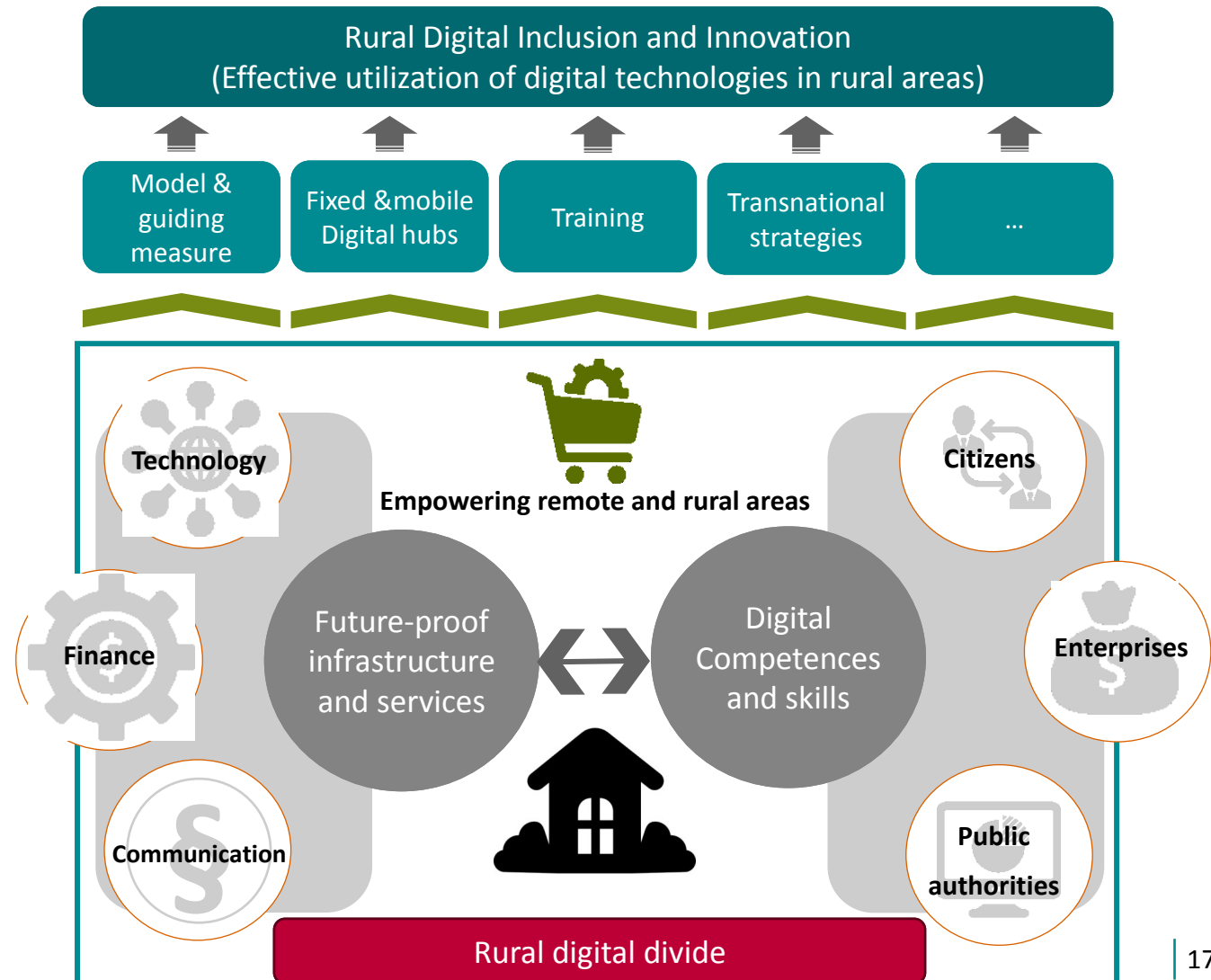
- Main challenges:

Infrastructural shortages

Lack of digital competences

Lack of know how for improving their condition

CORA - Approach

Work packages

1. Project management

2. Communication activities

3. Knowledge on digital inclusion

4. Enhancing digital skills and competences

5. CORA test beds

6. Mainstreaming CORA approach, policy briefing and know-how transfer

Rural Digital Inclusion and Innovation
(Effective utilization of digital technologies in rural areas)

Model & guiding measure

Fixed &mobile Digital hubs

Training

Transnational strategies

…

Technology

Empowering remote and rural areas

Citizens

Finance

Future-proof infrastructure and services

Digital Competences and skills

Enterprises

Communication

Public authorities

Rural digital divide

CORA - Partnership

ateneKOM

18 Partners from 7 EU Member states

12 partners form **public** sector

3 partners form **academic** sector

3 partners form **private** sector

Share of Member States

DE	2	NL	3
SE	2	NO	4
BE	1	UK	1
DE	5		

Belgium
Intercommunale Leiedal (Lead Partner)

Germany
atene KOM Agency for Communication, Organization
  and Management (atene KOM Gm
BürgerBreitbandNetz GmbH & Co. K

Sweden
Värmland County Administrative Bo
Torsby kommun

Denmark
Vejle Kommune
Middelfart Kommune
South Djurs Kommune
North Djurs Kommune
Aalborg University

The Netherlands
University of Groningen
Groningen Internet Exchange (GN-I)
Municipality of Oldambt

Norway
Hedmark County Council
Eidskog Kommune
Kongsvinger Kommune
Grue Kommune

United Kingdom
University of Lincoln

Interreg
North Sea Region
European Regional Development Fund

18

CORA – aim and expected results

Aim

- ✓ Bridging digital divide and stimulating digital innovation in rural areas.
- ✓ Enabling local authorities to fill in the digital gaps in terms of advanced infrastructure, digital skills as well as digital public services and empowers them to create an environment to facilitate digital innovation in rural areas.

Results

- ✓ Improved level of digital inclusion and public digital skills (local communities and enterprises) in rural areas.

CORA – main activities

Main activities in Work Packages

WP1
- Project management

WP2
- Communication stratgey
- Project conferences, workshops and seminars
- Presenting CORA in transnational stages
- CORA online platform
- EU platforms

WP3
- Framework & methodology around rural digital divide
- Diognistic surveys
- Transnational strategies and guiding measures
- SSE Model & Digital Hub concept
- Monitoring tool
- Training concept

WP4
- Frameowork & methodology around digital skills
- Diognistic surveys
- Transnational strategies and guiding measures (e-services and digital skills)
- Training concept
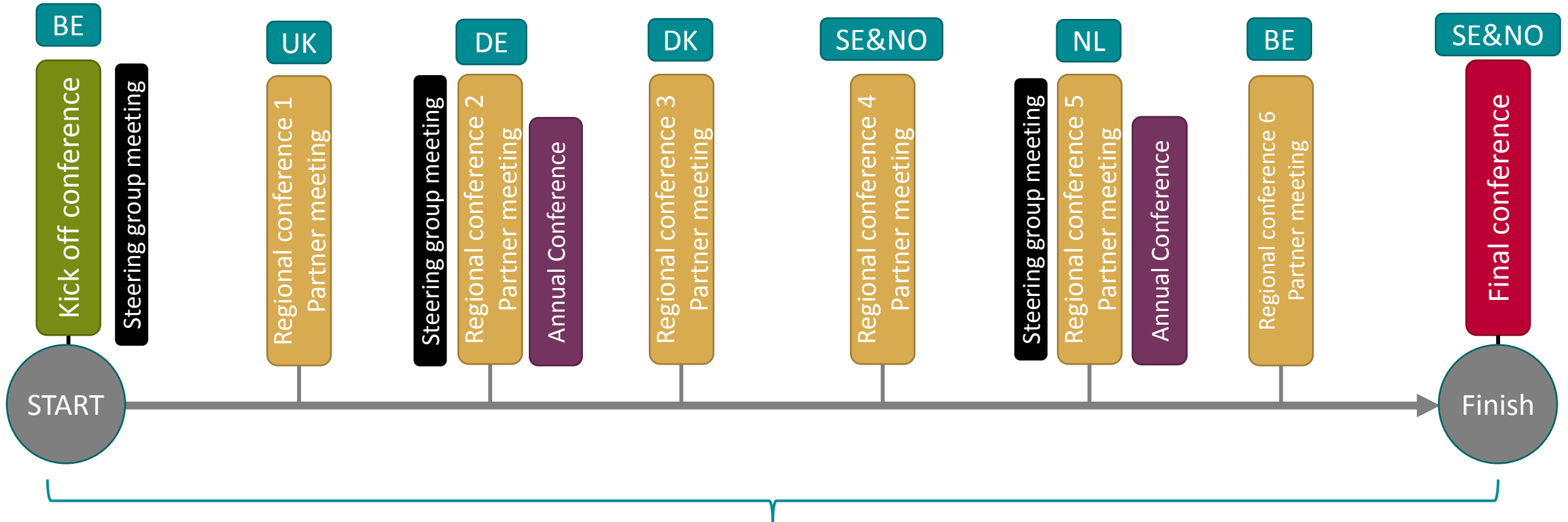
WP5
- 10 pilot activites in 10 regions.

WP6
- CORA Policy Briefings together with communication and consultation with different levels of authorities (local, regional, national and EU)
- Know-how transfer and mainstreaming CORA policy briefings, strategies and approach

CORA – Pilot demonstrations

ateneKOM

Värmland	SE
Hedmark	NO
North Djurs	
South Djurs	DK
Middelfart	
Vejle	
Lincolnshire	UK
Oldambt	NL
Leiedal	BE
Schleswig Holstein	DE
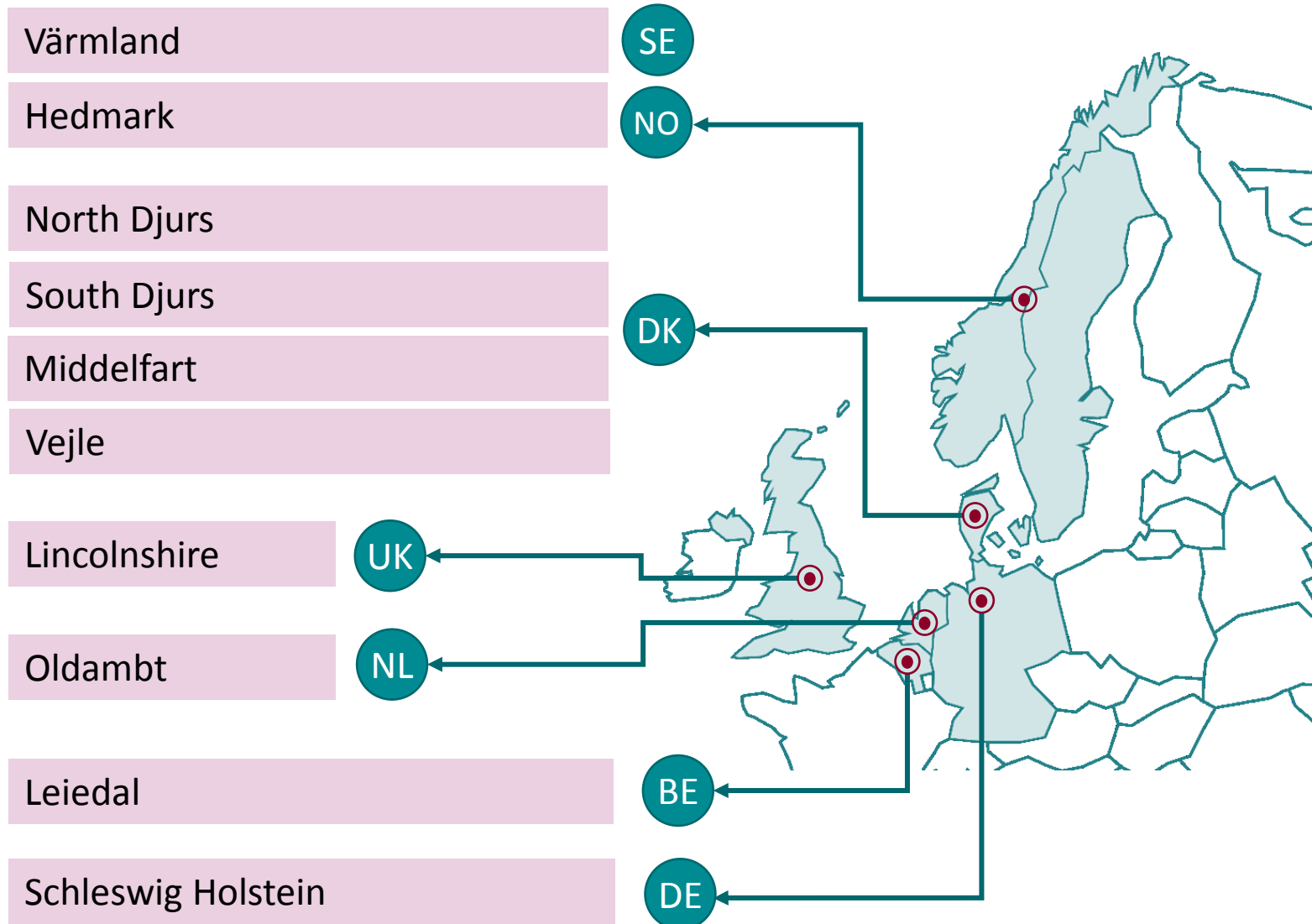
✓ Cross-border fibre sharing model

✓ Superfast wireless internet for rural communities and enterprises

✓ Enhancing the take-up

✓ CORA training in rural areas

✓ Testing CORA fixed digital hub concept

✓ Testing CORA mobile digital hub concept

✓ New digital public services for rural communities and businesses

CORA – events

BE — Kick off conference · Steering group meeting

UK — Regional conference 1 · Partner meeting

DE — Steering group meeting · Regional conference 2 · Partner meeting · Annual Conference

DK — Regional conference 3 · Partner meeting

SE&NO — Regional conference 4 · Partner meeting

NL — Steering group meeting · Regional conference 5 · Partner meeting · Annual Conference

BE — Regional conference 6 · Partner meeting

SE&NO — Final conference

START → Finish

Synergies with the Europe wide events!!!

Transnationality – "learning & exchanging"!!!

CORA - Transnationality

Why a transnational cooperation needed?

- Existence of common challenges!

- Different approaches/solutions are being applied with different qualities!

Lack of an exchange platform/community to share knowledge and experience

Digita Infrastructure

Digital skills

Digital enterprises

Digital public services

24

CORA - Transnationality

Good practices!!!

24 good practices — SE

6 good practices — DK

21 good practices — UK

13 good practices — NL

3 good practices — BE

44 good practices — DE

From Europe ➔ more than 160

From NSR ➔ 111 good practices
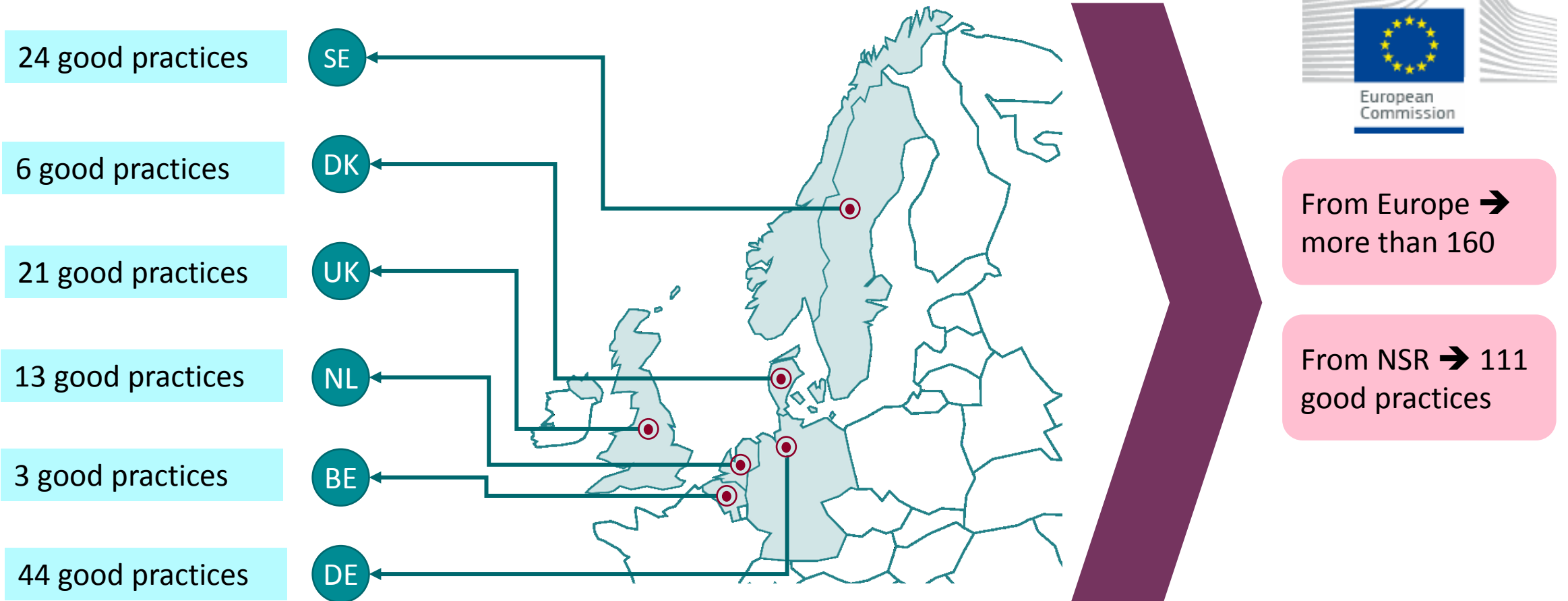
Project example: Glasvezel De Wolden, Netherlands

The bottom-up community driven initiative resulted in a super-fast fibre optic network connecting every home and company in the municipality

- 10.000 homes, 227 square kilometres

- for-the-people-by-the-people style initiative

- built own super-fast fibre optic network

- combination of market financing and governmental financing: EUR 16 million

- private companies, energy companies, municipalities & citizens worked together

- follow up investments in the upper layer (services)

How did you make this grassroots initiative viable?

Project example: the Ludgate Hub, Skibbereen, Ireland

- Community bottom up initiative

- 1 GB town in Skibbereen

- Hub located in 10.000 square foot building

- Connection at the Hub used by over 100 businesses & individuals, and over 8 community groups

- Rollout to 1.800 premises in the town

- Positive impact on the economic competitiveness of the region

CORA - Transnationality

Exchanging successful experiences!!!

Any Other Questions?

Please contact us:

atene KOM GmbH

Agency for Communication, Organisation and Management

Invalidenstraße 91
10115 Berlin
GERMANY

Tel. +49 (0)30 60 98 990-0
Fax +49 (0)30 60 98 990-99

www.atenekom.eu

Peyman Khodabakhsh

Project Manager

Tel. +49 (0)30 60 98 990-45
P.khodabakhsh@atenekom.eu

Additional slides

Digital divide and rural areas

Households with no access to internet at home because the costs are too high (in sparsely populated areas – 2016)
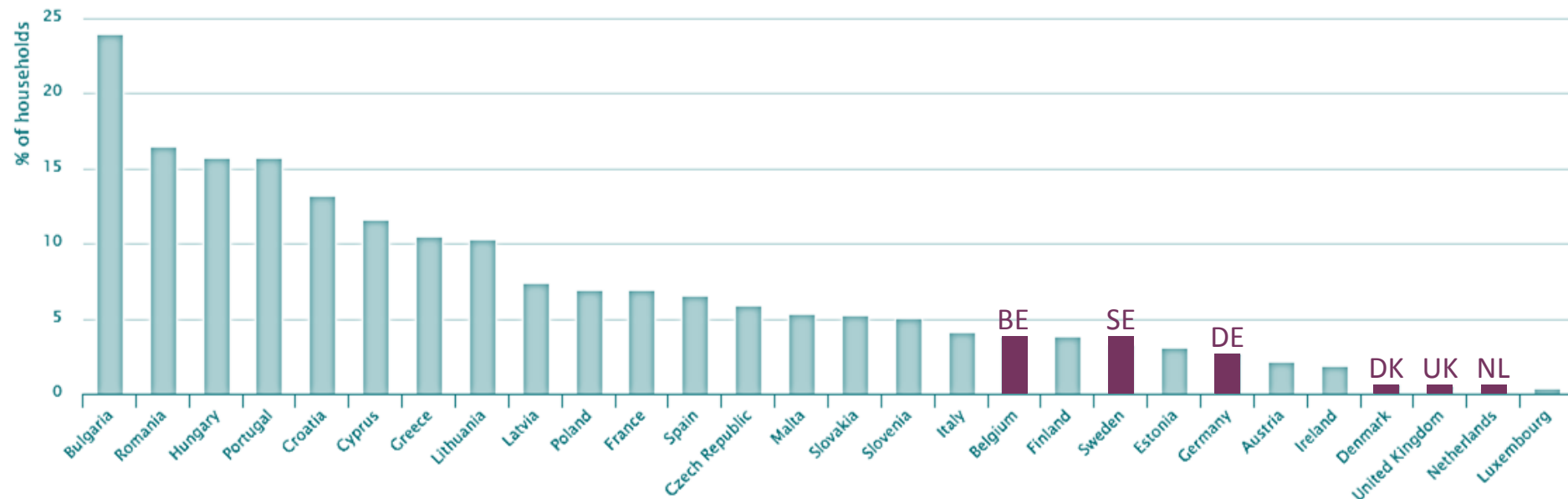
Source. European Commission - DESI

Digital divide and rural areas

ICT skills obtained through formal educational institutions (in sparsely populated areas – 2011)
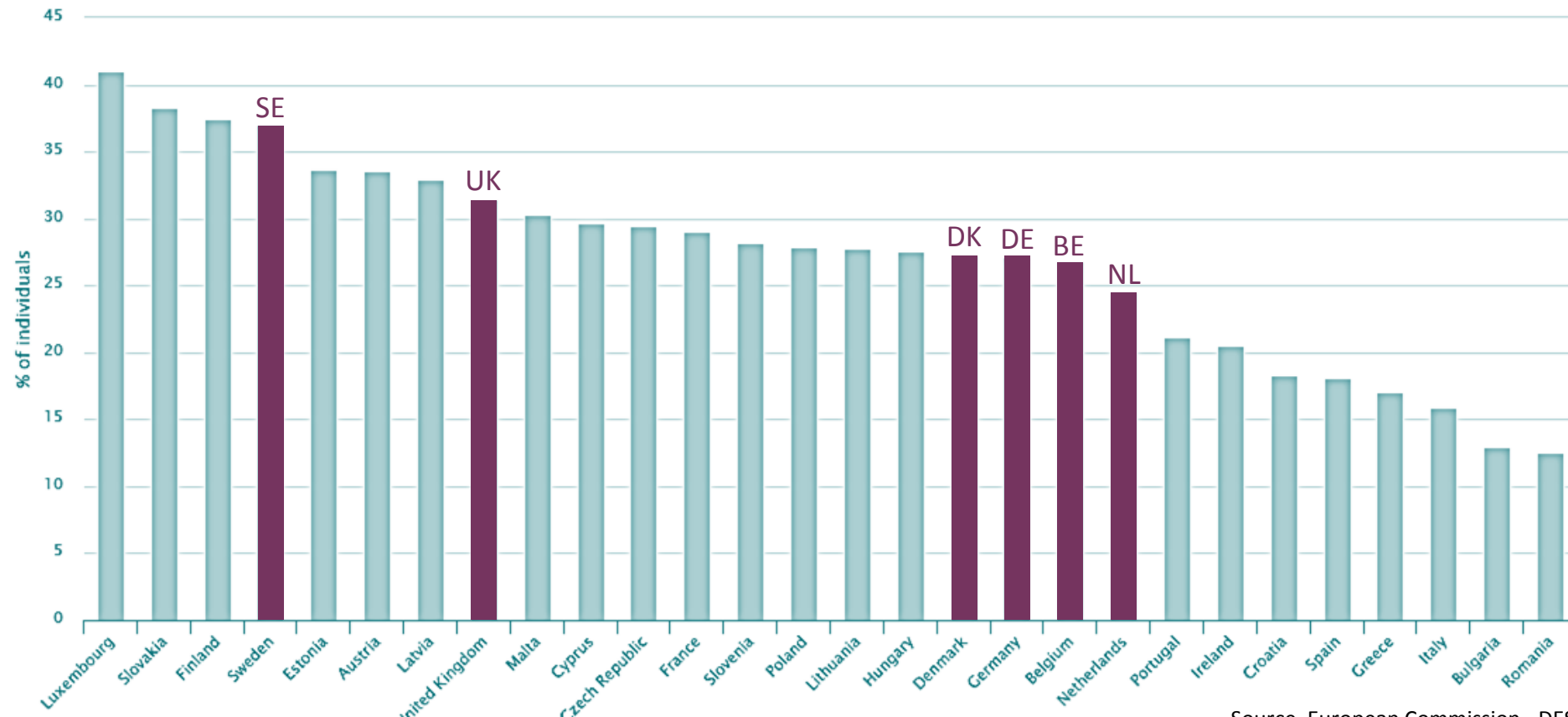
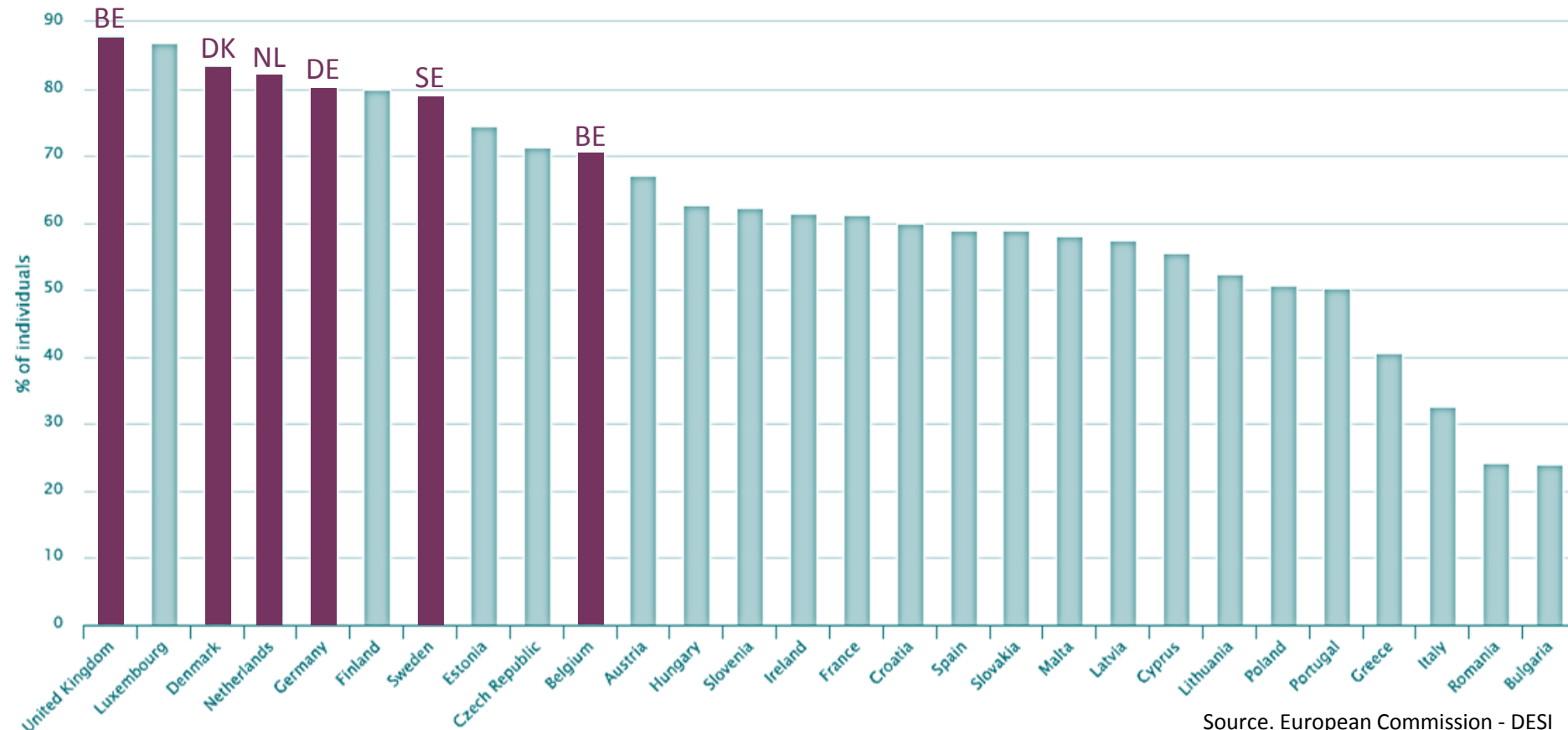Source. European Commission - DESI

Digital divide and rural areas

Individuals who have never used the internet (in sparsely populated areas – 2016)
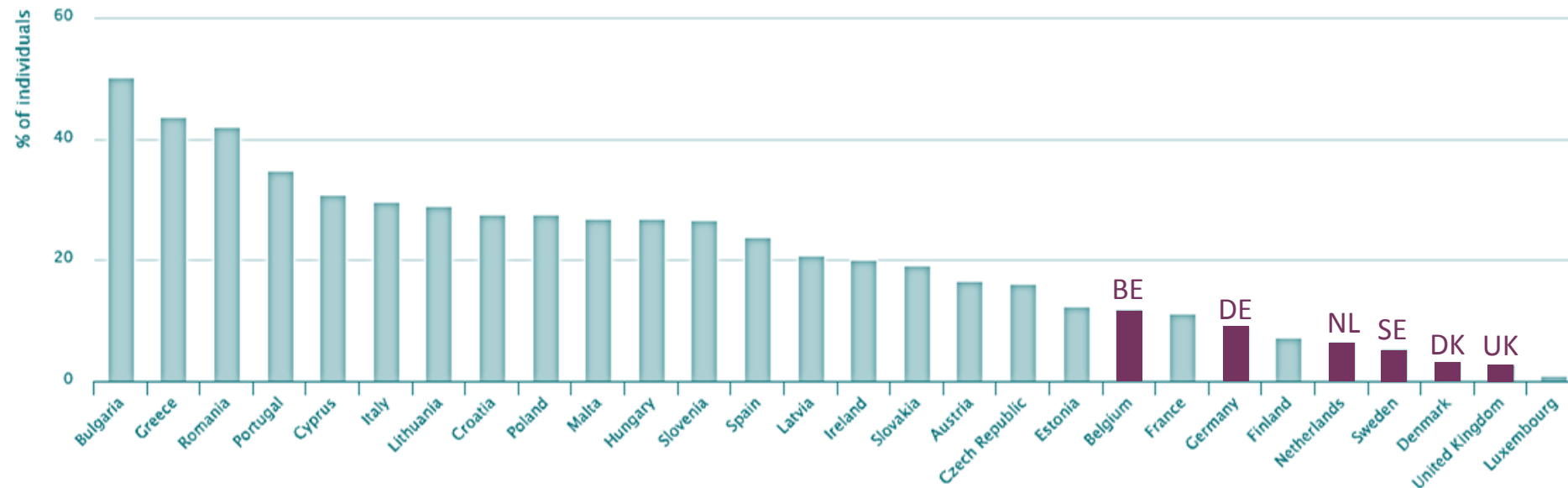
Source. European Commission - DESI
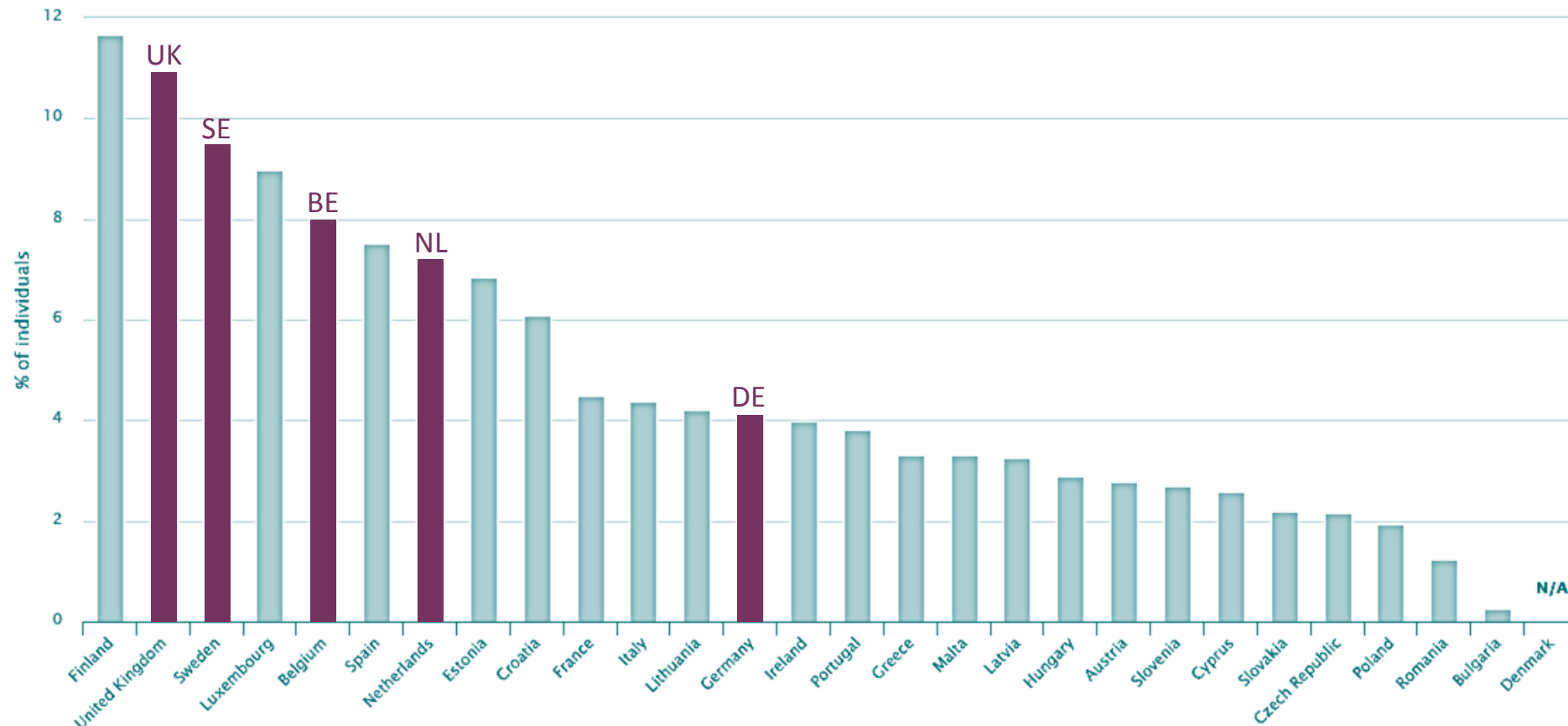
Digital divide and rural areas

looking for information about goods and services online (in sparsely populated areas – 2016)

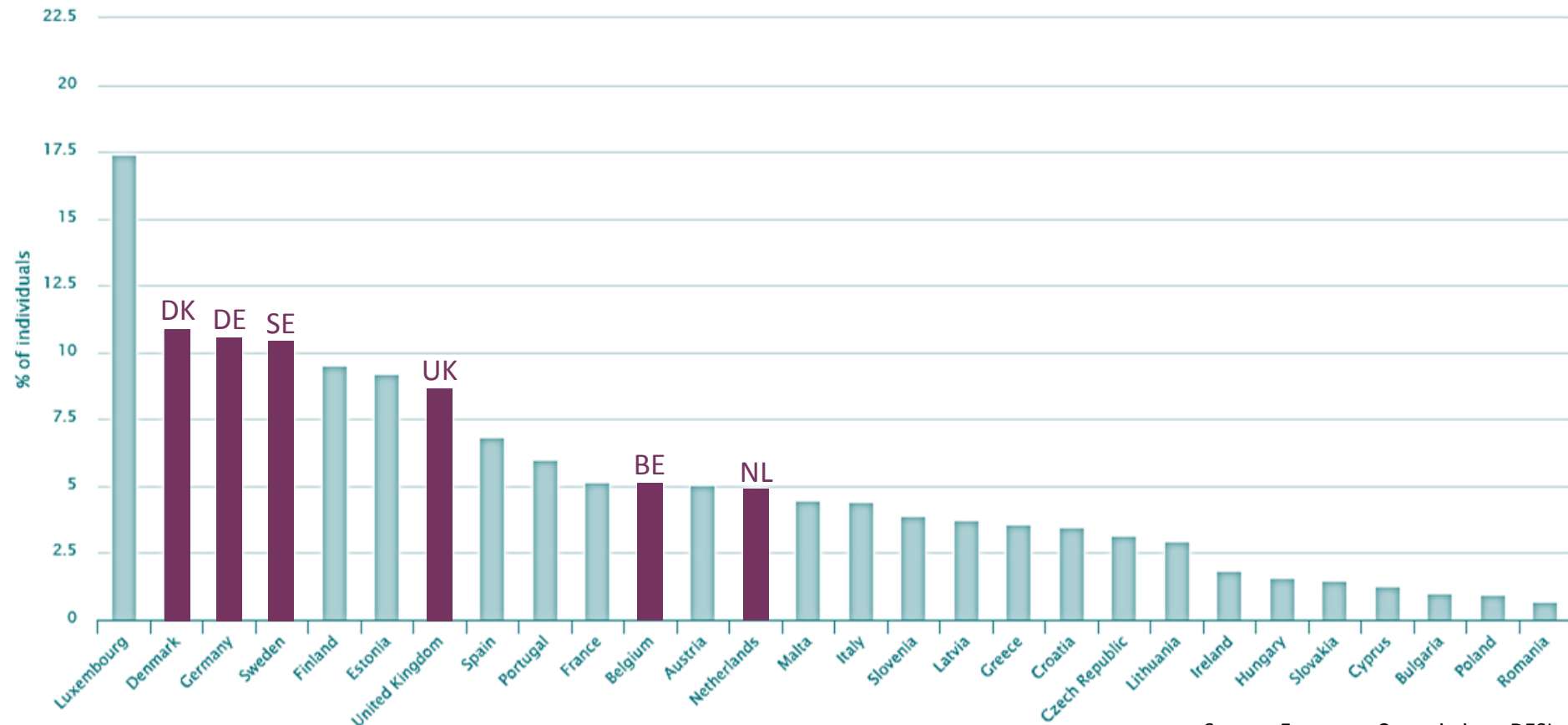Source. European Commission - DESI

Digital divide and rural areas

Doing an online course (in any subject, in sparsely populated areas – 2016)

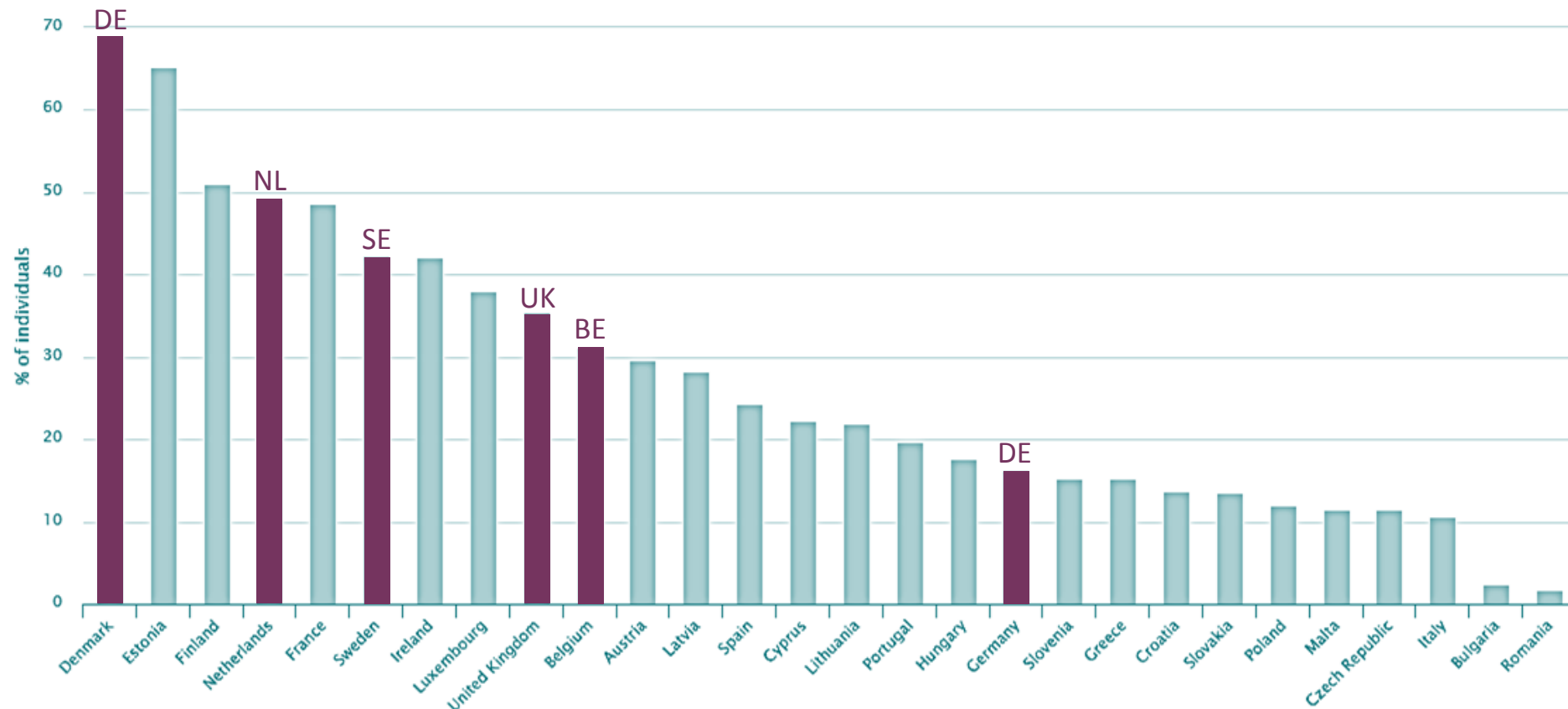Source. European Commission - DESI

Digital divide and rural areas

Taking part in on-line consultations or voting to define civic or political issues
(in sparsely populated areas – 2015)

Digital divide and rural areas

Individuals submitting completed forms to public authorities, over the internet, last 12 months (in sparsely populated areas – 2016)