Data for Better Lives

World Development Report 2021

Vivien Foster

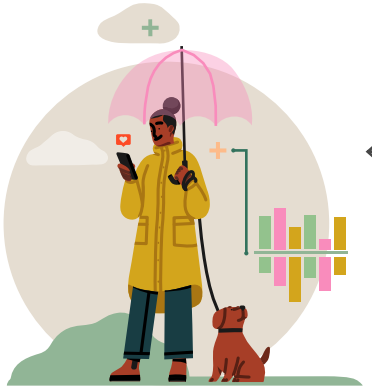
StrategEast State & IT Forum

10th November, 2021

WORLD BANK GROUP

Data for development: 3 pathways

Data production and collection



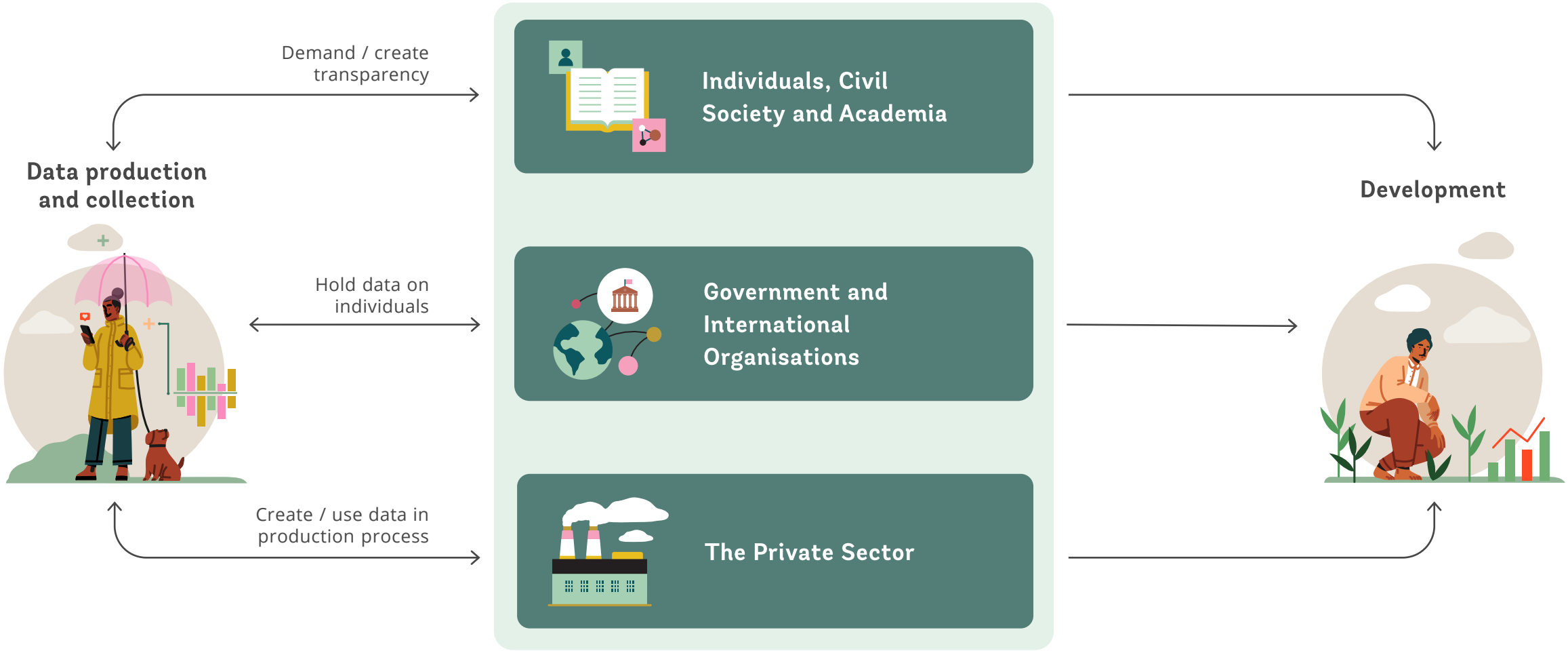
Individuals, Civil Society and Academia

Government and International Organisations

The Private Sector

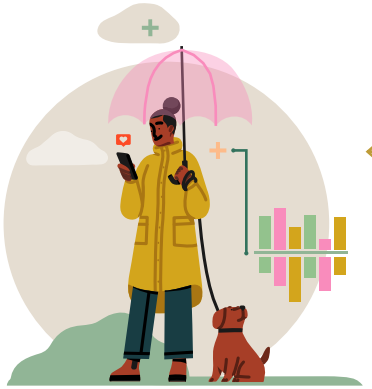
Development

Data for development: 3 pathways



Data for development: potential benefits

Data production and collection



Individuals, Civil Society and Academia

Government and International Organisations

The Private Sector

Greater accountability

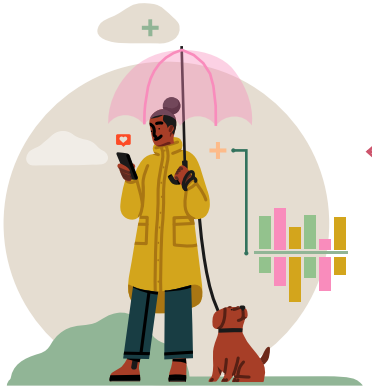
Policy design / evaluation
Service delivery

Business opportunities

Development

Data for development: potential harms

Data production and collection



Individuals, Civil Society and Academia

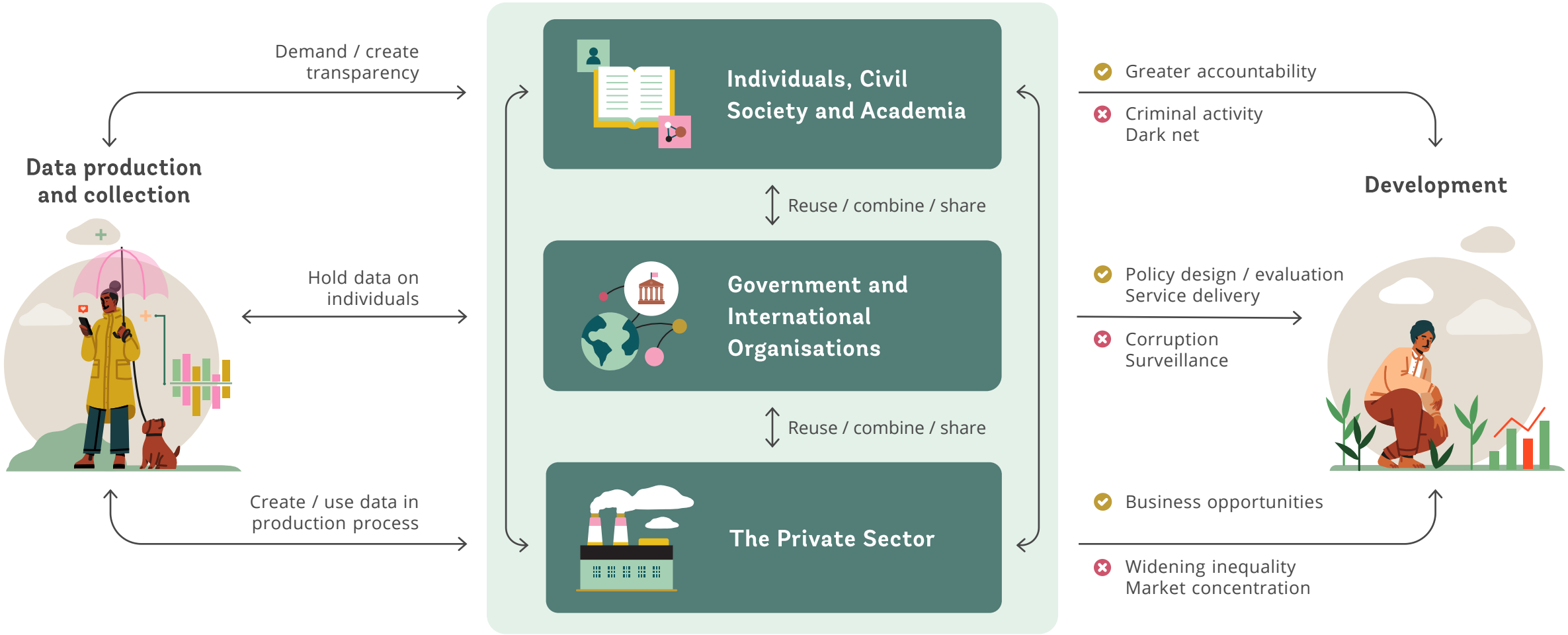
Government and International Organisations

The Private Sector

- Criminal activity
  Dark net
- Corruption
  Surveillance
- Widening inequality
  Market concentration

Development

Data for development: 3 pathways

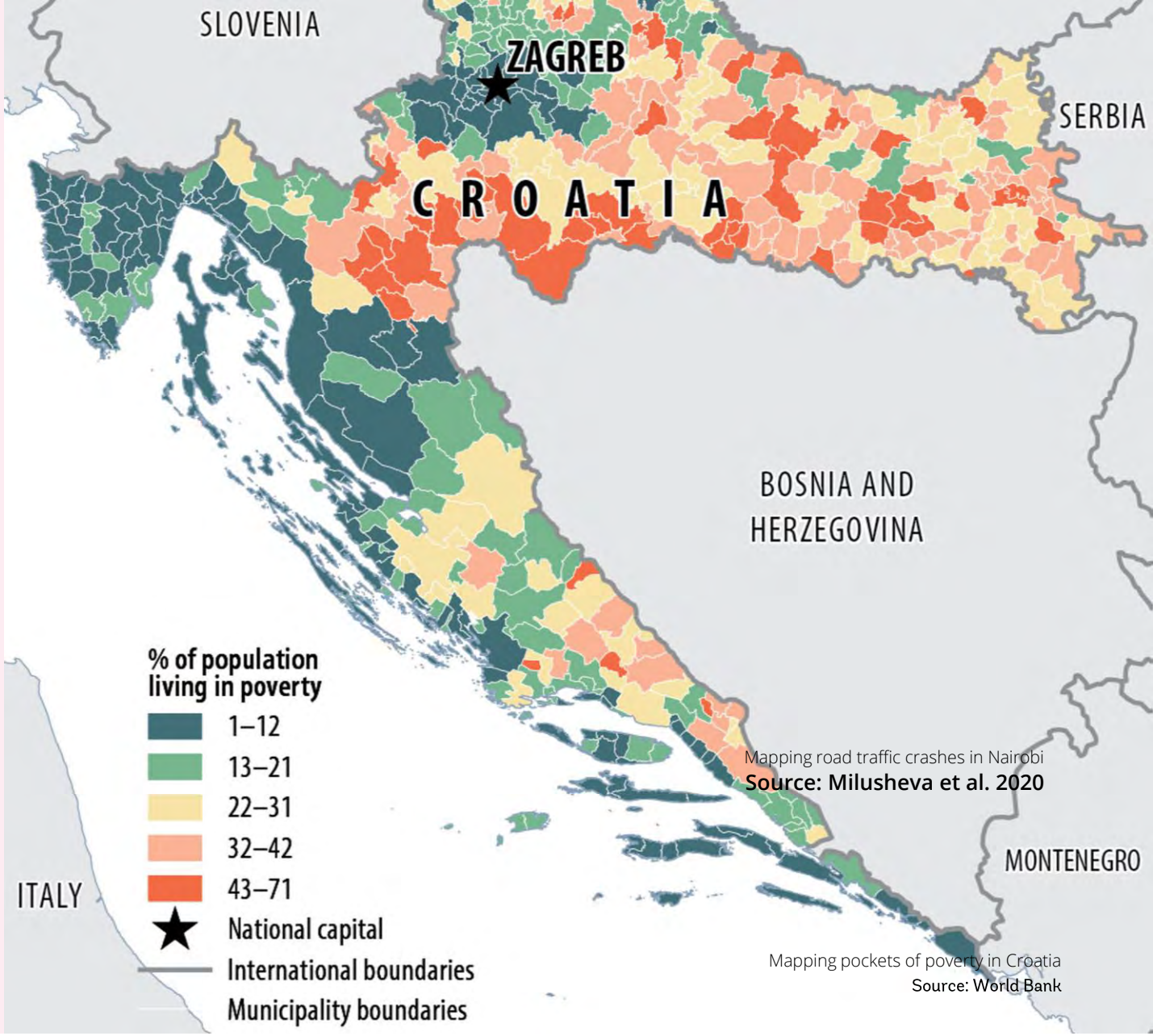


Croatia

Pinpointing poverty

Combining sources

Traditional household survey data was previously used to determine deprivation and allocate EU funding, based on regional GDP. This means that resources weren't reaching poor municipalities in nonpoor regions. Combining the household data with the population census and administrative data revealed large differences in living standards within regions, fuelling proposals for new funding divisions.



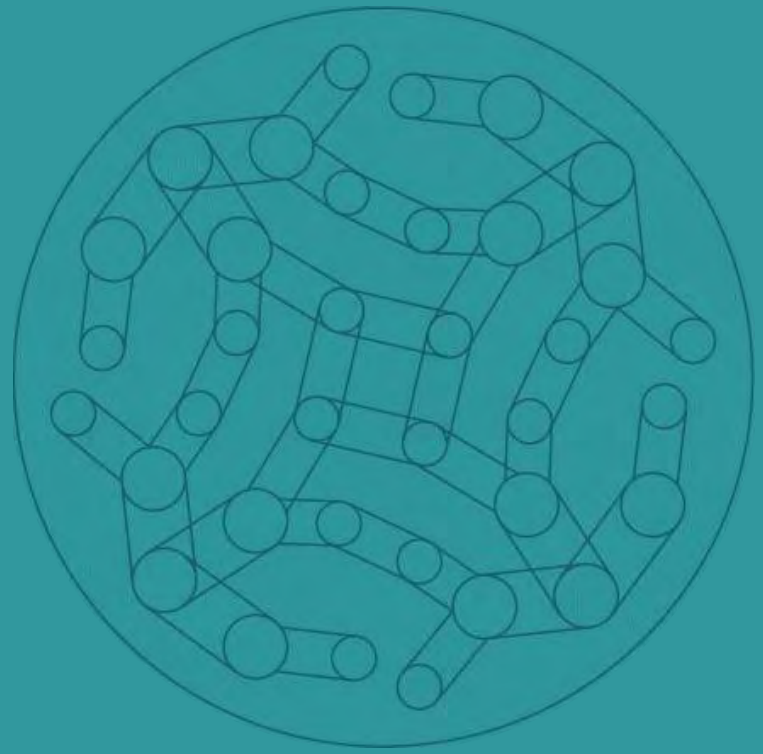
Mapping road traffic crashes in Nairobi
Source: Milusheva et al. 2020

Mapping pockets of poverty in Croatia
Source: World Bank

The social contract for data

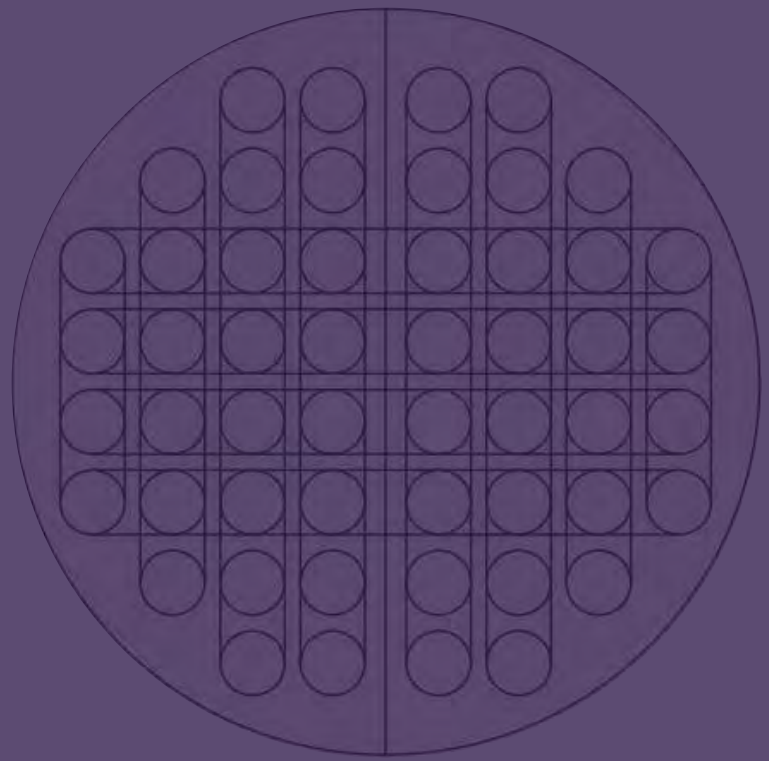
Value

Economic and social value comes from sharing, reusing, and combining data sources to generate greater insight



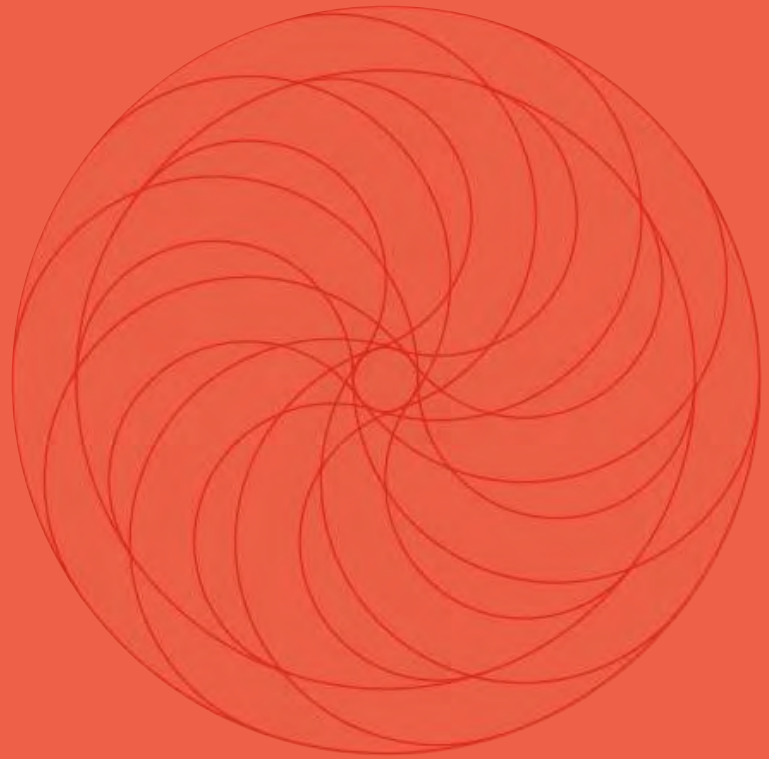
Equity

Data capture, infrastructure, and trade need to include poorer communities and countries equitably

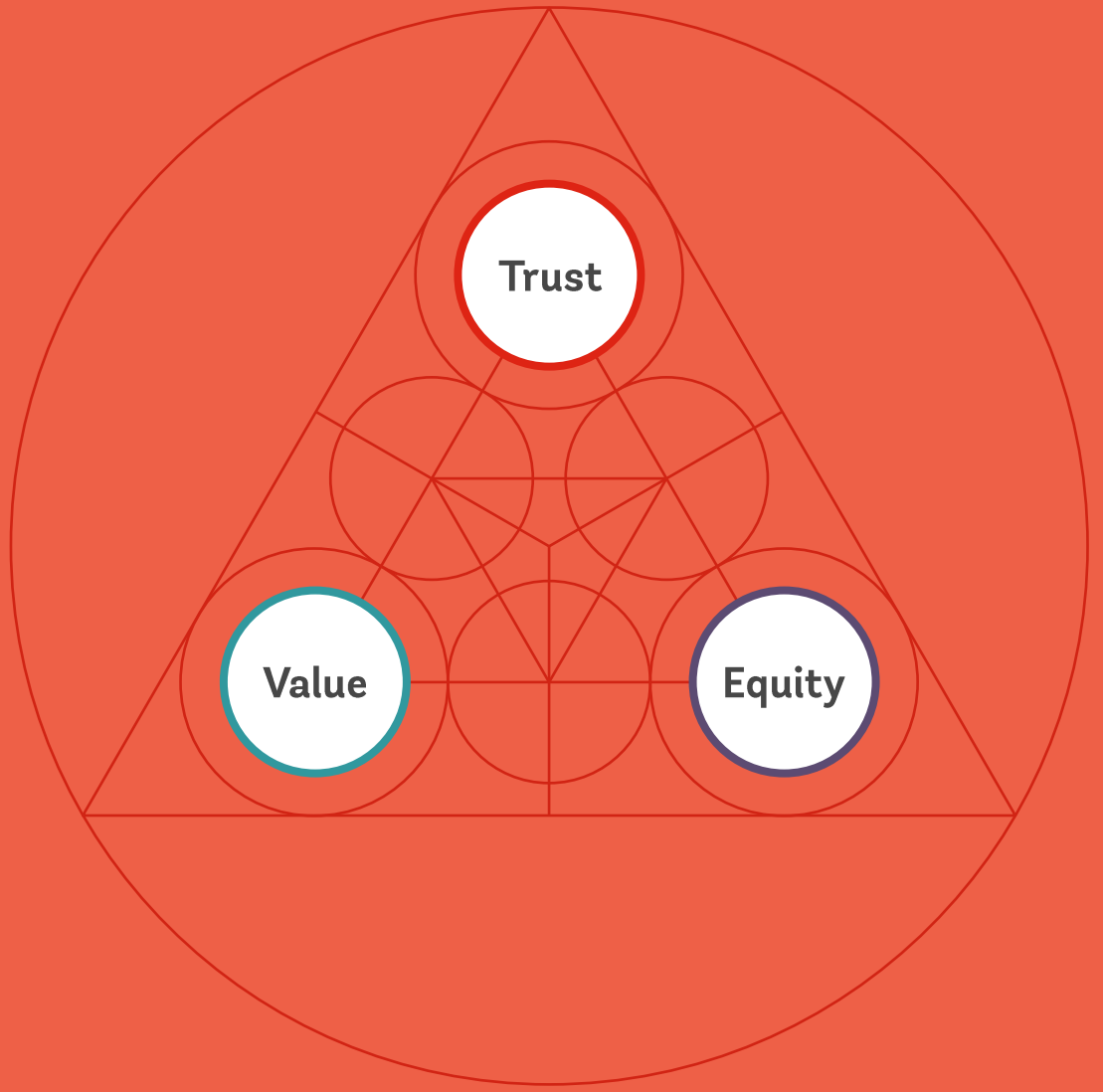


Trust

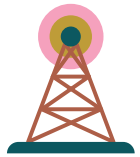
Personal data and data infrastructure must be protected from misuse to avoid discrimination and cybercrime

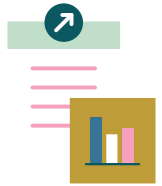


The three elements of a social contract for data: Value, Equity and Trust



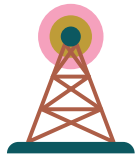
Data governance provides means to enforce the social contract





	Infrastructure policies	Laws and regulations	Economic policies	Institutions
National	Universal broadband coverage Domestic data infrastructure	Safeguards Enablers	Antitrust Trade Taxation	Government entities Other stakeholders
International	Global technical standards Regional collaboration	Cybersecurity conventions Interoperability standards	International tax treaties Global trade agreements	International organisation Cross-border cooperation

Data governance layer 1: Infrastructure policies



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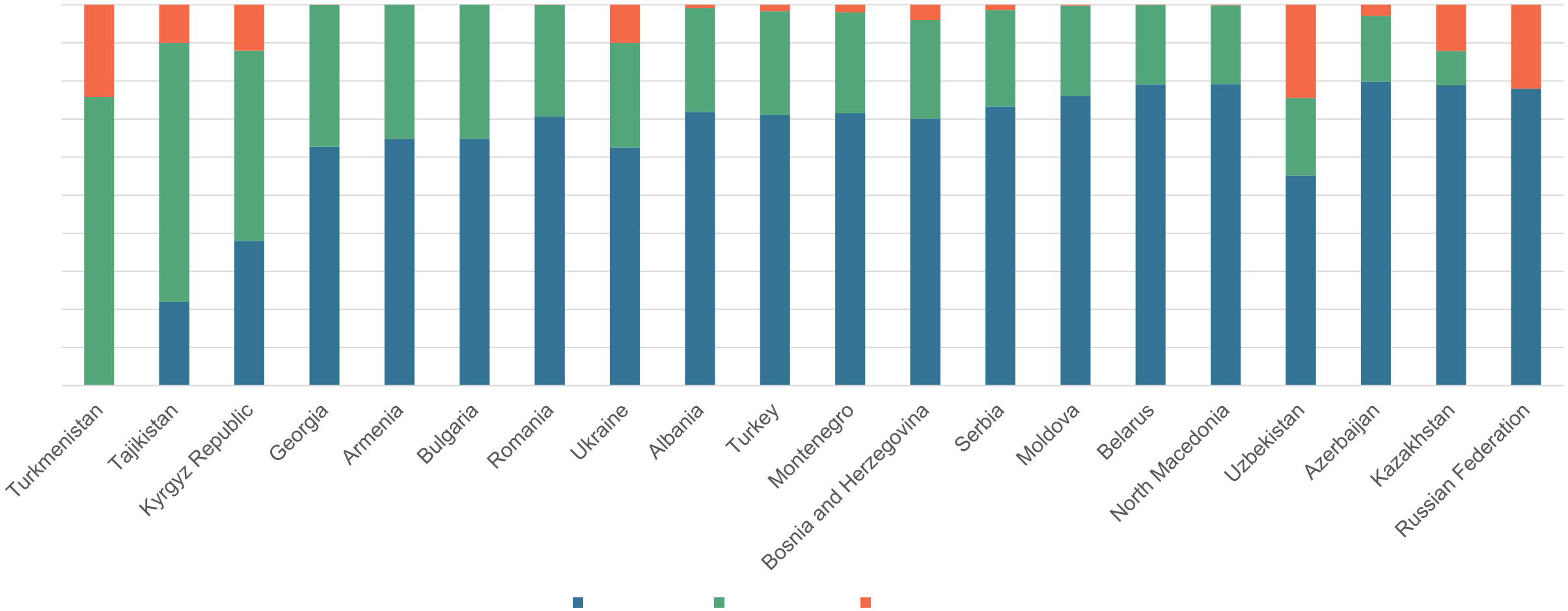
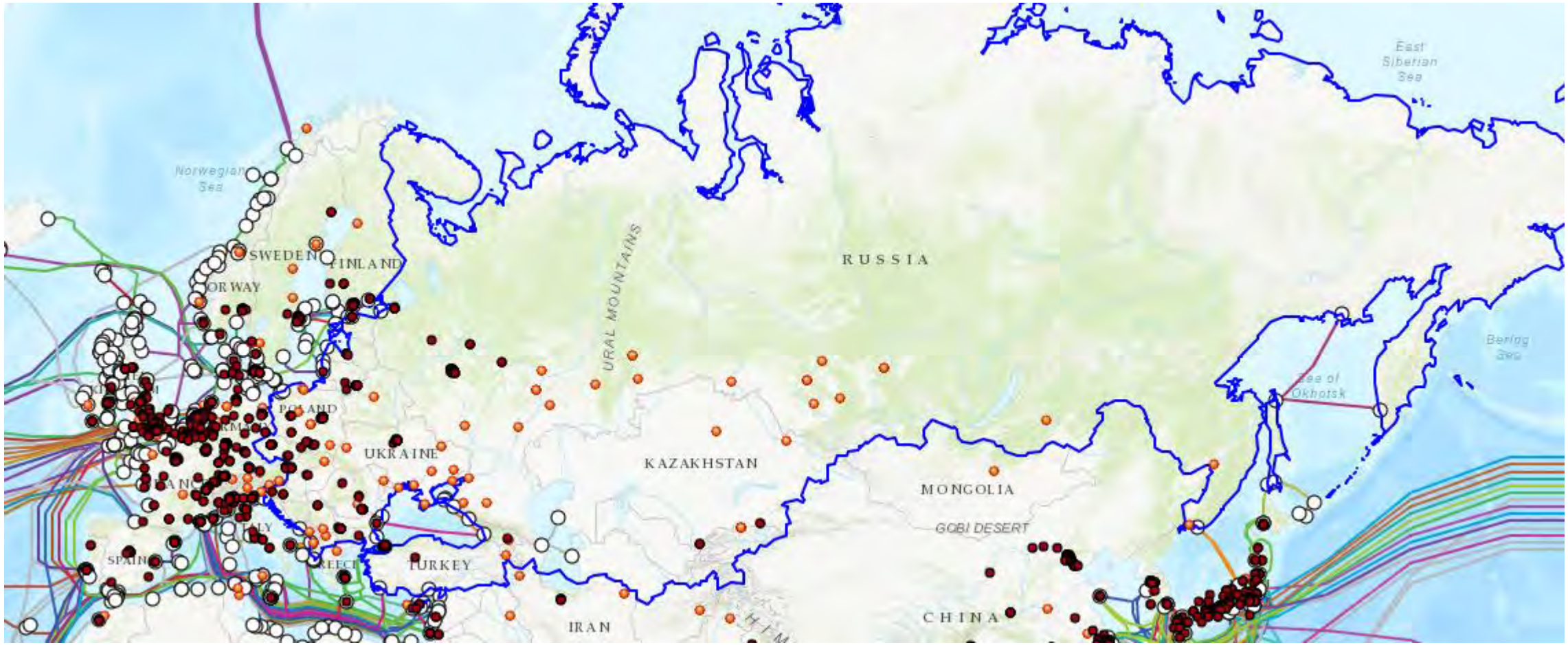
Usage gaps vary widely across countries, with few coverage gaps



National data infrastructure is also unevenly distributed within ECA countries, with landlocked countries suffering the most



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Internet Exchange Points

Colocation data centers

Submarine Cables

ECA countries are quite distributed across different stages of the data infrastructure ladder

Example: Ukraine

DTEL-IX

Co-location datacenters with IXPs

The Digital Telecom Internet Exchange (DTEL-IX), founded in 2009, is situated in two data centers in Kiev. As the largest IXP, it has 193 participants of which one fifth are from outside the country

DTEL-IX facilities attract international content providers and content delivery networks due to their services for storage, with average incoming traffic at 929 Gbps in July 2020, up over 600% since 2014

Getting ready for the new colocation space.
Photo: Reg Natarajan

Data governance layer 2: Laws and regulations

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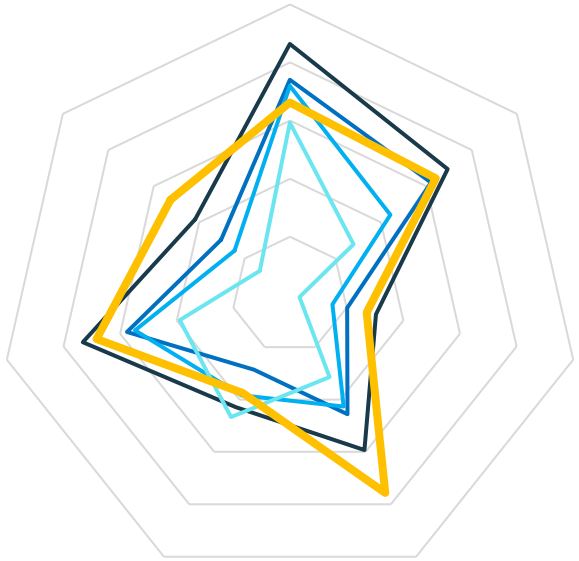
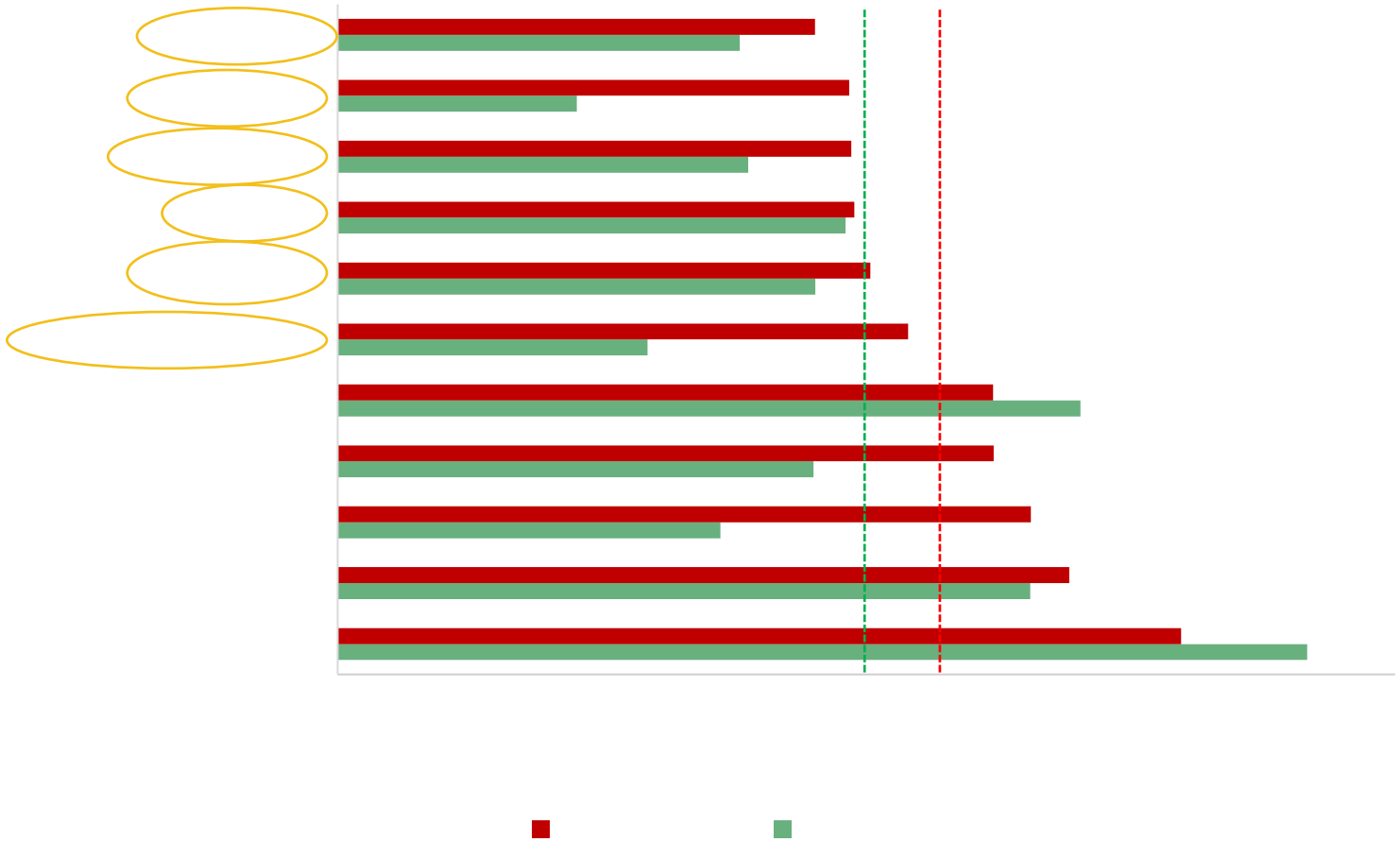
Establishing the enablers and safeguards for data flows is key, especially amid COVID-19

Overall, ECA Region does better than all other regions on the enablers and safeguards for transfer of data



However, some ECA countries can do more to establish the necessary enablers for data flows



Example: Top down vs. bottom-up approaches to data sharing

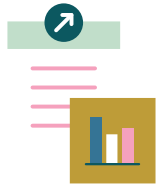
Enabling private intent data sharing through policies and partnerships

Sharing "High value" datasets

France and the EU require **"high value"** or **"public interest" datasets** to be made available according to open standards and in machine-readable formats.
Alternatively, companies such as **Waze** have forged **data partnerships** with governments: through its Connected Citizens Program, the traffic app **has partnered with over 1,000 cities and public sector entities** to exchange traffic data to inform mobility projects, support emergency response and share data with citizens.

paris street
Photo: zoetnet, flickr

Data governance layer 3: Economic policies



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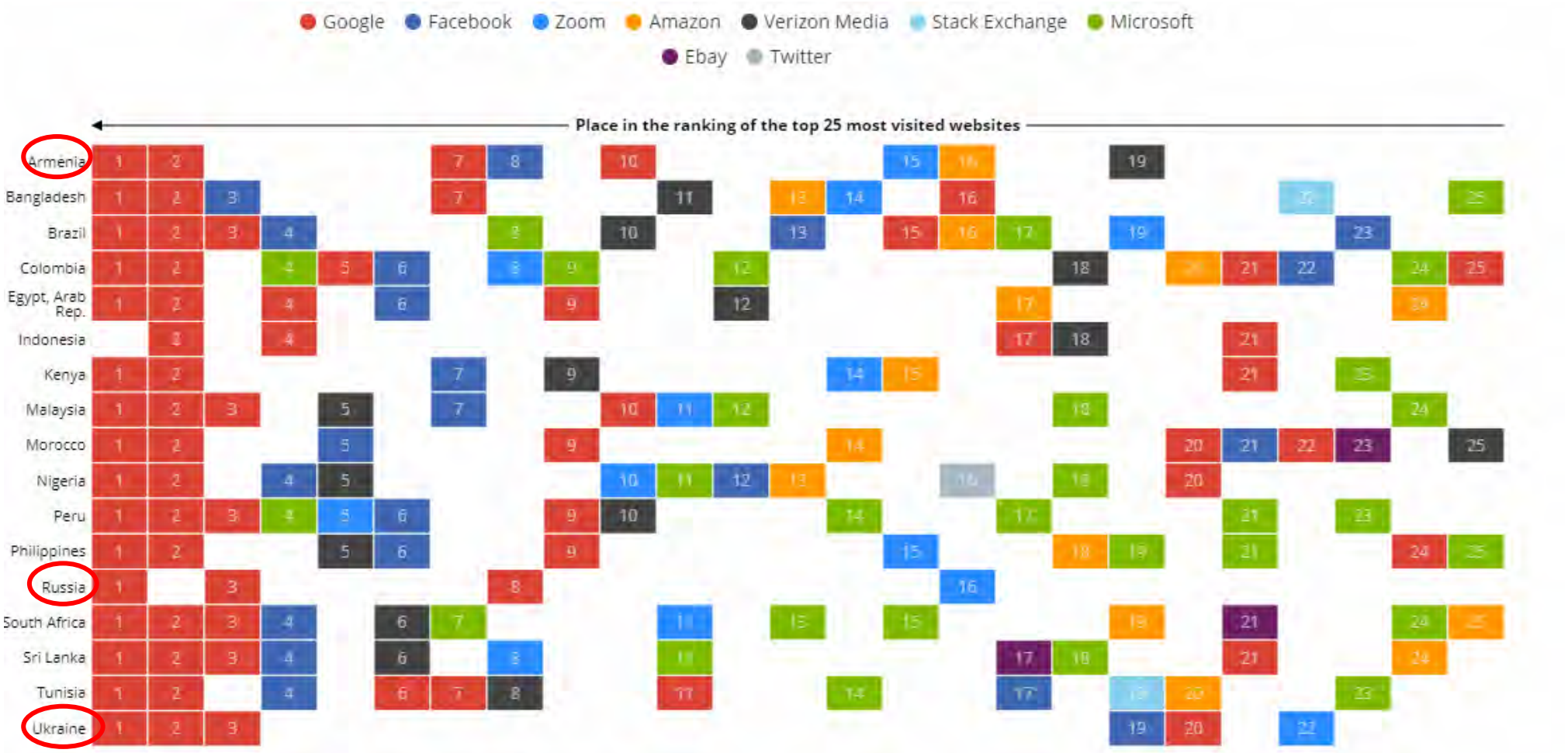
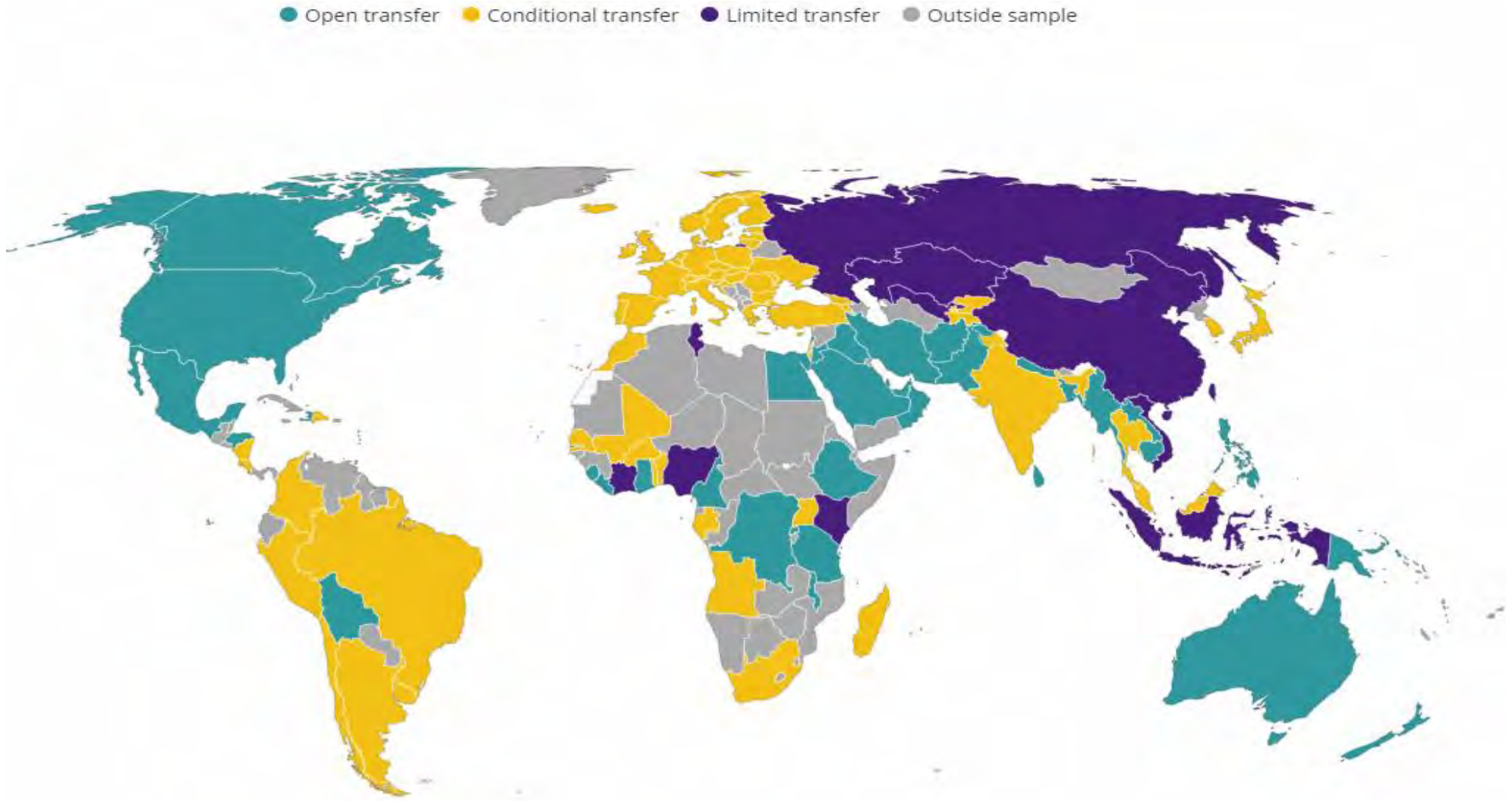
Dominance by big tech platforms is a challenge for some ECA countries



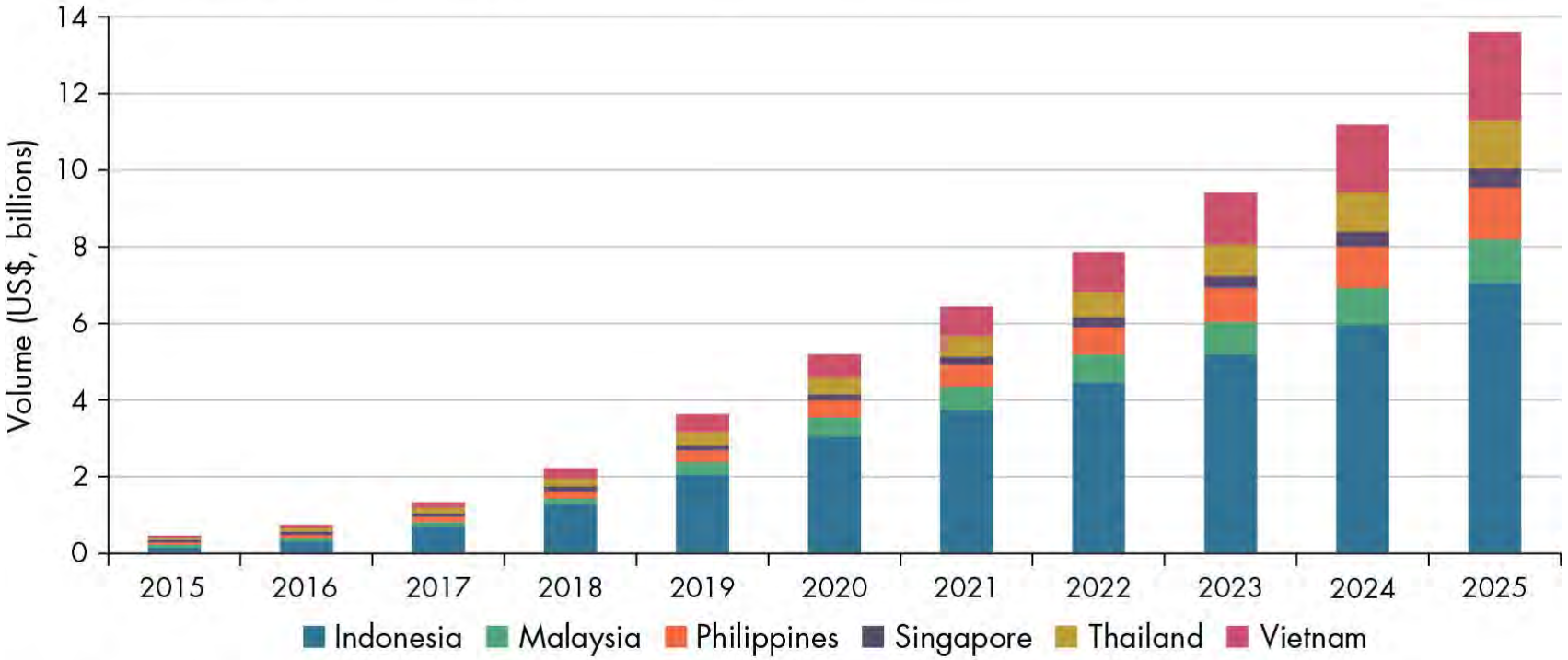
Source: Alexa (downloaded 2020:Q2).

Cross-border data flow regimes vary between conditional transfer and limited transfer models



ECA can do more to capitalize on tax revenues from digital services

Figure 7.6 East Asian countries are losing a substantial volume of tax revenue by failing to apply current VAT rules to digital services



Source: Al-Rikabi and Loeprick, forthcoming. Data at http://bit.do/WDR2021-Fig-7_6.

Note: Figure shows the indirect tax potential of business-to-consumer e-commerce. VAT = value added tax.

Example: Croatia

Collecting VAT

Capturing tax revenues from tourism platforms

Croatia collaborated with third country tax authorities to collect information about tax returns needed to enforce VAT collection on small businesses selling tourist accommodation over tourism platforms, raising compliance above 40% baseline.

Data governance layer 4: Institutions

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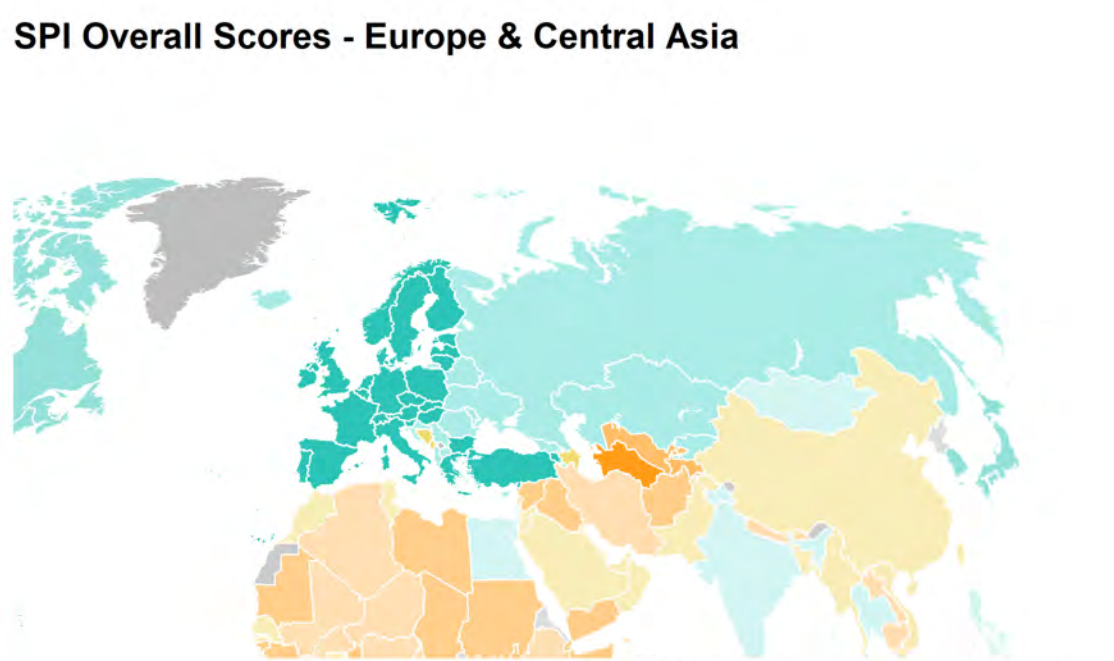
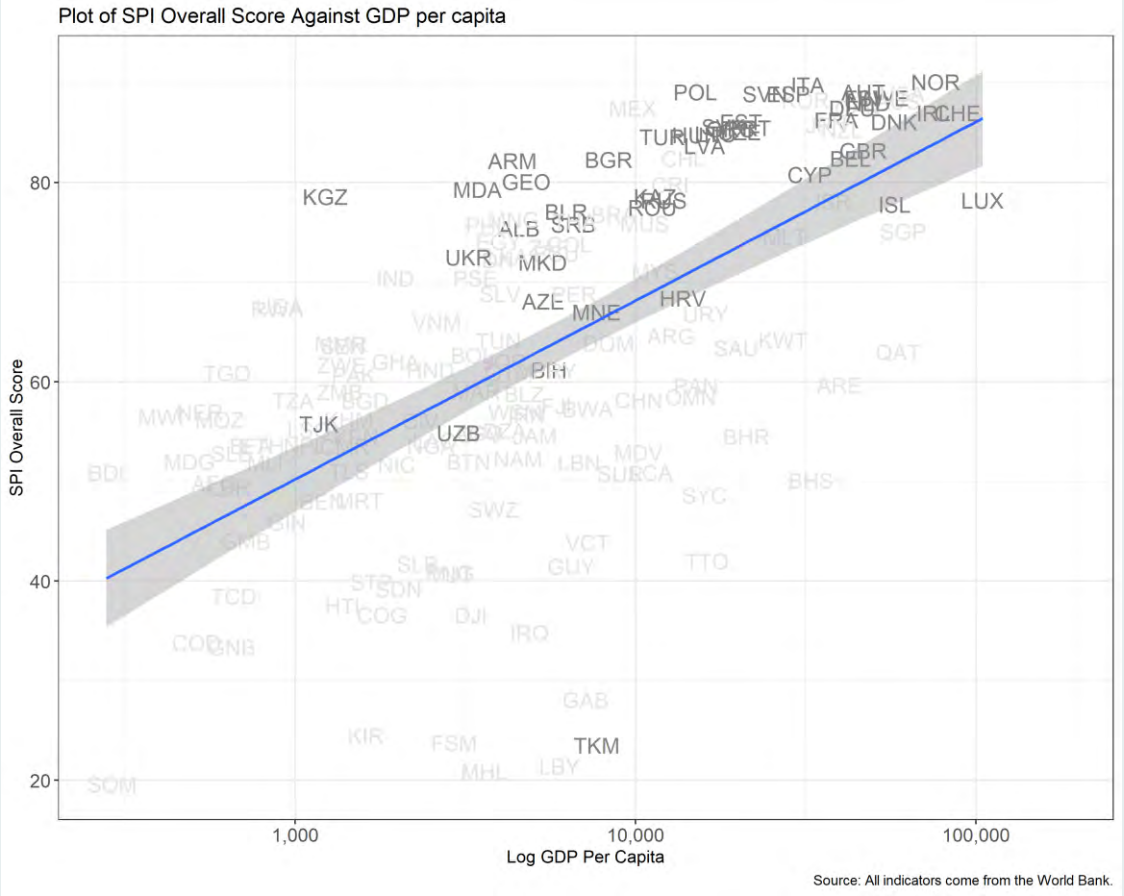
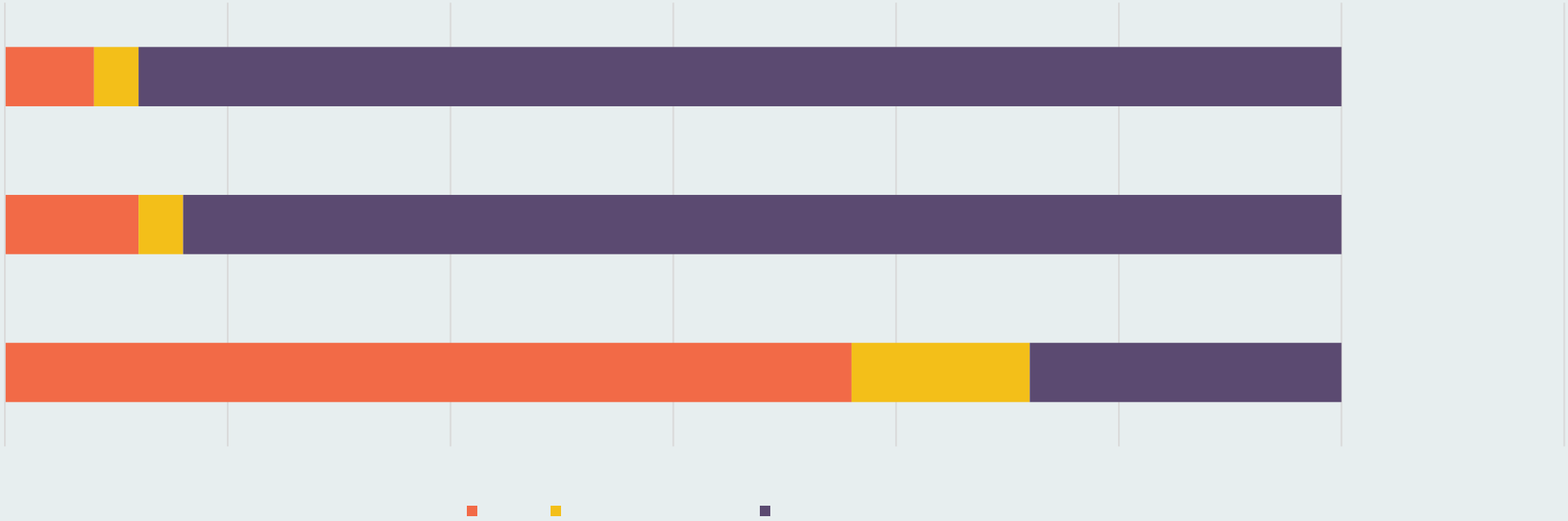
ECA's statistical performance is quite unequal, with countries in the EU performing substantially better than others





ECA countries have some key institutions for data governance, but capacity building to fulfil critical functions is key



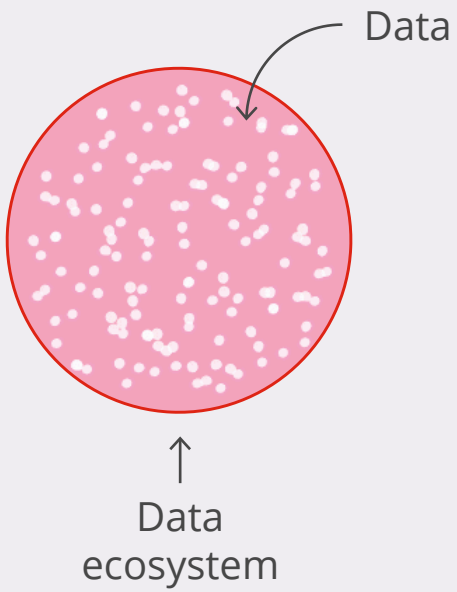
Working towards an integrated national data system (INDS)

What is an Integrated National Data System?

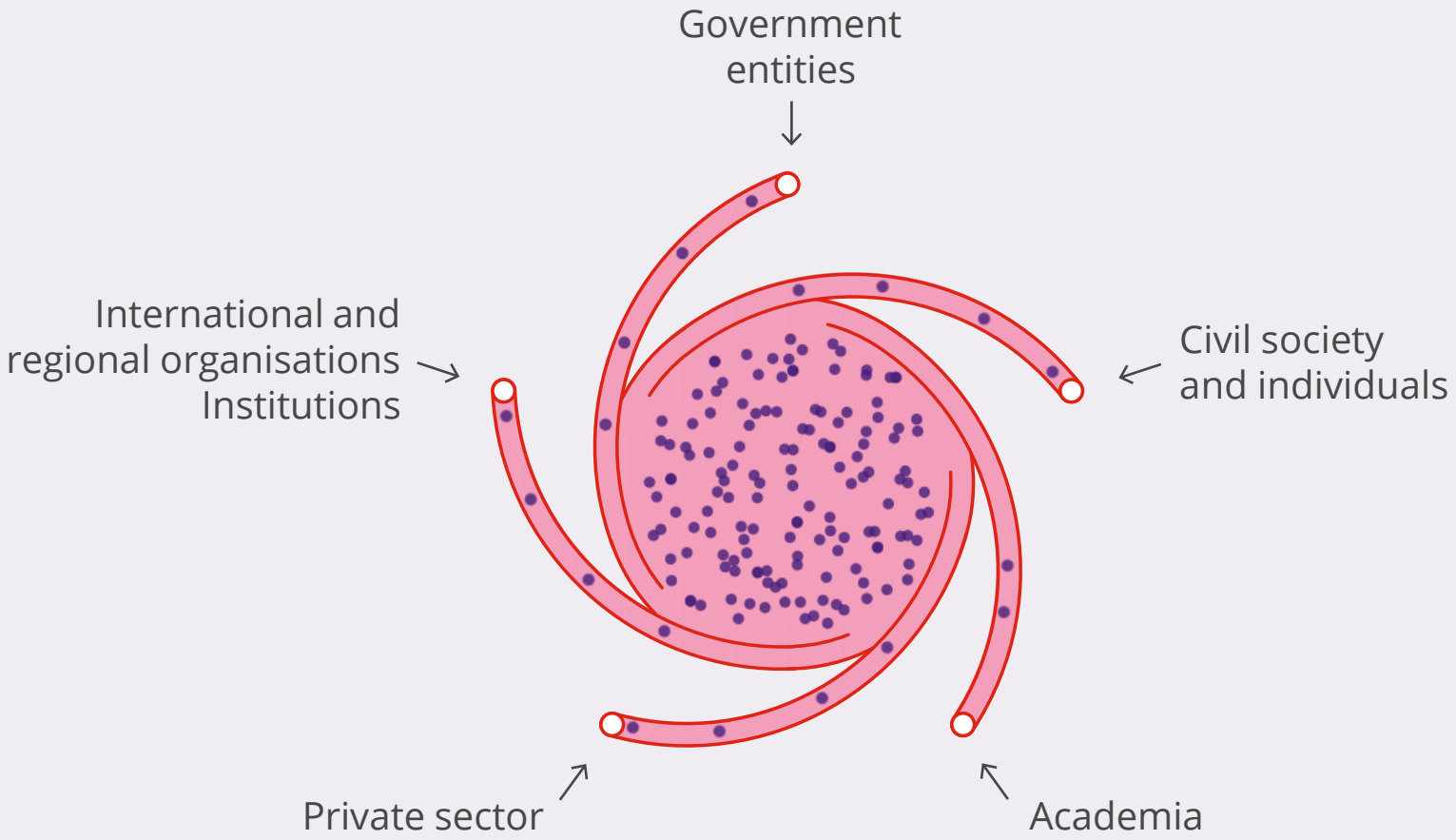
An INDS is an intentional, whole-of-government, multistakeholder, approach to data governance

Data in the INDS must be:

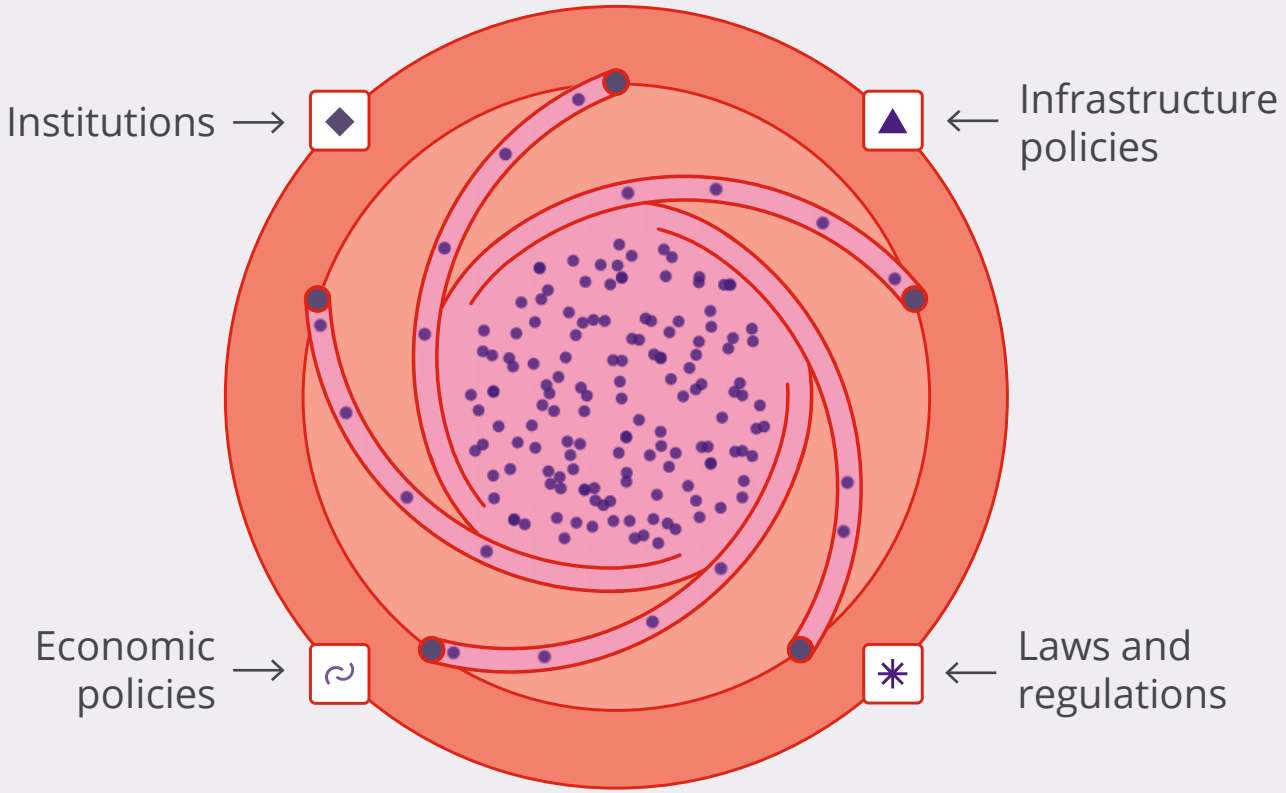
- Produced
- Protected from misuse
- Open
- Quality controlled
- Used and reused



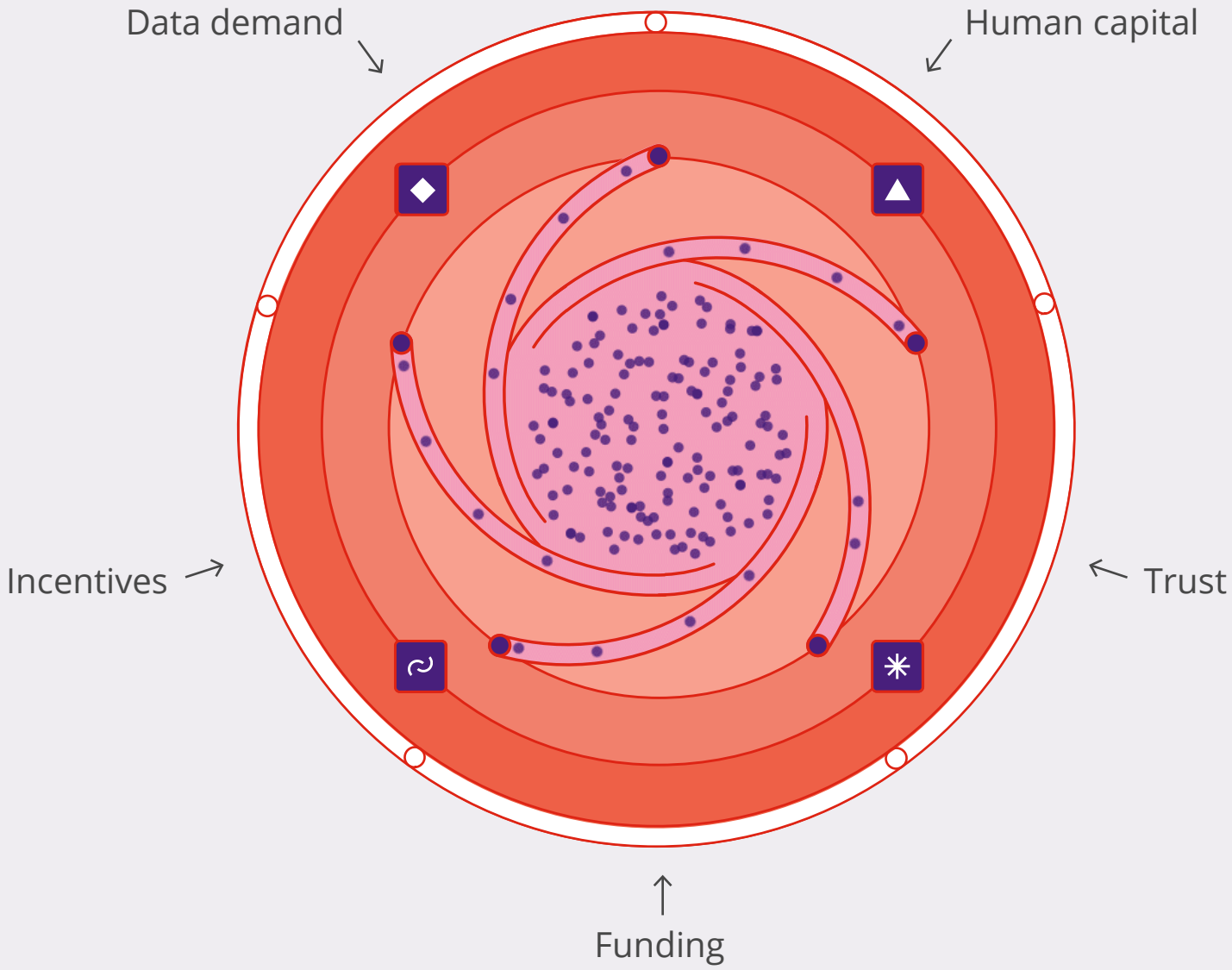
Participants in the INDS create and share data



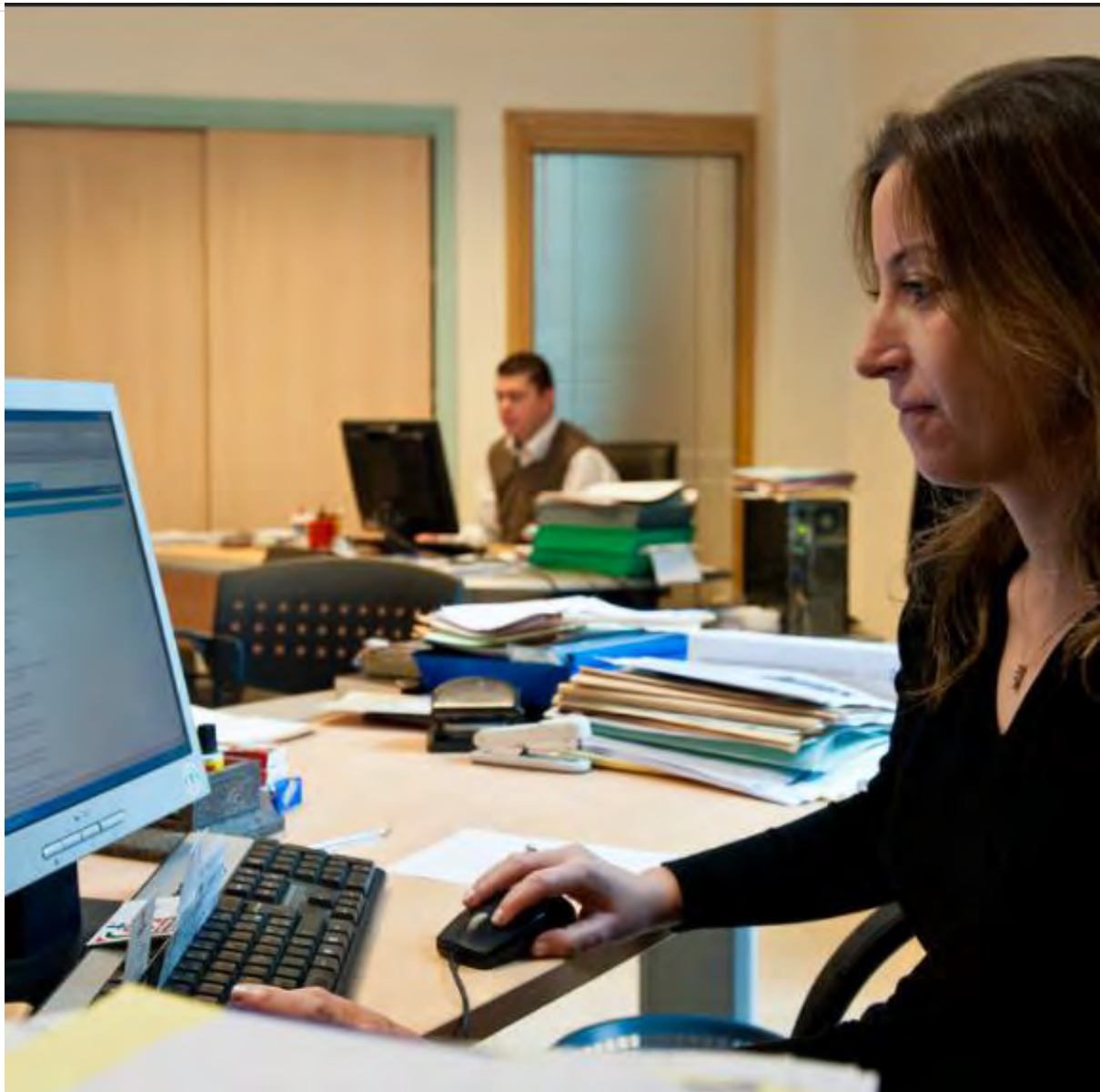
Four pillars support the INDS



Five foundations sustain the INDS



Bringing it all together: Estonia's X-Road



Summary of main messages

THANK YOU

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