



European
Investment
Bank

The EIB bank



EUROPEAN
INVESTMENT
FUND



ONLINE CONFERENCE

**SLOVENIA ON THE PATH OF
DIGITAL TRANSFORMATION:**

**Recovery and Resilience Plan, Other
Financial Incentives and Best Practices**



European
Commission



European
Investment
Bank
The EIB bank



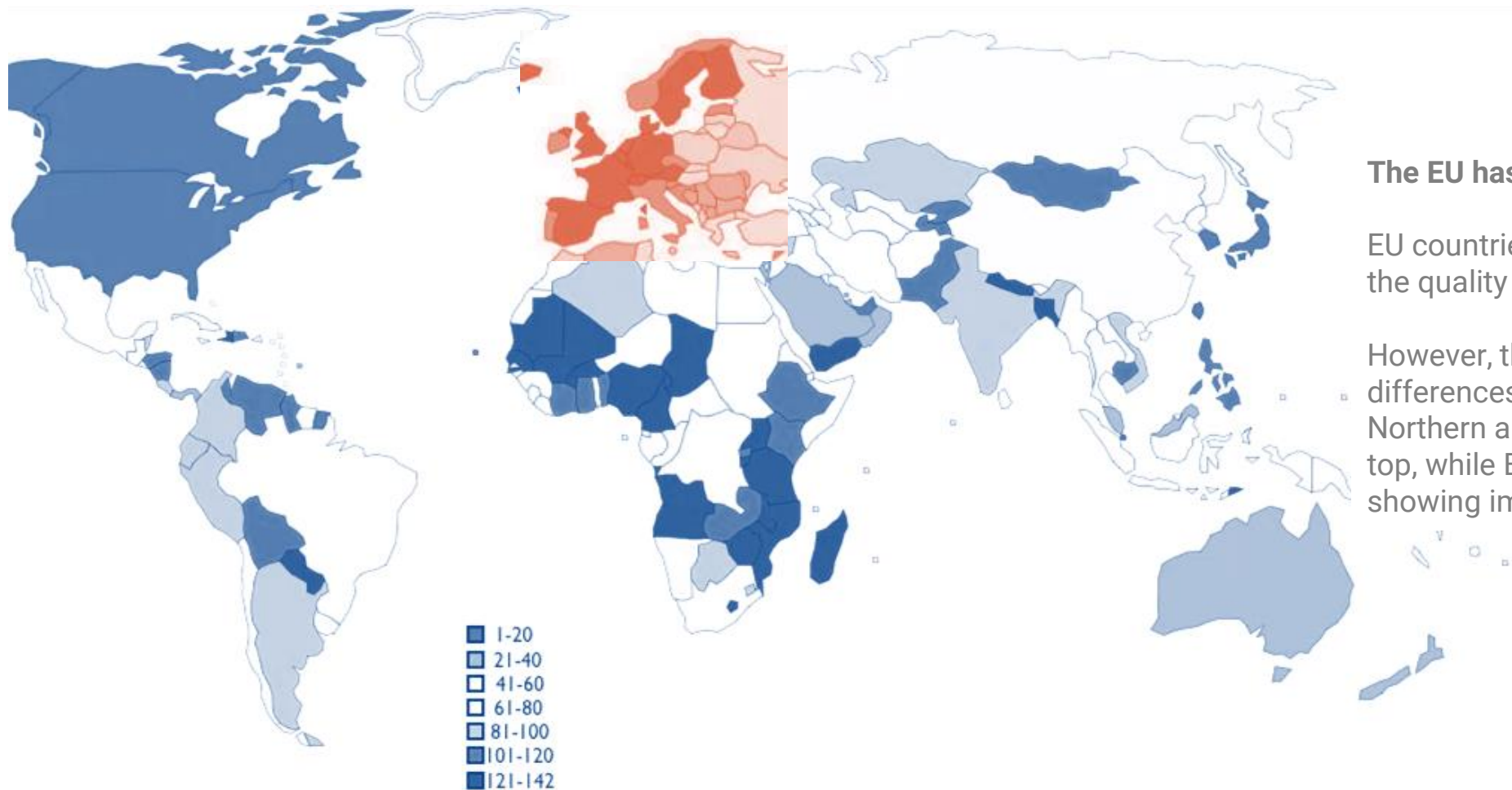
Digitalisation of strategic public infrastructure: transport sector

Tiago Lopes | EIB, PJ/ MOBILITY Air, Maritime and Innovative Transport

Luxembourg 4th February, 2022

Scene setting: The EU in general has good transport infrastructure

Global Infrastructure ranking, 2019

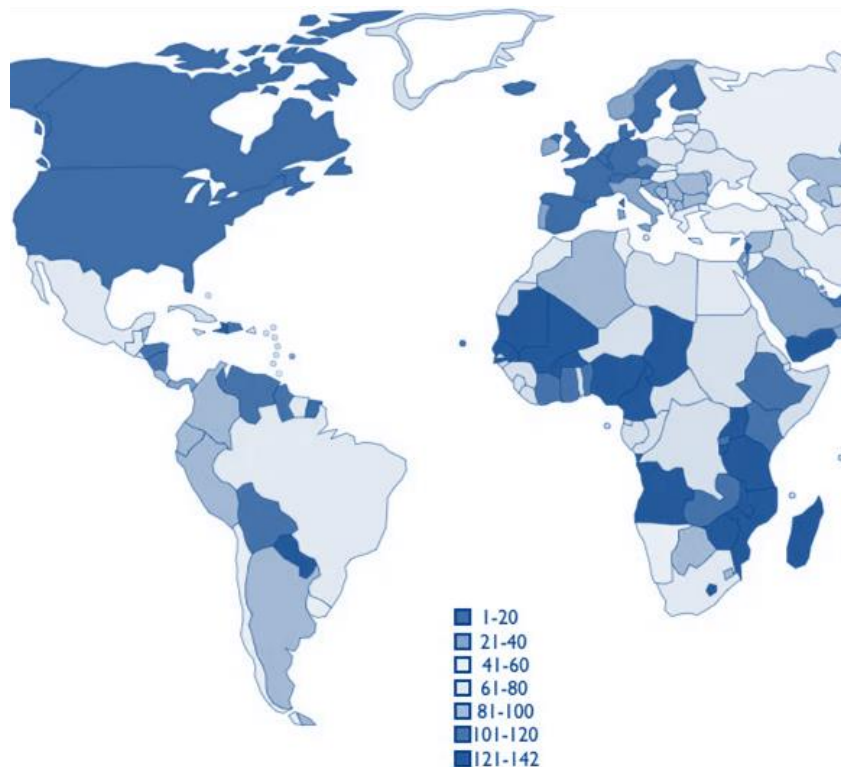


The EU has decent level of infrastructure

EU countries rank very high in terms of the quality of transport infrastructure.

However, there are strong regional differences between countries, with Northern and Western Europe ranking on top, while Eastern and Southern Europe showing important deficiencies

Deep dive: Slovenia has some key gaps in transport infrastructure



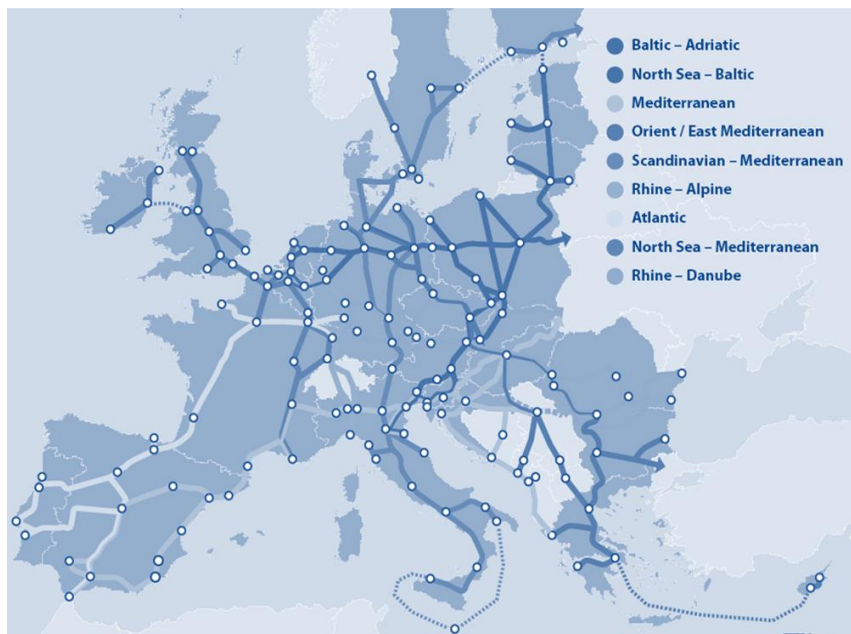
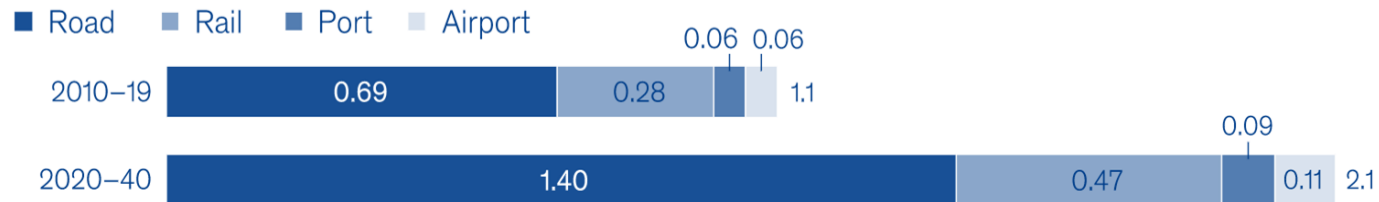
Slovenia infrastructure ranking

	Value	Score (out of 100)	World ranking (141 countries)
2nd pillar: Infrastructure			
Transport infrastructure 0–100	-	58.3 ↑	47
2.01 Road connectivity 0–100 (best)	74.3	74.3 ↑	76
2.02 Quality of road infrastructure 1–7 (best)	4.9	65.8 ↑	33
2.03 Railroad density km/1,000 km ²	60.0	100.0 =	14
2.04 Efficiency of train services 1–7 (best)	3.1	35.5 ↓	62
2.05 Airport connectivity score	8,559.7	30.4 =	101
2.06 Efficiency of air transport services 1–7 (best)	4.6	59.3 ↓	74
2.07 Liner shipping connectivity 0–100 (best)	39.3	39.3 ↑	46
2.08 Efficiency of seaport services 1–7 (best)	4.7	61.6 ↑	45

Outlook: about EUR 2 tn per year will be needed in transport infrastructure worldwide

Policies & trends impacting transport infrastructure

Average annual investment in transport infrastructures required, \$ trillion



Growing passenger and freight transport demand

From ~53 trillion pkm¹ in 2015 to 105 trillion–125 trillion pkm in 2050;
 from ~135 tkm² in 2015 to ~280–350 tkm in 2050

Urbanization

From ~30% of urban population in 1950 to ~55% in 2018 and ~70% in 2050

Stimulus plans

\$2 trillion in US,
 €672.5 billion in Europe,
 \$500 billion in China

Trans-European Network - Transport

The overall investment cost of TEN-T, has been estimated at around EUR 900 billion

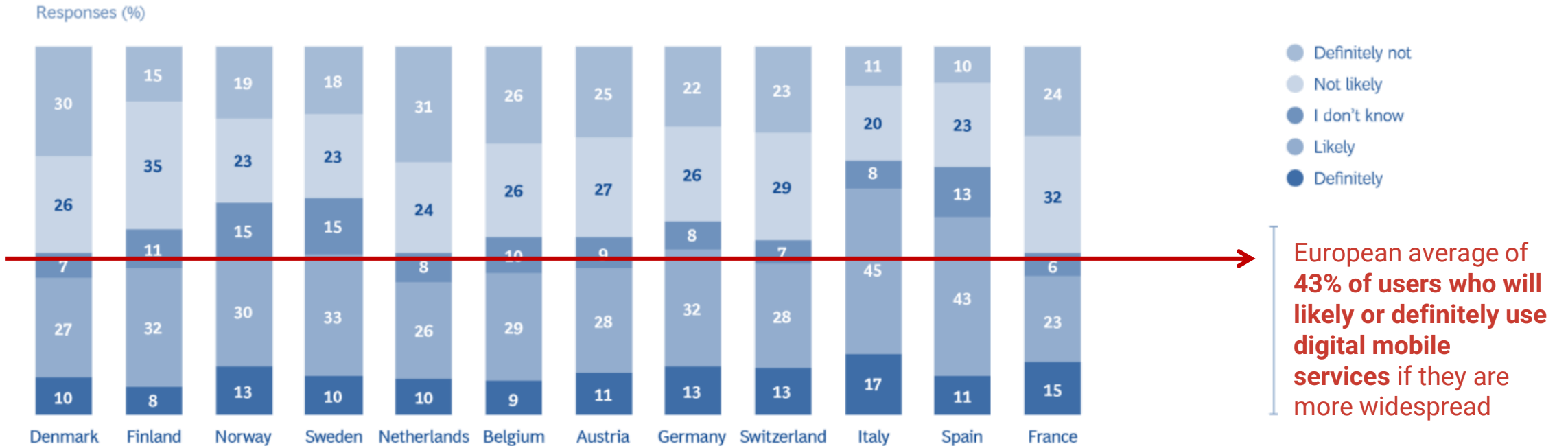
Increasing digitalisation willingness

43% of Europeans willing to use mobile services more frequently

Source: adapted from Europe Commission, McKinsey

Key trend: users want to use digital mobile service more frequently

User willingness to use digital mobile services if they are more widespread



Source: adapted from BGG from questionnaire with 8,000 respondents

So... how does digital transport infrastructure differ from the “normal” approach

Infrastructure investment criteria



Environmental

Performance indicator example:
CO₂/ton-mile



Social

Performance indicator example:
safety or cost of public transport



Institutional

Performance indicator example:
regional development



Economic

Performance indicator example:
revenue, EBITDA¹



Digital project characteristics

Inclusive

Sustainability as enhanced social inclusivity and no prevention from benefiting from the service

Technological

Sustainability as benefits from increasing technology innovations

Productive

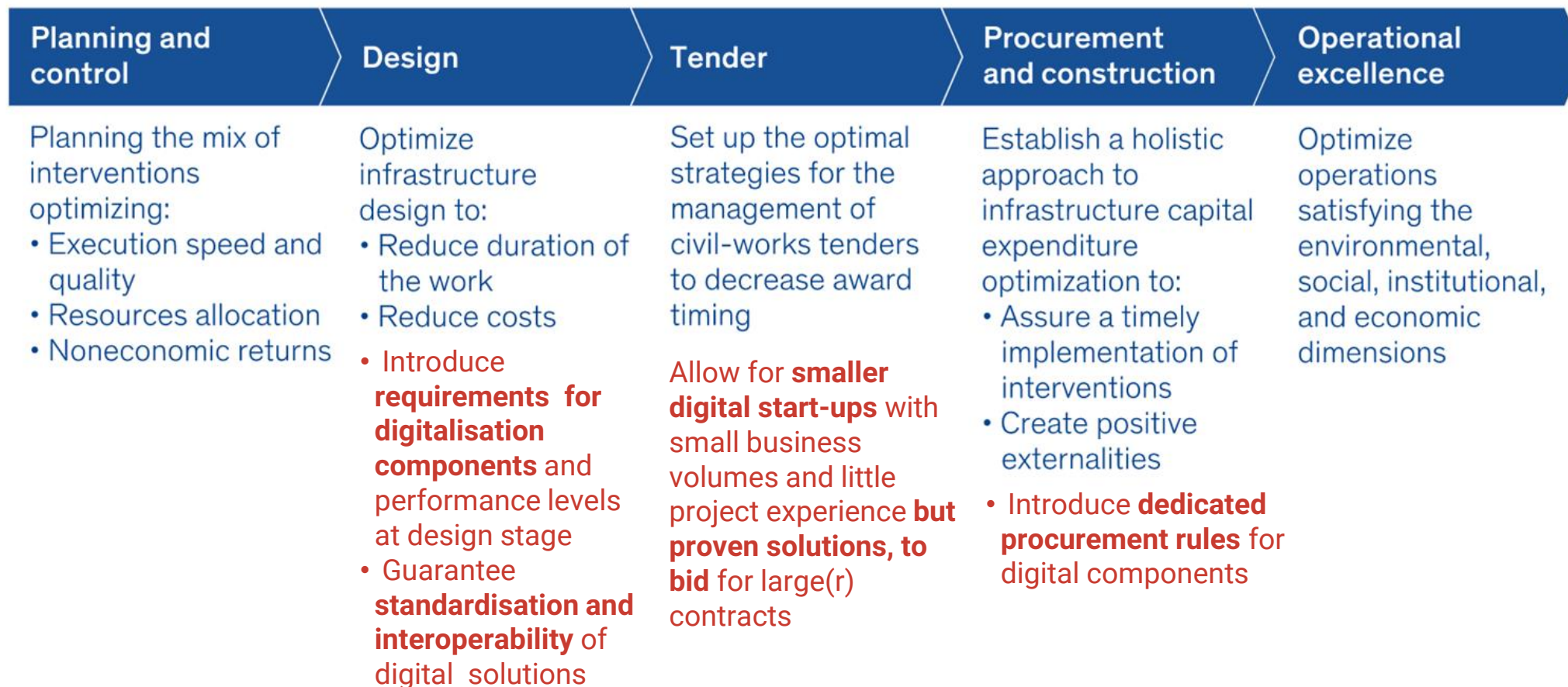
Sustainability as increased productivity and streamlining of delivery and implementation of the projects

Flexible

Sustainability as improved ability to flexibly adapt to shocks and changing environment

In practice: how to deliver digital components in the procurement process

Standard procurement process and proposed changes



The Bank provides financing for all types of digital transport infrastructure

From the traditional projects...

European Rail Traffic Management System (ERTMS)

Air Navigation infrastructure and systems

Road tolling schemes

Traffic flow management & control systems

Vessel Traffic Systems



To the more *exotic* ones...

Electrical and hydrogen vehicle and vessel charging infrastructure

Ride-Hailing applications and services

Drone safety and security services

Digitalisation NEVER STOPS and requires

CONSTANT INVESTMENT!!



European
Investment
Bank

The EIB bank



EUROPEAN
INVESTMENT
FUND

ONLINE CONFERENCE

SLOVENIA ON THE PATH OF DIGITAL TRANSFORMATION:

Recovery and Resilience Plan, Other Financial Incentives and Best Practices



European
Commission



European
Investment
Bank
The EIB bank



t.lopes@eib.org

Thank you!