Digitalisation and regional development - a European perspective

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EPRC

European Policies Research Centre

- research institute at the University of Strathclyde in Glasgow

- founded in 1978, 18 staff + network of associates

- specialises in comparative research on public policy, especially regional development policies across Europe

- research, knowledge exchange and policy advice for national governments, European institutions, sub-national authorities

- second base established in 2017 at Technical University of Delft (EPRC Delft)

European Regional Policy Research Consortium (EoRPA)

- Long-term programme of research & knowledge exchange

  – founded in 1978 by DE, IT, NL, UK

  – currently comprises economics/industry ministries from AT, **CH (SECO)**, DE, FI, FR, IT, NL, NO, PL, PT, SE, UK

  – involves comparative study of national regional and territorial development policies in 30 European countries

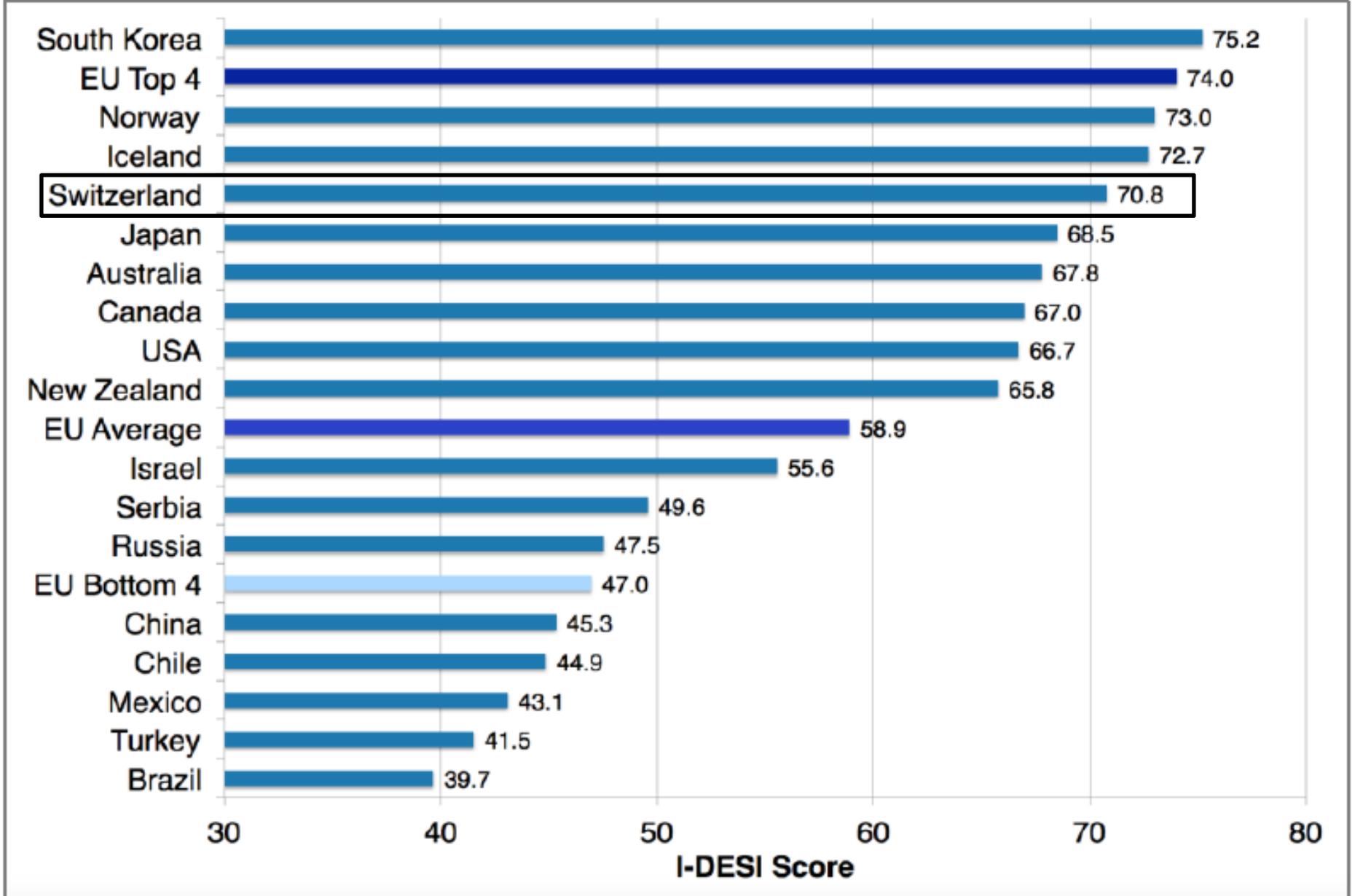 – also analysis of EU Competition policy, control of State aid and EU Cohesion policy ➔ influence on national policy
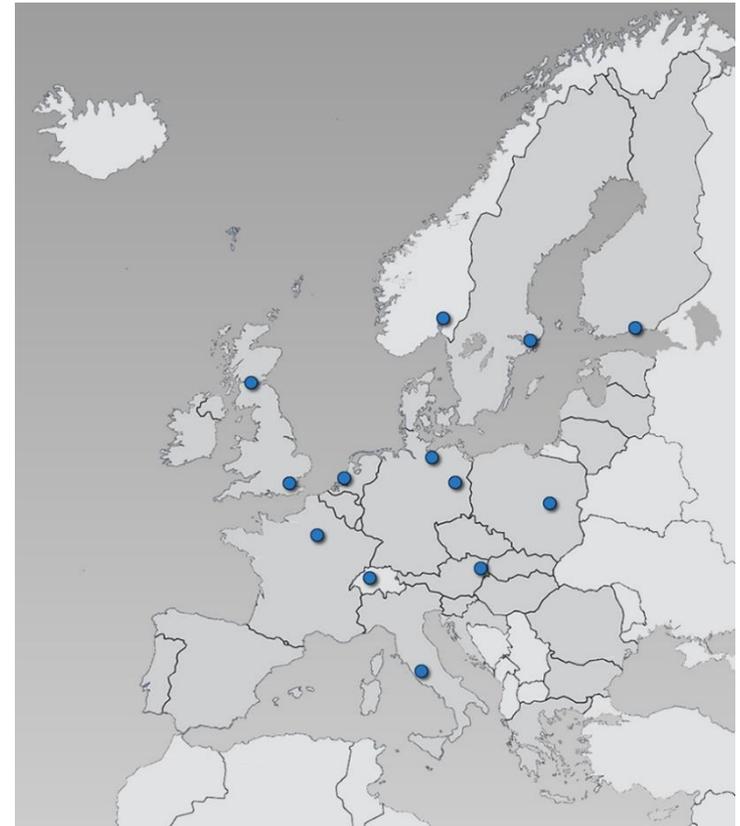
*'Digitalisation is the transformation of all sectors of our economy, government and society based on the large-scale adoption of existing and emerging digital technologies'**

*Randall L, Berlina A, Teräs J and Rinne T (2018)

1 Digitalisation performance of Switzerland

I-DESI 2018
International Digital Economy and Society Index

Country	I-DESI Score
South Korea	75.2
EU Top 4	74.0
Norway	73.0
Iceland	72.7
Switzerland	70.8
Japan	68.5
Australia	67.8
Canada	67.0
USA	66.7
New Zealand	65.8
EU Average	58.9
Israel	55.6
Serbia	49.6
Russia	47.5
EU Bottom 4	47.0
China	45.3
Chile	44.9
Mexico	43.1
Turkey	41.5
Brazil	39.7

I-DESI Score

1 **Connectivity:** The deployment of broadband infrastructure and its quality.

2 **Digital Skills**: The skills needed to take advantage of the possibilities offered by a digital society.
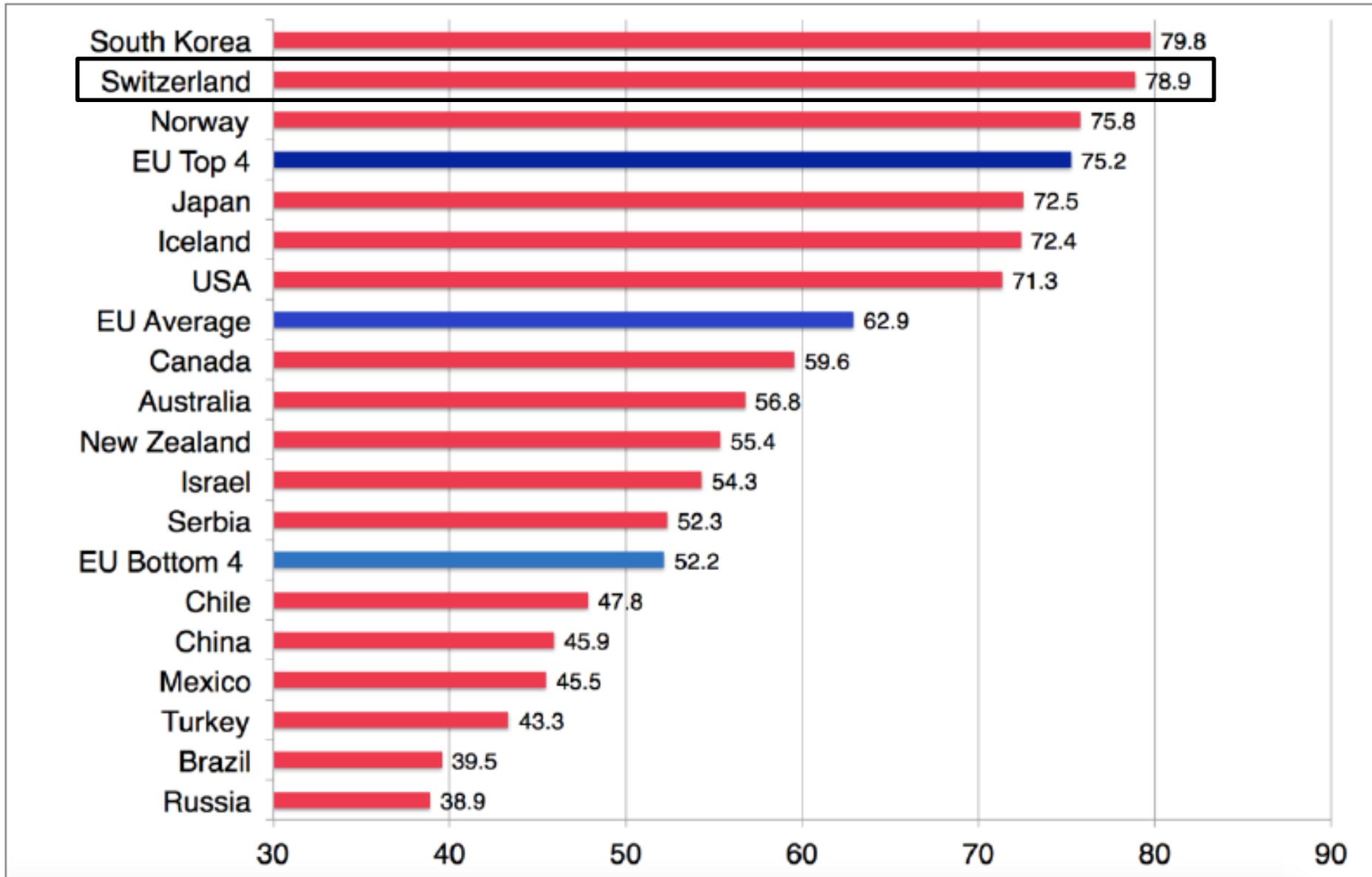
3 **Citizen use of Internet**: The variety of activities performed by citizens already online.

4 **Business technology integration**: The digitisation of businesses and development of the online sales channel.

5 **Digital public services**: The digitisation of public services, focusing on eGovernment.
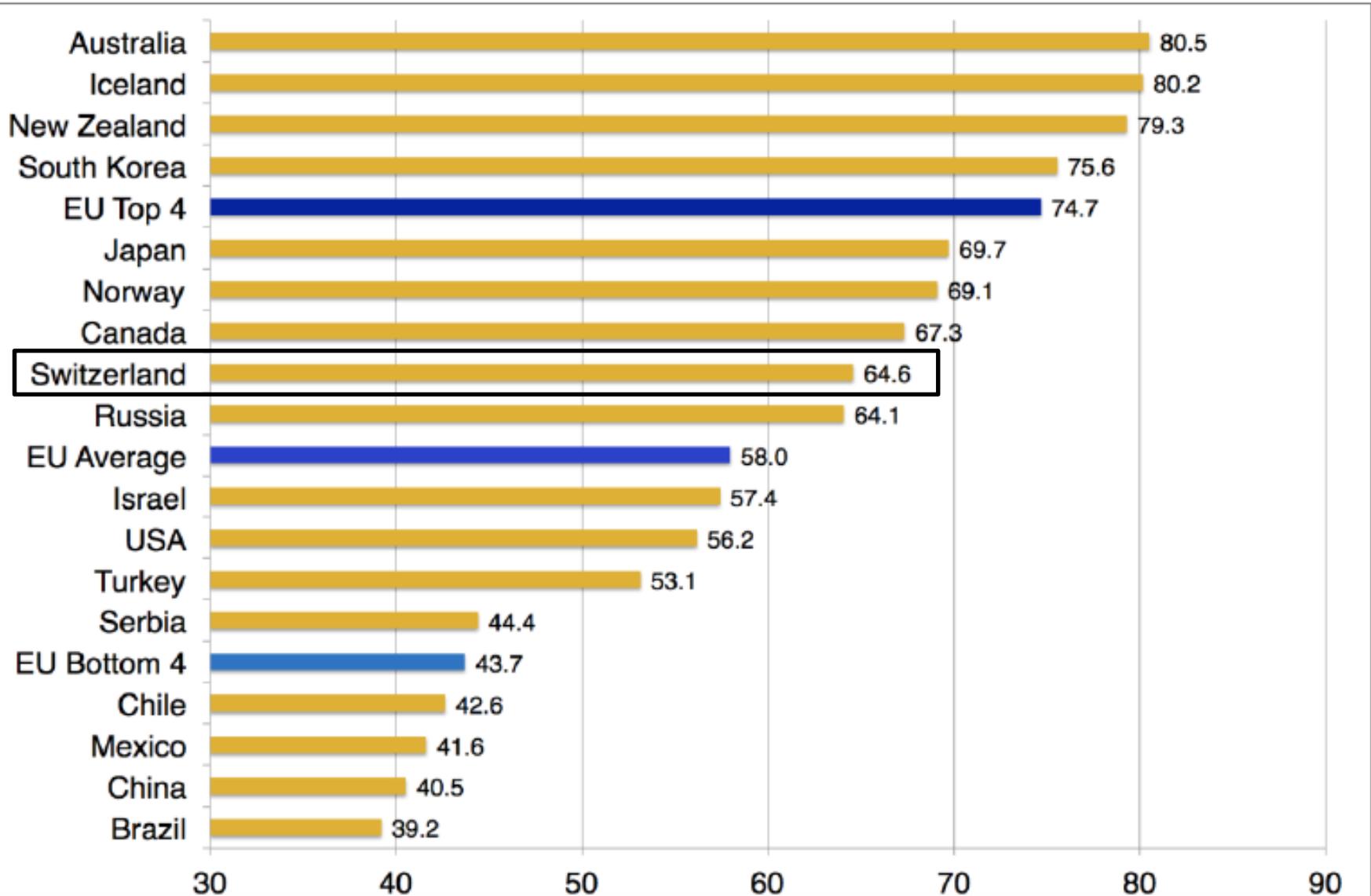
Connectivity
Deployment of broadband infrastructure & quality

Country	Value
South Korea	79.8
Switzerland	**78.9**
Norway	75.8
EU Top 4	75.2
Japan	72.5
Iceland	72.4
USA	71.3
EU Average	62.9
Canada	59.6
Australia	56.8
New Zealand	55.4
Israel	54.3
Serbia	52.3
EU Bottom 4	52.2
Chile	47.8
China	45.9
Mexico	45.5
Turkey	43.3
Brazil	39.5
Russia	38.9

Human Capital
Skills needed to exploit the possibilities of digital society

Country	Value
Australia	80.5
Iceland	80.2
New Zealand	79.3
South Korea	75.6
EU Top 4	74.7
Japan	69.7
Norway	69.1
Canada	67.3
Switzerland	64.6
Russia	64.1
EU Average	58.0
Israel	57.4
USA	56.2
Turkey	53.1
Serbia	44.4
EU Bottom 4	43.7
Chile	42.6
Mexico	41.6
China	40.5
Brazil	39.2

Use of Internet
Activities performed by citizens already online

Country	Value
Norway	85.2
EU Top 4	78.5
Switzerland	77.5
Iceland	75.9
South Korea	74.5
Japan	73.9
USA	71.0
Canada	66.2
EU Average	59.7
Israel	58.5
New Zealand	58.2
Australia	57.8
Serbia	49.6
Russia	48.7
China	45.3
EU Bottom 4	44.4
Turkey	35.9
Brazil	33.8
Chile	32.9
Mexico	30.0
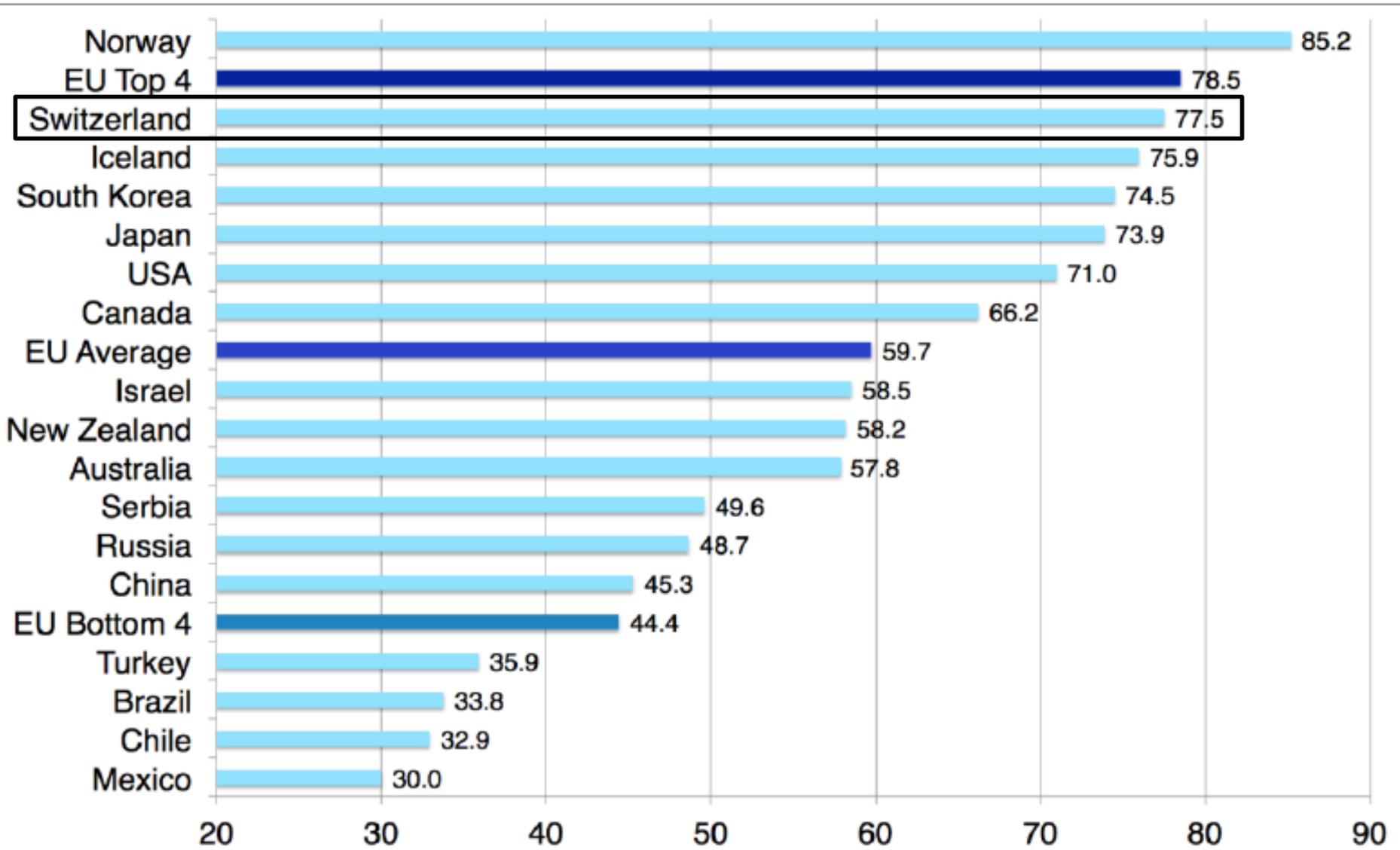
Integration of Digital Technology
Digitalisation of businesses & their exploitation online sales channels

Country	Value
Switzerland	80.3
Iceland	75.7
EU Top 4	72.8
Norway	65.8
Canada	65.4
South Korea	63.8
USA	61.8
Australia	57.3
New Zealand	55.6
Japan	53.0
EU Average	51.3
Israel	45.2
Serbia	44.3
China	40.7
Chile	40.5
Mexico	33.7
EU Bottom 4	32.3
Russia	29.8
Brazil	27.8
Turkey	27.7
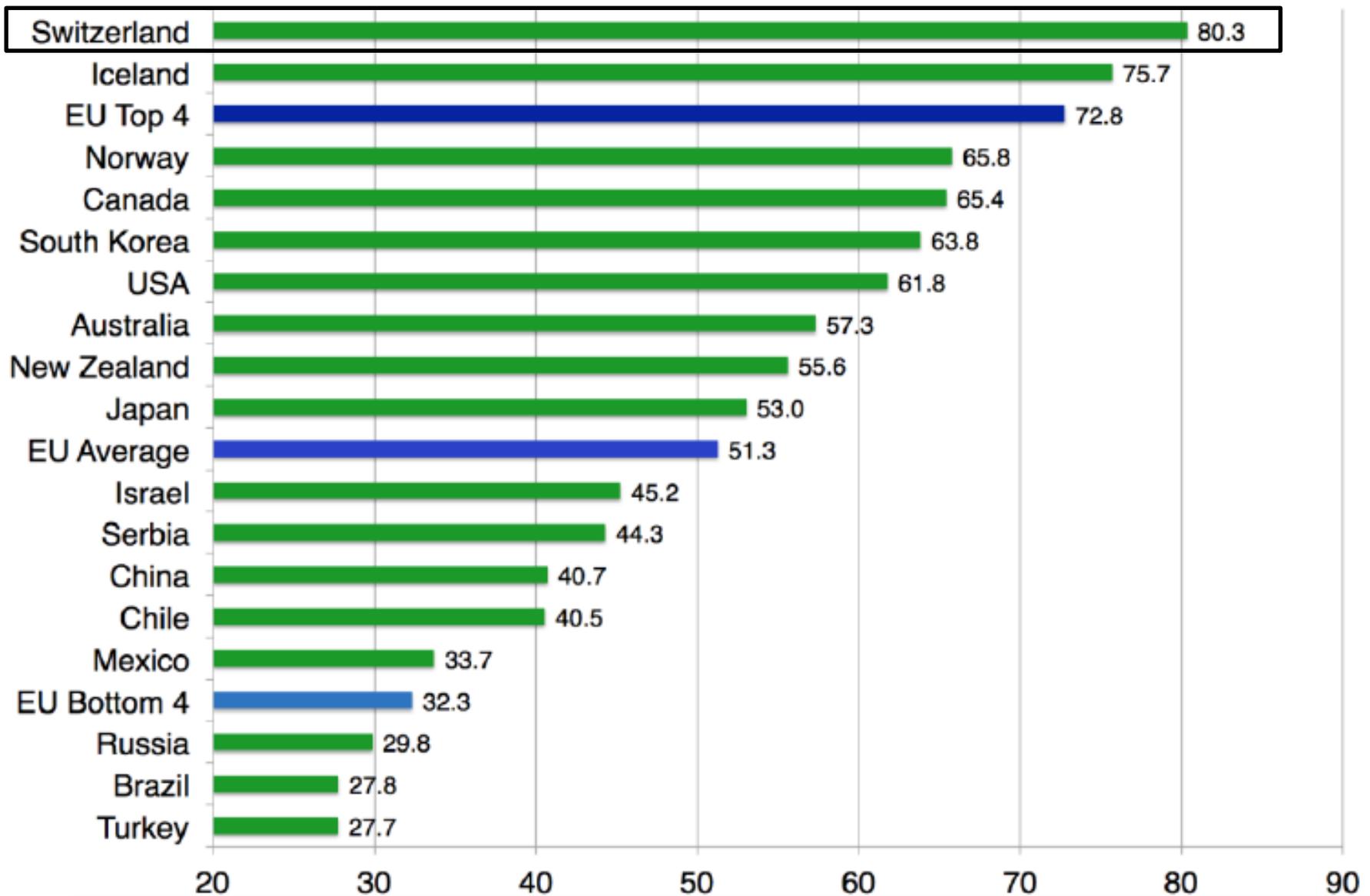
Digital Public Services

Digitalisation of public services, e.g. eGovernment

Country	Score
Australia	88.9
EU Top 4	84.7
South Korea	83.0
New Zealand	81.6
Canada	81.5
USA	79.0
Japan	75.0
Norway	72.5
Mexico	67.2
Israel	65.4
EU Average	63.1
Brazil	62.4
Chile	61.4
Serbia	60.7
China	58.6
Russia	56.8
Iceland	53.7
Switzerland	48.3
Turkey	43.2
EU Bottom 4	41.1
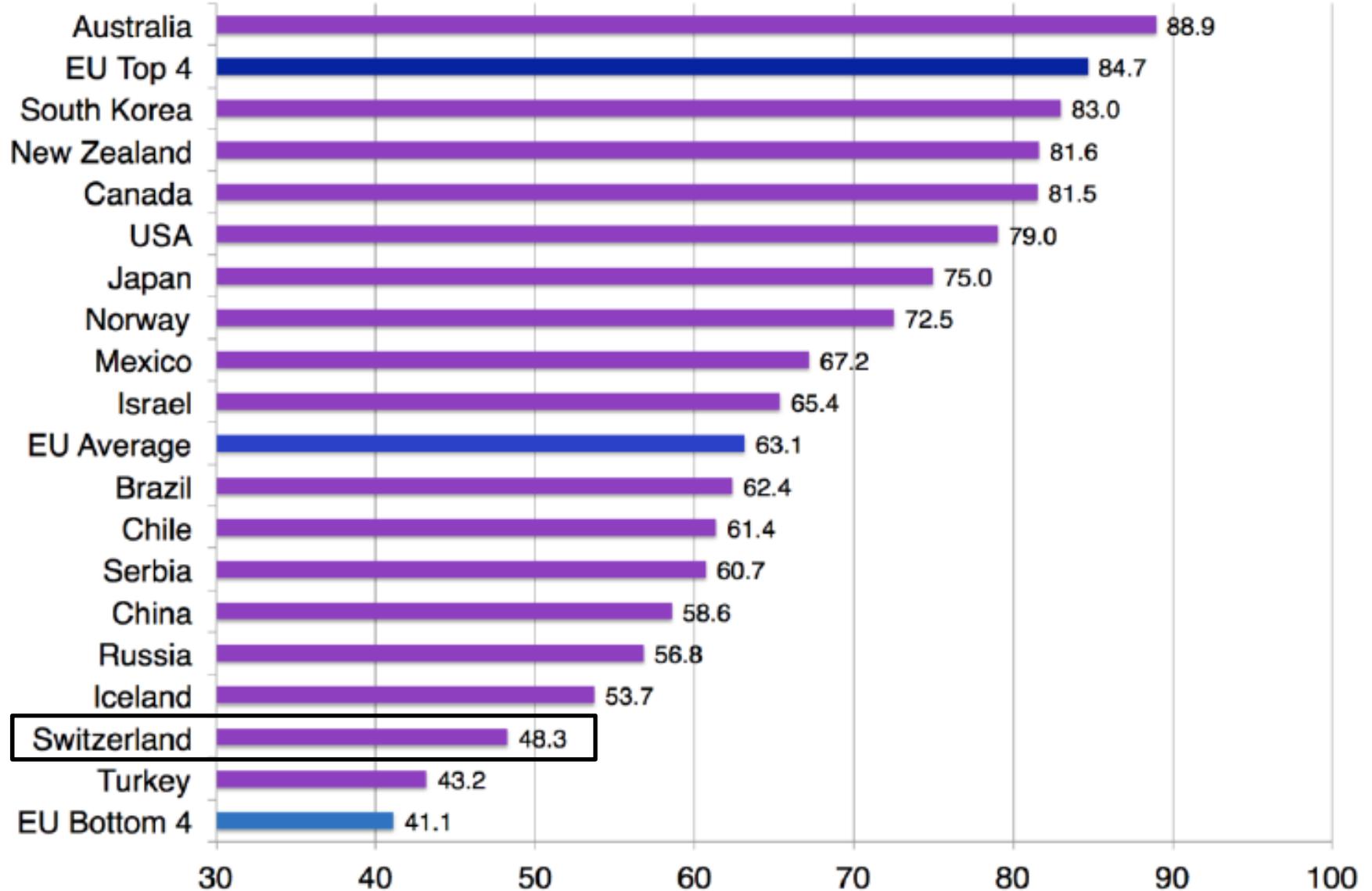
	CH	**Suitability for (regional) policy response**
1 **Connectivity:** The deployment of broadband infrastructure and its quality.	2.	✓
2 **Digital Skills**: The skills needed to take advantage of the possibilities offered by a digital society.	9.	(✓)
3 **Citizen use of Internet**: The variety of activities performed by citizens already online.	3.	-
4 **Business technology integration**: The digitisation of businesses and development of the online sales channel.	1.	✓
5 **Digital public services**: The digitisation of public services, focusing on eGovernment.	18.	(✓)

2 Policy responses

2a. EU policy responses
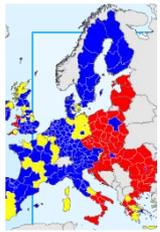
Thematic Objective ICT

eHealth Action Plan

Digital Single Market Strategy

Skills Agenda for Europe

EU eGovernment Action Plan

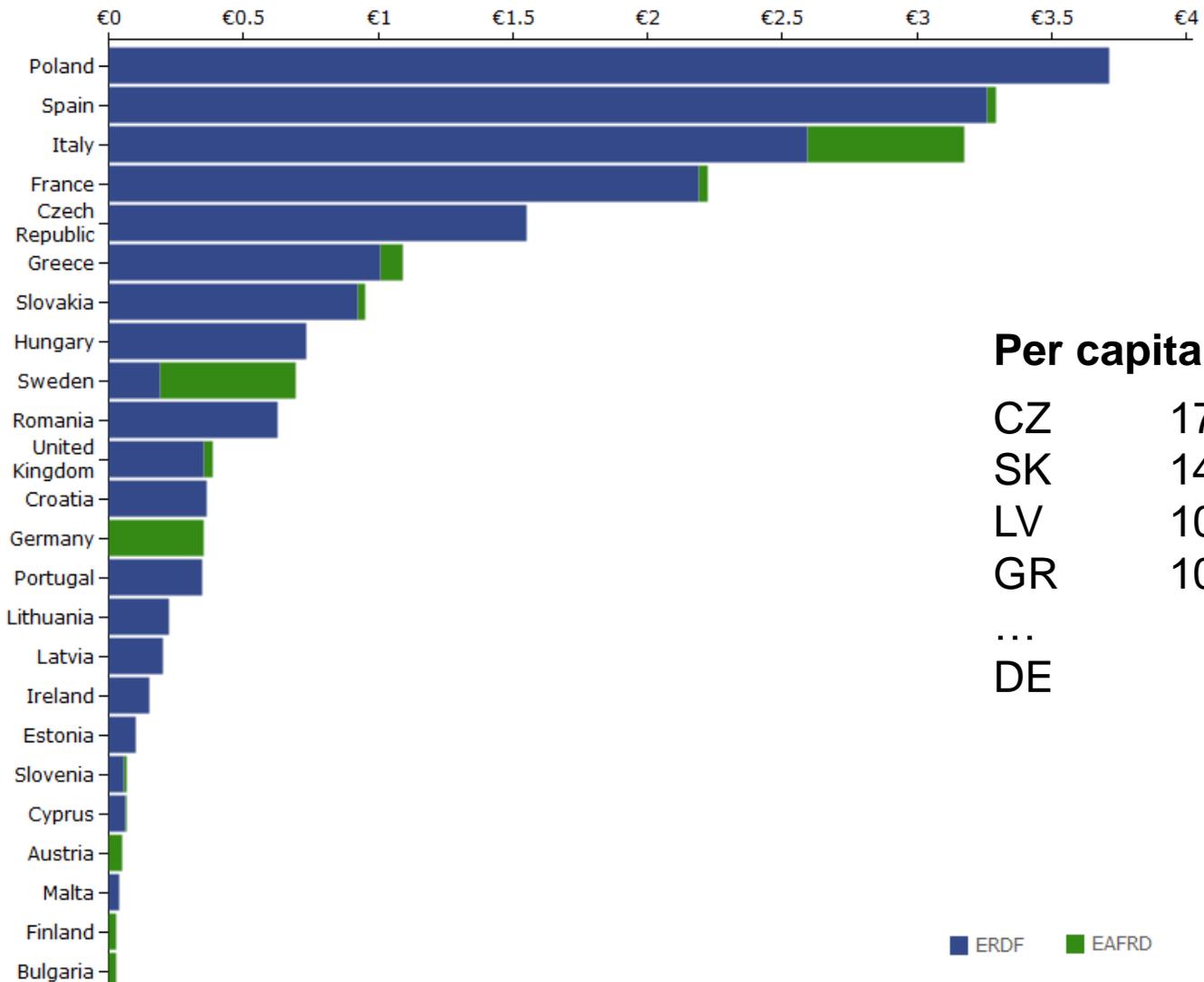EU Action for Smart Villages

Digital Education Action Plan

Wifi4EU I

European Structural and Investment Funds
"Thematic Objective 2 – ICT"

- €20.5 billion (2014-20)

- EU Member States are asked to focus on:

  a) extending **broadband deployment** *and the roll-out of high-speed networks and supporting the adoption of emerging technologies and networks for the digital economy;*

  b) *developing* **ICT products and services***, e-commerce, and enhancing demand for ICT; and*

  c) *strengthening ICT applications for* **e-government, e-learning, e-inclusion, e-culture** *and* **e-health**

- Use of regional development (ERDF) and/or rural development (EAFRD) funding

- No minimum allocation

- Poland: specific Operational Programme dedicated solely to investment in digitalisation (€2.5 billion)

ERDF and EAFRD budgets allocated to TO2 ICT in 2014-20, by EU Member State

Per capita:

CZ	177€
SK	146€
LV	107€
GR	102€
…	
DE	4€

EU Action for Smart Villages

- Launched April 2017

- Cuts across different policy areas

Action	Implementation	Timing
Thematic working group on Smart Rural Businesses	ENRD	2016-17
Thematic working group on Smart Villages	ENRD	2017-19
Workshop on access to data and data platforms	EIP-AGRI	April 2017
Seminar on new data-driven business development	EIP-AGRI	June 2017
Conference on innovation in agriculture and rural development	Portuguese Ministry of Agriculture and DG AGRI	October 2017
Pilot project on Smart Eco-Social Villages	DG AGRI	2017-18
LEADER/CLLD	Member States and regions	2014-20
Smart specialisation platform agri-food	DGs REGIO, AGRI, JRC, RTD and regions	2014-20
Broadband Competence Offices (BCO)	DGs AGRI, REGIO and CNECT	2016-20
Digital Innovation Hubs (DIH)	DGs CNECT and RTD	2014-20
Pilot Project 'Smart Rural Transport Areas' (SMARTA)	DG MOVE	From 2016
Internet of Things	DGs AGRI and CNECT (Horizon 2020)	2017-20
More efficient and smarter door-to-door logistics	DG MOVE (Horizon 2020)	2016-17
Business models for modern rural economies	DG AGRI (Horizon 2020)	2016-17
Future calls under the 'rural renaissance' header	DG AGRI (Horizon 2020)	2018-20
Data-driven bioeconomy	DG CNECT (Horizon 2020)	2017-19

2b. Project examples

Digital services
'Digital Villages' in Rheinland-Pfalz (Germany)

- Digital solutions for people living in sparsely populated areas

- €4.5 million (domestic), 2015-19

  - online marketplace (BestellBar)

  - mobile app and delivery service (LieferBar)

  - local news portal (DorfNews)

  - mobile app (DorfFunk)

ERUDITE
Enhancing Rural and Urban Digital Innovation Territories

- €1,737,632 (ERDF, Interreg Europe), 2016-20

- 11 partners from 7 countries (FI, FR, HU, IE, IT, SE & SI)

- Exploit the economic and social potential of <u>existing</u> digitalisation infrastructure

- Co-development of e-services to meet real needs on the ground

1. Define policy or practice goals for the services;

2. Identify and engage relevant stakeholders and define their goals;

3. Co-design the service;

4. Set indicators and values, estimate and then monitor social, economic and environmental return on investment.
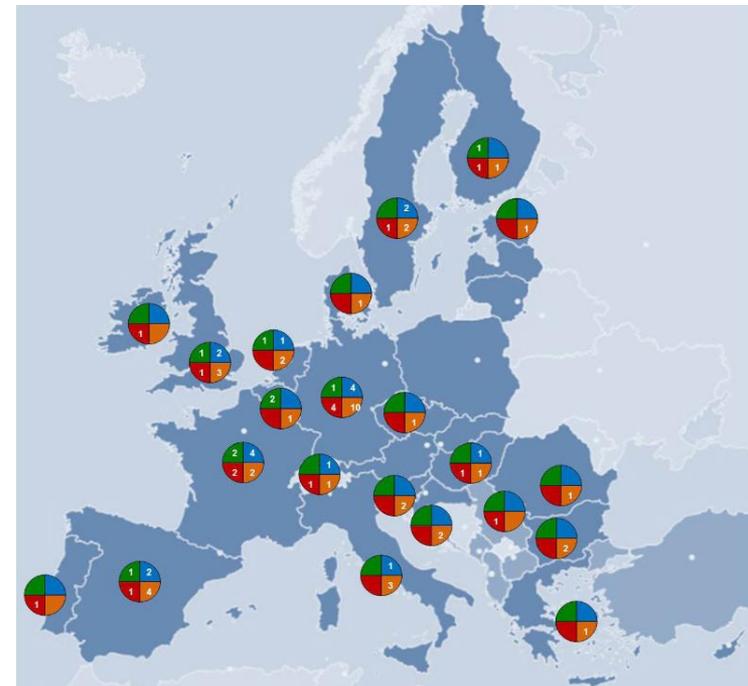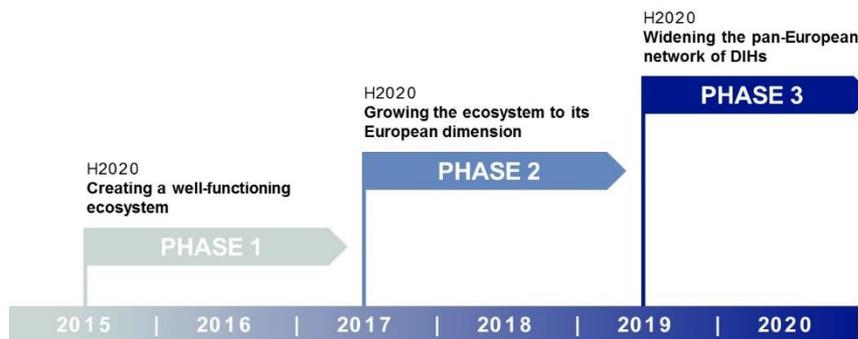
SAE
Smart Anything Everywhere

- Enhancing the digital transformation of the European industry through Digital Innovation Hubs (DIHs)

- €52 million (Horizon 2020), 2017-20

- >350 participants from 23 EU & non-EU countries

- Areas

  - Cyber Physical Systems

  - Advanced Computing

  - Smart Systems Integration

  - Organic and Large Area Electronics

H2020
Widening the pan-European network of DIHs
PHASE 3

H2020
Growing the ecosystem to its European dimension
PHASE 2

H2020
Creating a well-functioning ecosystem
PHASE 1

2015 | 2016 | 2017 | 2018 | 2019 | 2020

Conclusions

- Switzerland's digitalisation performance is very good – with some specific weaknesses

- Some challenges are better suited for (regional) policy responses than others

- Policy measures for digitalisation are well-funded and diverse in terms of
  - policy areas
  - themes
  - target groups

- But – where is regional development policy intervention best placed?