# 

WIDENING DIGITAL INNOVATION HUBS

28 October 2022

DIHs serving the public sector: support services to foster the uptake of new technologies

## Some quick rules to making the most of this webinar





### **KEY RULES**

Please make sure to **mute your microphone** during the whole webinar to ensure a seamless experience.

In order to post questions, please use the "Chat" panel. You should take the following steps:

- 1. Click on the Chat icon to open the panel
- 2. Enter your question in the chat text box and then press **Enter**

*P* Participants Chat

Questions will be collected throughout the webinar and answered in the dedicated Q&A session





## DH-WORLD

Time	
11:00 - 11:05	Welcome greetings and introduction Costanza Bersani, Manager, Intellera
11:05 - 11:15	Needs, goals and barriers for digitis Costanza Bersani and Beatrice Bozza
11:15 - 11:30	<b>The experience of FIT DIH serving tl</b> Ionut Tata, CEO @Iceberg; Chairman
11:35 - 11:45	<b>The experience of NordicEdge servi</b> Trygve A. Meyer, Head of Cluster @No
11:45 - 12:00	<b>Q&amp;A Session and closing remarks</b>



Co-funded by the Horizon 2020 Framework Programme of the European Union Under grant agreement No. 952176

## Agenda

#### Session

#### on

Consulting

### ing Public Administrations and the role of (E)DIHs

o, Intellera Consulting

#### he Public Sector

@Cluster for Innovation & Technology, Romania

#### ing the Public Sector

ordicedge and partner in EDIH Oceanopolis, Norway

## OJ. Introduction to DIH-World



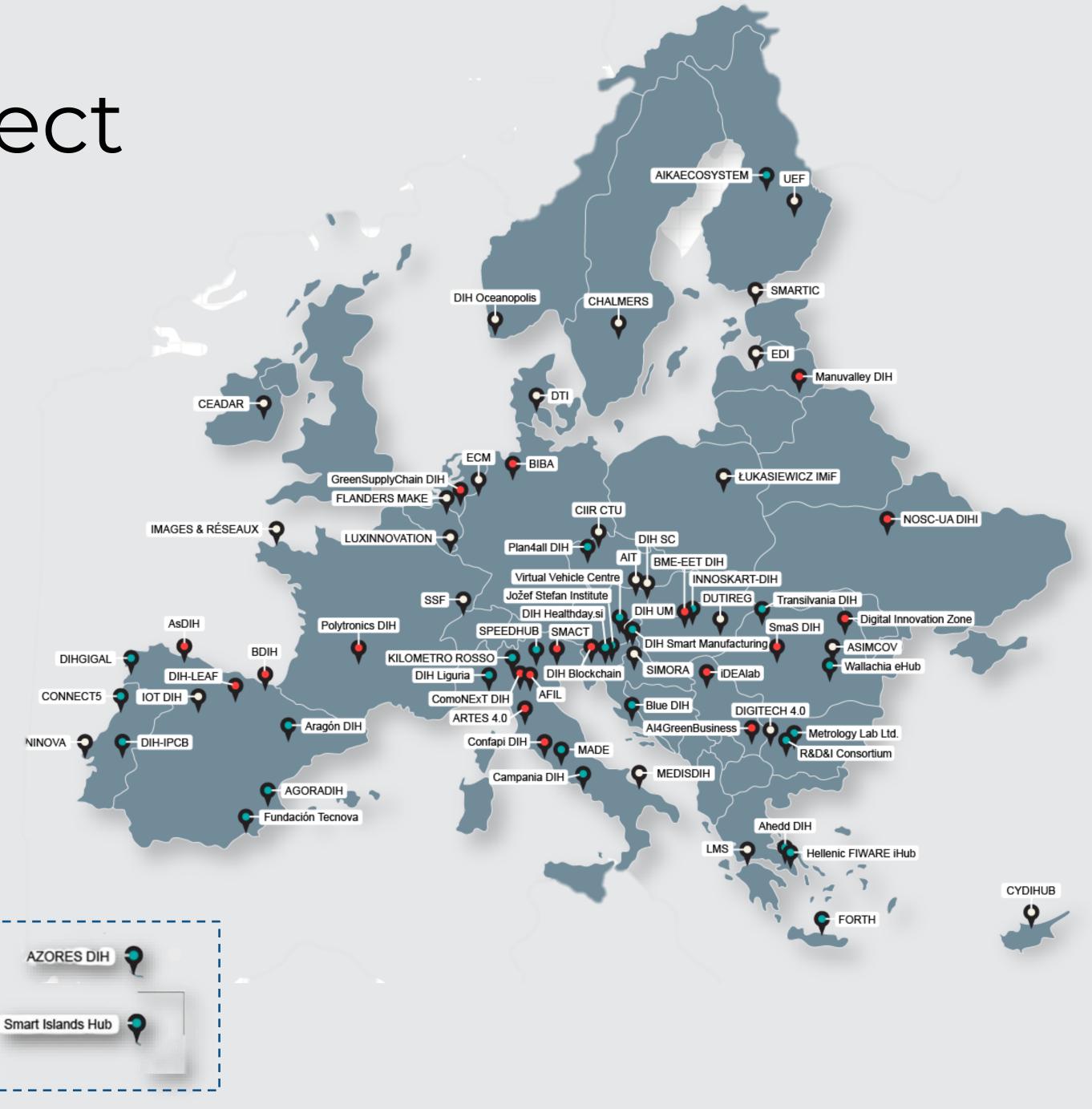
# The DIH-World project

**DIH-World** is an Innovation Action funded by the EU through the Horizon 2020 programme, lasting three years (2020-2023).

DIH-World includes a network of Digital Innovation Hubs, which has grown to include 74 Hubs with the launch of two open calls for experiments, respectively in 2021 and 2022.

The aim of this project is to accelerate the development and consolidation of DIHs and to improve the digitalisation of European SMEs and public sector bodies.





#### **DIH-World Experiments**

DIH-World has launched two Open Calls for experiments:

April 2021: 1st Open Call April 2022: 2nd Open Call

#### **Technology needs** assessment

DIHs learn and conduct **SME** technology needs assessments.



## **DIH-World key activities**

#### **DIH-World Academy**

The Academy provides a wide range of training, webinars and coaching support services to DIHs to improve their service delivery capabilities



DIH-World provides opportunity to **build a** network of DIHs, so that they can collaborate and learn from each other



Understand the current status, needs and challenges of digitalising **Public Administrations in Europe** and the potential role of (E)DIHs





## Objectives of the webinar



Get inspired by the experience of other DIHs in serving the public sector



Get an insight on possible **improvement** of the service offering to support the public sector

# 02.

Goals and barriers of digitising Public Administrations and the role of (E)DIHs





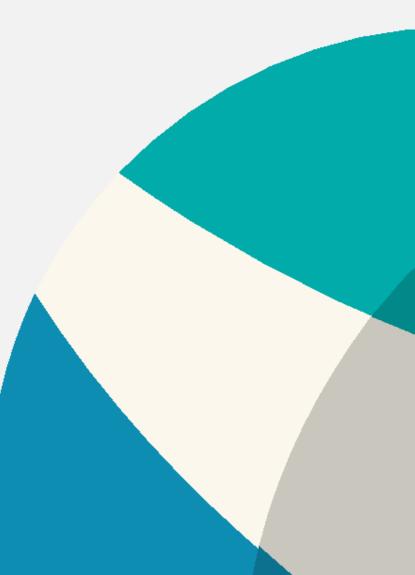
## Setting the scene: EU Policy objectives The Berlin Declaration on Digital Government (2020)

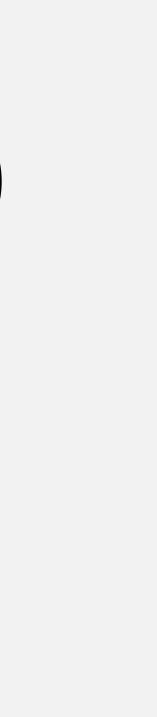
The declaration sets out **7 key principles** with related policy action lines at national and EU level:

- 1. Validity and respect of fundamental rights and democratic values in the digital sphere;
- 2. Social participation and digital inclusion to shape the digital world;
- **3. Empowerment and digital literacy**, allowing all citizens to participate in the digital sphere;
- 4. Trust and security in digital government interactions, allowing everyone to navigate the digital world safely, authenticate and be digitally recognised within the EU conveniently;
- 5. Digital sovereignty and interoperability, as a key in ensuring the ability of citizens and public administrations to make decisions and act self-determined in the digital world;
- 6. Human-centred systems and innovative technologies in the public sector, strengthening its pioneering role in the research on secure and trustworthy technology design;
- 7. A resilient and sustainable digital society, preserving our natural foundations of life in line with the Green Deal and using digital technologies to enhance the sustainability of our health systems.



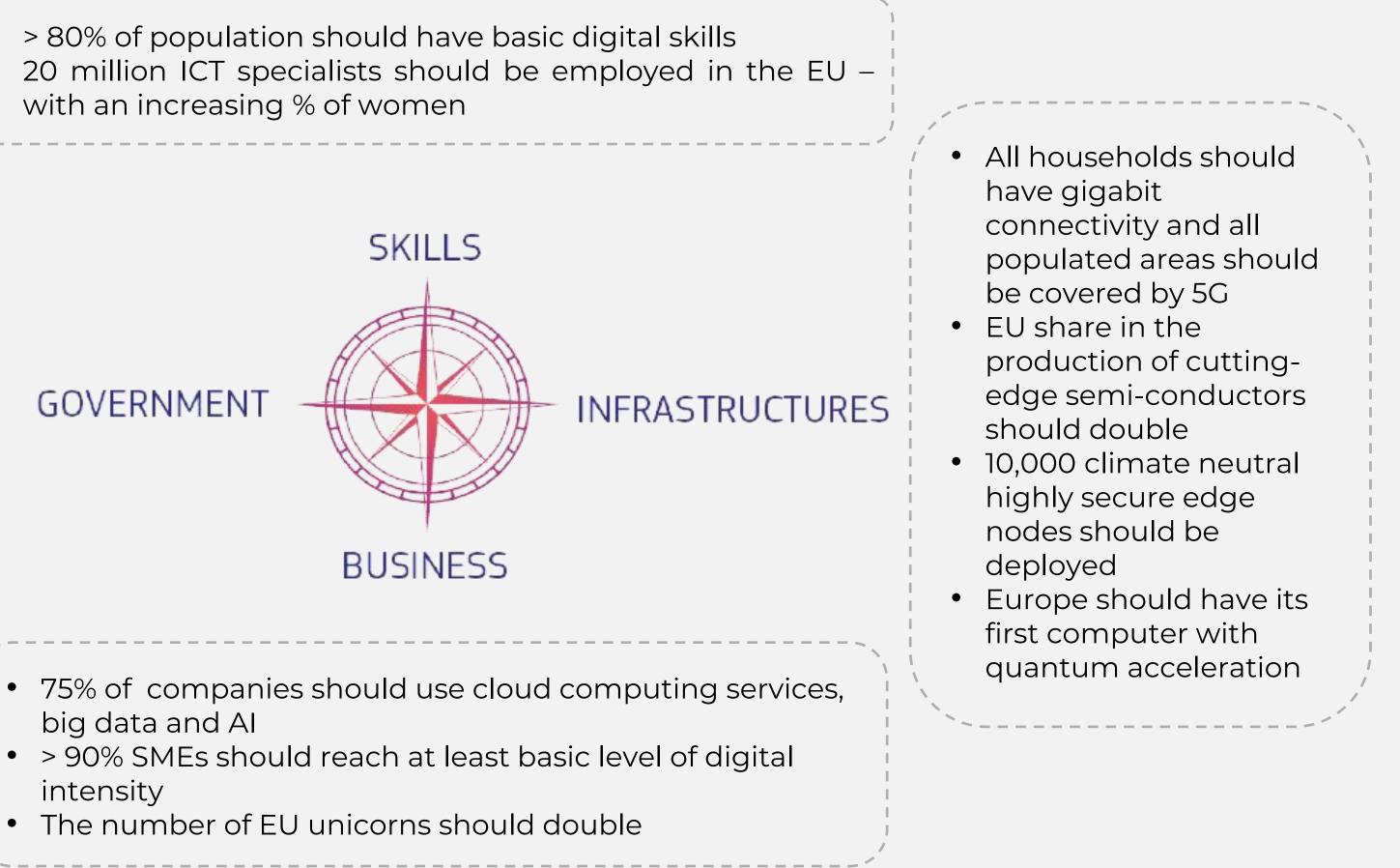
"The public sector is an essential element for the European Single Market and a driving force for new and innovative technological solutions for public services and societal challenges".





## Setting the scene: EU Policy objectives The digital compass and Europe's ambitions for 2030



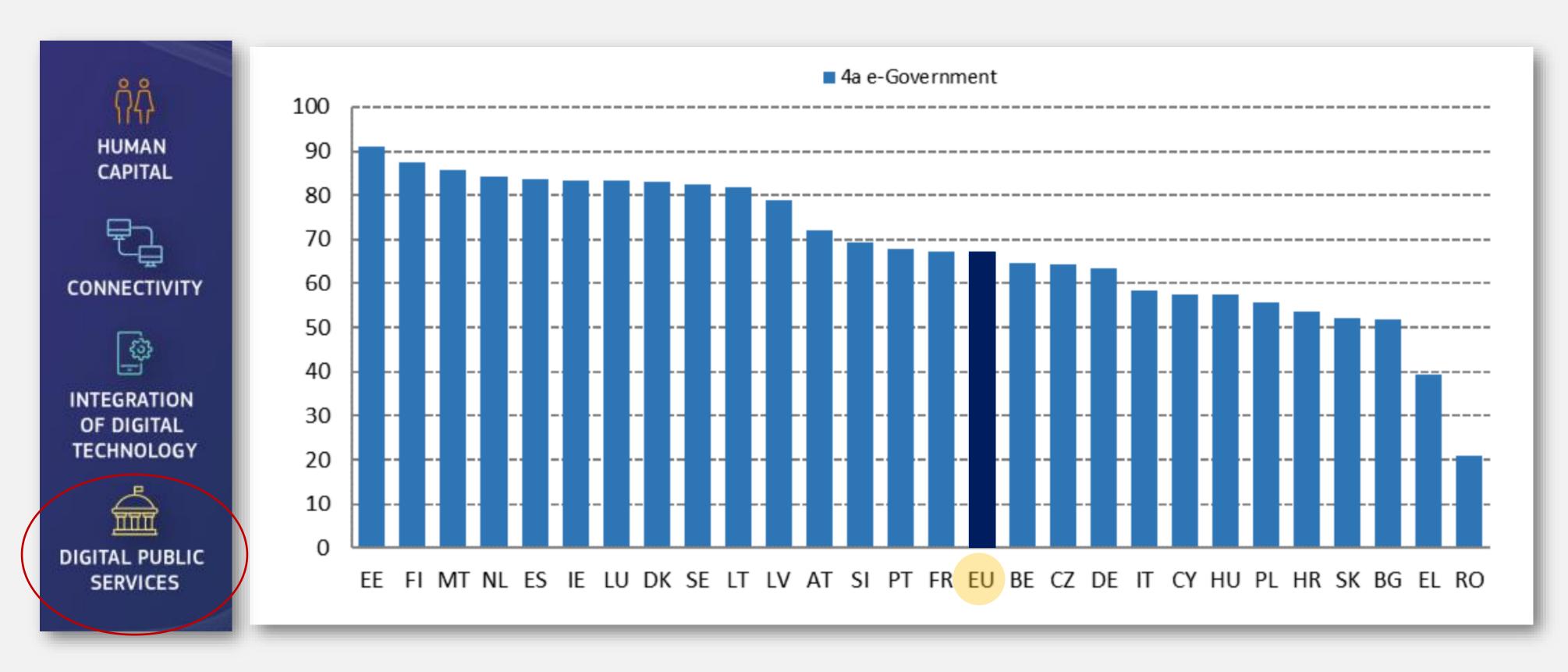






## DESI 2022: Digital public service overall

The Digital Economy and Society Index (DESI) summarizes indicators on Europe's digital performance and tracks the progress of EU countries

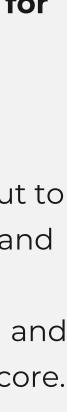




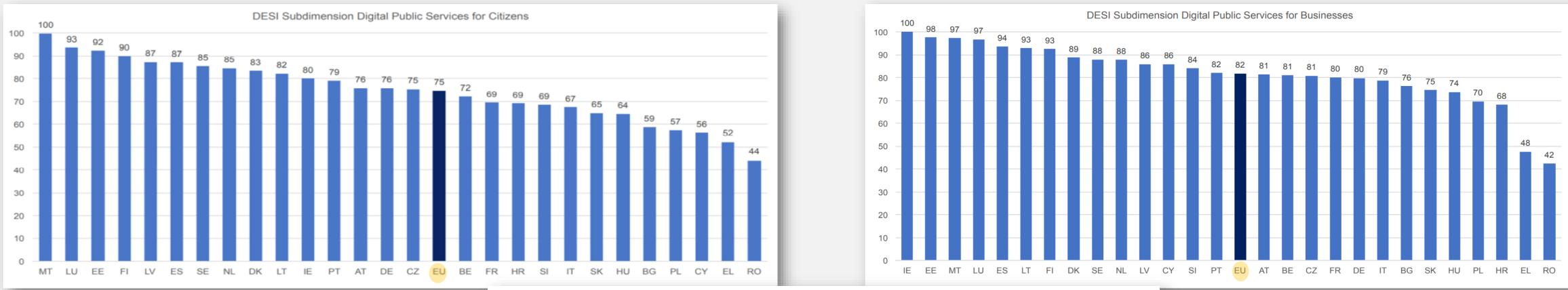
Summing up all digital public services indicators in DESI:

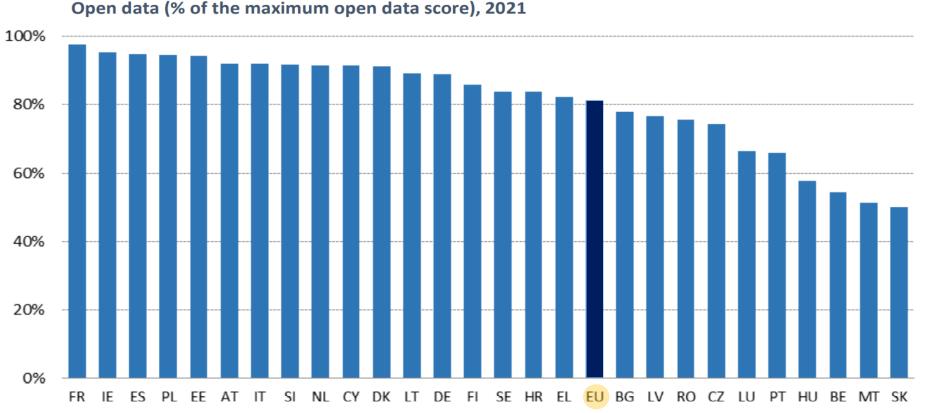
- e-Government users •
- pre-filled forms
- digital public services for citizens
- digital public services for businesses
- open data

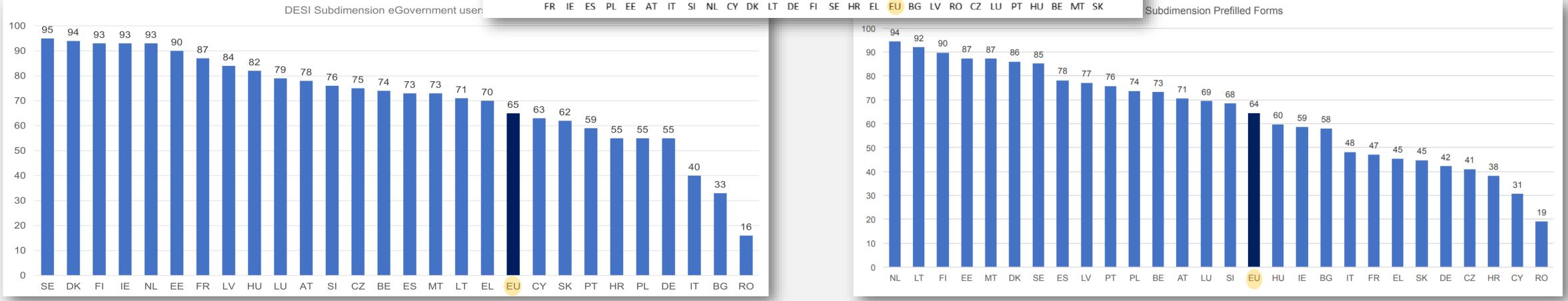
The top performers turn out to be Estonia, Finland, Malta and the Netherlands, while Romania, Greece, Bulgaria and Slovakia have the lowest score.



### DESI 2022: Digital Public Services (5 subdimensions)















## Public Sector Digitalisation: what could be improved according to the eGovernment benchmarking report? (2022)



### **User Centricity:**

- Making government websites more compatible with mobile devices

- Enabling automatic access to services without precedent request



#### **Transparency**:

- Enhancing **cybersecurity** of public sector websites and infrastructures



#### **Key Enablers:**

- Implementing **digital enablers** in eGovernment service delivery



#### **Cross-Border Mobility**:

- Improving cross-border acceptance of eIDs



• Reducing the **gap** between Online Availability of services for businesses and the one for citizens Using more **innovative technologies**, e.g. AI powered chatbots and blockchain-enabled eIDs

• Improve the security and compliance to privacy regulation on the data collection and use

Making better use of **national eID** for the services that require online identification

• Making the use of a service from **another European country** easier for citizens and businesses

## Challenges of digitising Public Administrations

On top of the areas for improvement identified in the eGovernment report, some of the most crucial **challenges** for the digital transformation of public services still exist and are represented by:

- Interoperability of public services at all levels: EU, national, regional and local, from the technical to the legal dimension
- The management of an increasing amount of data to be processed, analysed and connected
- The use innovative technologies in the most effective way to improve processes and service delivery, following principles of inclusiveness and ethics
- The general lack of **digital skills** and culture needed to lead and implement the digital transformation
- A tendency of public sector employees to **resist change** coupled with lack of **incentives** towards innovation
- Working and liaising with **external stakeholders** and private sector partners to improve delivery of public services and foster innovation





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## DIHs as enablers of public sector digital transformation

#### SKILLS AND TRAINING

• Supporting advanced **digital skills trainings** to use AI, HPC, Cybersecurity and European CEF building blocks

- Providing trainings on how to write tender specifications for **procuring** advanced ICT
- Supporting the implementation of the DEP Advanced Digital Skills pillar for PAs

• Contributing to the implementation of the Al Act

#### SUPPORT TO FIND INVESTMENTS

Bridge with the local market to find possible applicants to public procurement
Providing support to leverage the purchasing power of the public sector, transforming it into a large innovation buyer, and acting as a test site for **innovation procurement**





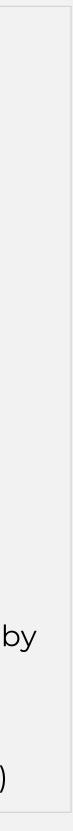
### DIGITAL INNOVATION HUBs

## INNOVATION ECOSYSTEM & NETWORKING

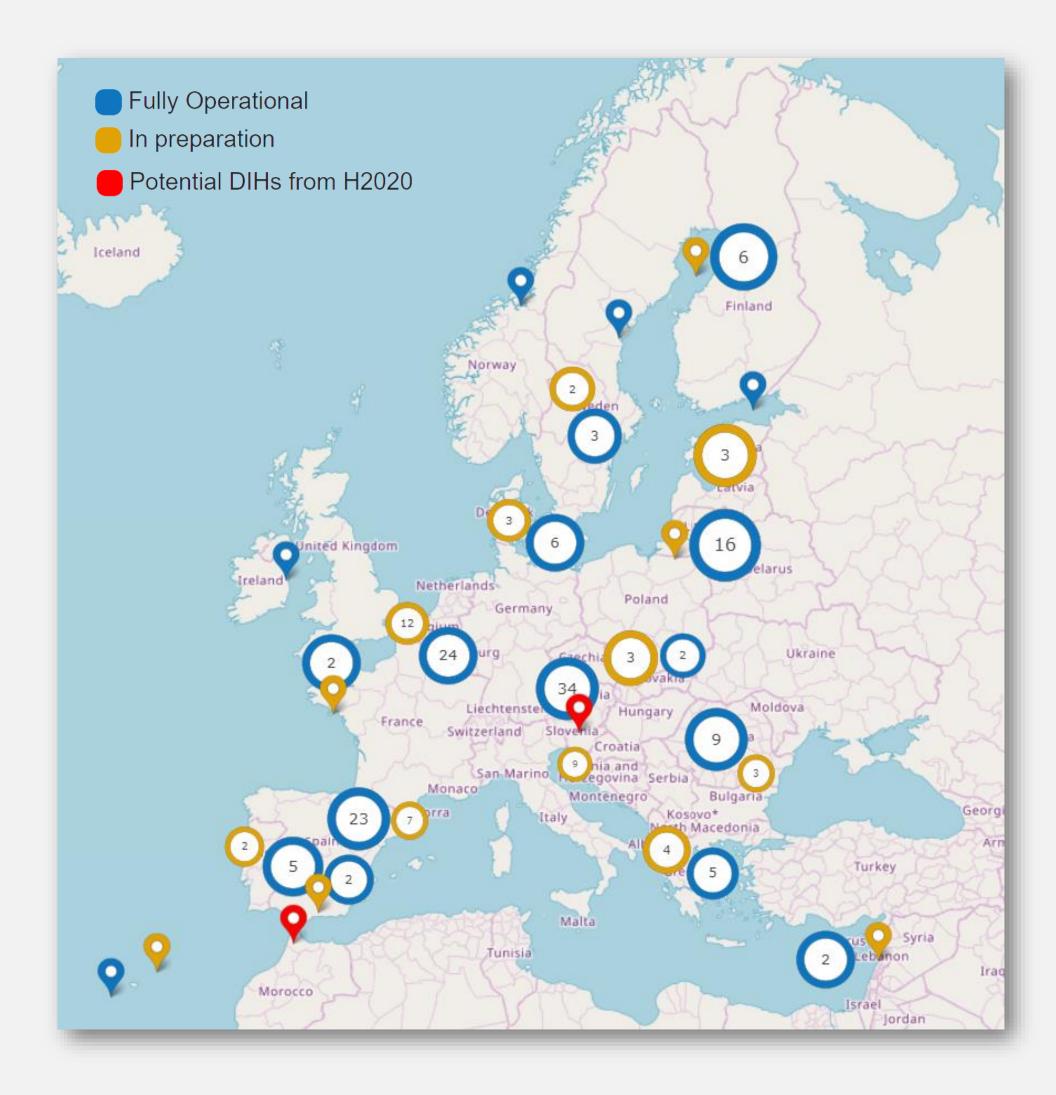
- Brokering between end-users and potential suppliers of technological solutions
- Finding **solutions at cross-border** level with other DIHs
- Linking public buyers to tech suppliers (marketplace facilitator)
- Replicating locally developed digital public services via DIHs

#### TEST BEFORE INVEST

- Digital maturity assessment
- Knowledge and technology transfer
- Testing/implementing the solutions provided by the Transformation Platform Ecosystem
- Experimenting and testing with HC, AI, Cybersecurity, blockchain for PAs
- Providing infrastructure (standards, platforms)



## (E)DIHs working for Public Administrations





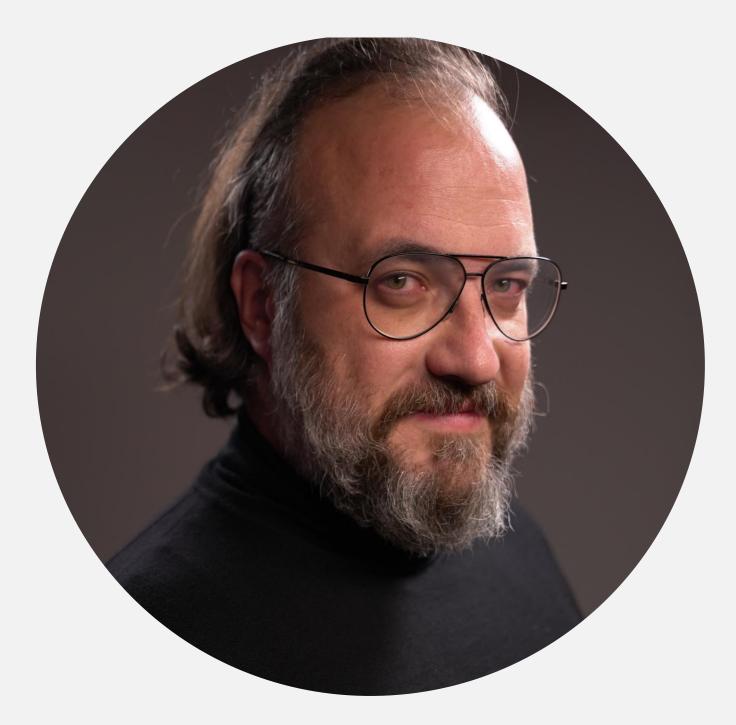


## O3. The direct experience of DIHs working with the Public Sector





# The direct experience of DIHs serving the public sector: today's speakers



### **Ionut Tata**

CEO @lceberg; Chairman @Cluster for Innovation & Technology, Romania





### Trygve A. Meyer

Head of Cluster @Nordicedge and partner in EDIH Oceanopolis, Norway

# 04.

The experience of the FIT DIH (Romania) serving the Public Sector





## DIGITAL INNOVATION HUB

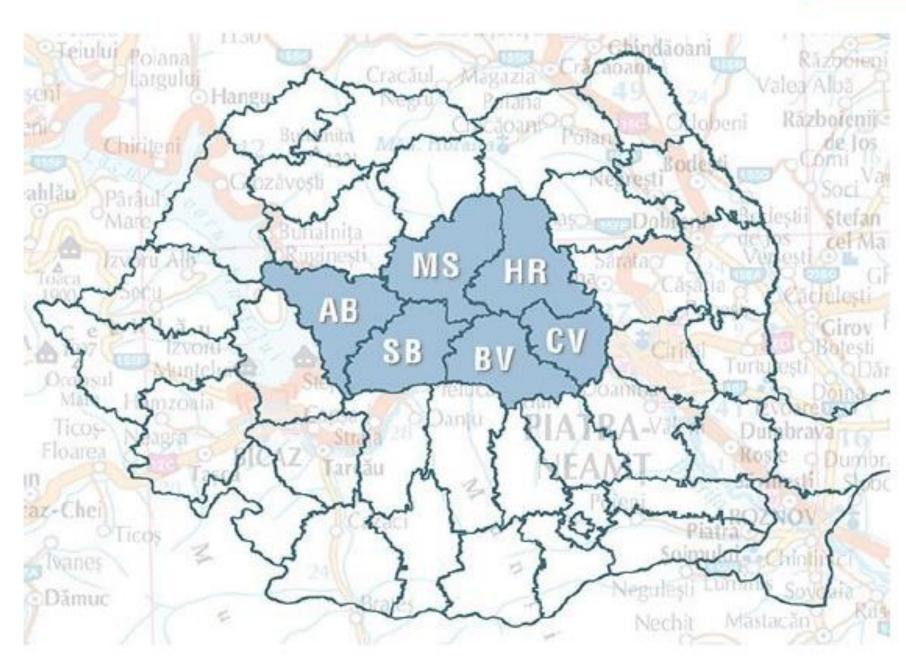


## **Context / Centru Region**

### **RDA Centru Study – The state of digitalization in Regiunea Centru**

SMEs in the Centru Region DO NOT have knowledge about the benefits of digitalization

60-70% from public administration in the Centru Region are partially digitalized

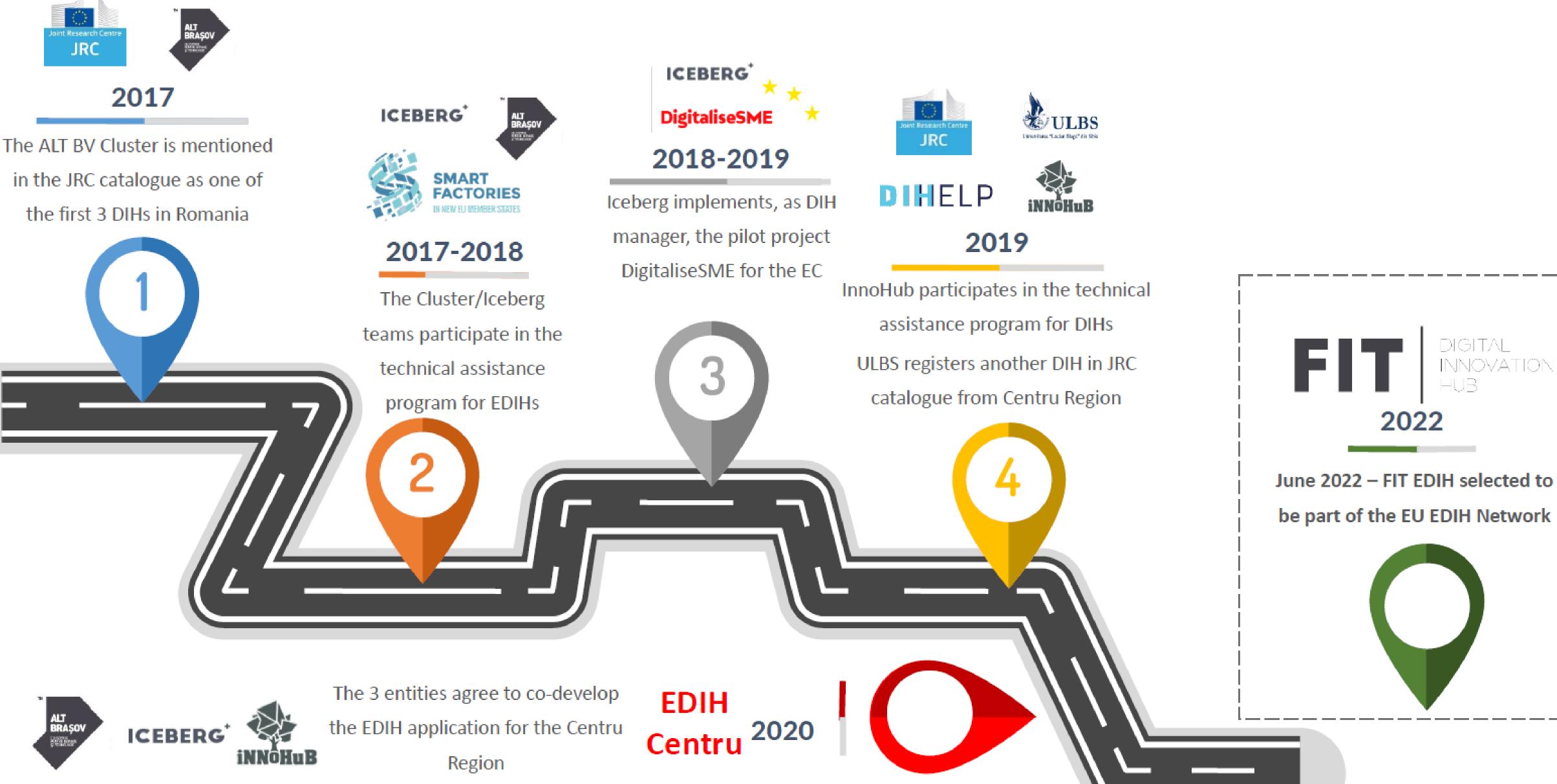




- Only 5-8% from the companies from the Centru Region have adopted advanced digital technologies
- Source: ADR Centru STUDIU Resurse umane pentru specializarea inteligentă nevoile și oferta de competențe digitale în administrație și economie (2022)



## The history of FIT EDIH in Regiunea Centru





DIGITAL









#### InnoHub/Asimcov

Access to the start-up and SME community for key sectors in the Centru Region through its consortium of clusters

ROPARDO One of the most innovative IT/tech companies from the Centru Region

### \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*



#### **Clusterul pentru Inovare si Tehnologie**

An ITC/tech knowledge community including corporations, SMEs and start-

ups



#### Agentia Metropolitana Brasov

Digital Transformation for public administration, development and access to research and innovation infrastructures



#### **Consiliul National al IMM-urilor**

Access to the national SME community as the target beneficiaries of FIT EDIH

DIGITAL INNOVATION HUB

Management entity, innovation consultancy, access to finance and technology transfer





#### Asociatia Smart Factory

Digitalization skills and expertise for the manufacturing sector





#### Asociatia Incubatoarelor

Access to incubators nd business communities from the Cnetru Region and the national level

#### Asociatia Intercomunitata de **Dezvoltare Alba Iulia**

Acccess to the regoional community of public administrations in order to increase the uptake of smart city technologies







#### Universitat' – ULBS si UMFST

Two of the most prestigious universities in the fields of manufacturing and e-health

### **EDIH Orchestrator**

### **ICEBERG<sup>†</sup>**



# **Curriculum Approach / FIT EDIH**





[BASIC]: 1.Connectivity infrastructures in Smart Clties (e-governance, data-driven decision models, IoT, sensors, 5G connectivity, interoperability and open data)
 [ADVANCED] 2. Smart Mobility (Public Transport and Traffic Solutions, Tracking and traceability, V2X,), 3. Smart Living (SMART energy systems, smart grids), 3. Smart Economy (Smart and Sustainable Tourism Management, Smart Retail)

[BASIC]: 1. Information Management Systems & Manufacturing Execution (ERP, CMS, Financial control systems) 2. Live chats, social networks and chatbots to communicate with clients / Remote Collaboration Tools (Business Administration) 3. Basic Automation (IoT, Digital Twin, MES, PLC), 4. Cybersecurity
 [ADVANCED]: 4. Future of work (AI, VR, AR, robotics - exoskeletons, sensor fusion), 5. Digital design (simulation and Digital Twins – metamodelling and co-simulation), 6. Computer-aided design and manufacturing (simulation, 3D printing)

 [BASIC]: 1. Information Management Systems for Healthcare (EHRs, CRM and UC -Data Security in Healthcare) 2. Live chats, social networks and chatbots to communicate with clients / Remote Collaboration Tools (mHealth, Telemedicine)
 [ADVANCED]: 3. Automation and AI (Medical Devices, Personalized Medicine, Smart Diagnosis, Digital Twin)



VATION



# **Curriculum / FIT EDIH Services**

	FIT DIH Client Journey	WP1 - Innovation Ecosystem and Networking	WP2 - Test Before Invest	WP3 - Digital Upskilling	WP4 - Access to Finance	W5 - Outreach and Engagement	WP6 - Project Management
	Level 1. EDIH Awareness "Curious About EDIH"	T1.1. Regional Digital Needs Discovery (CNIPMMR)	T2.1 Technology Discovery (ULBS)	T3.1 FIT Learning Platform & UpSkilling Discovery (UMFST)	T4.1. FIT4Finace Platform & Funding Discovery (ICE)	T5.1 FIT EDIH Brand Identity, Communication & Dissemination Strategy (ICE)	T6.1 Administrative and operative management
Smart City Curriculum Track Manufacturing	Registering with FIT EDIH		T2.2 Digital Maturity Assessment (UMFST)				
Curriculum Track eHealth Curriculum Track	Level 2. FIT EDIH Basic Level "Just browsing - First steps to Digitalization"	T1.2 Technology mapping and matchmaking (ICE)	T2.4 Demo - Testing - Knowledge Transfer (ROPARDO)	T3.3. FIT Upskilling Training Modules (ULBS)	T4.2. FIT4Finance - Phase I - Prepare for finance (ASIMCOV)	T5.2 FIT Community Engagement (CNIPMMR)	T6.2 FIT EDIH Sustainability Plan
	Level 3. FIT EDIH Advanced Digital Transformation Level "Transformative Practice"	EDIH, EEN, PE networking and policy alignment (ULBS)	T2.3 Advanced Digital Transformation #1 Technology (ICE)	T3.2 Advanced Digitall Transformation - #2 Human Centric Digitization (ICE)	T4.3 FIT4Finance - Phase II - Advanced Digital Transformation #3 - Finance (AICAR)	T5.3 FIT Content Development (CNIPMMR)	T6.3 FIT EDIH Monitoring and Evaluation



TAL.

ACT AV



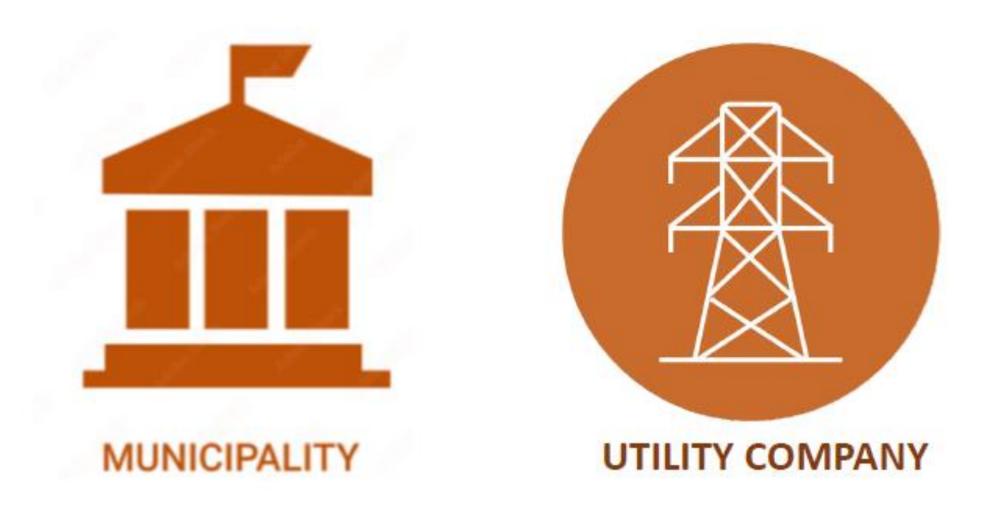
# FIT EDIH => Services for Public Service Organisations



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## FIT EDIH => Services for Public Administrations





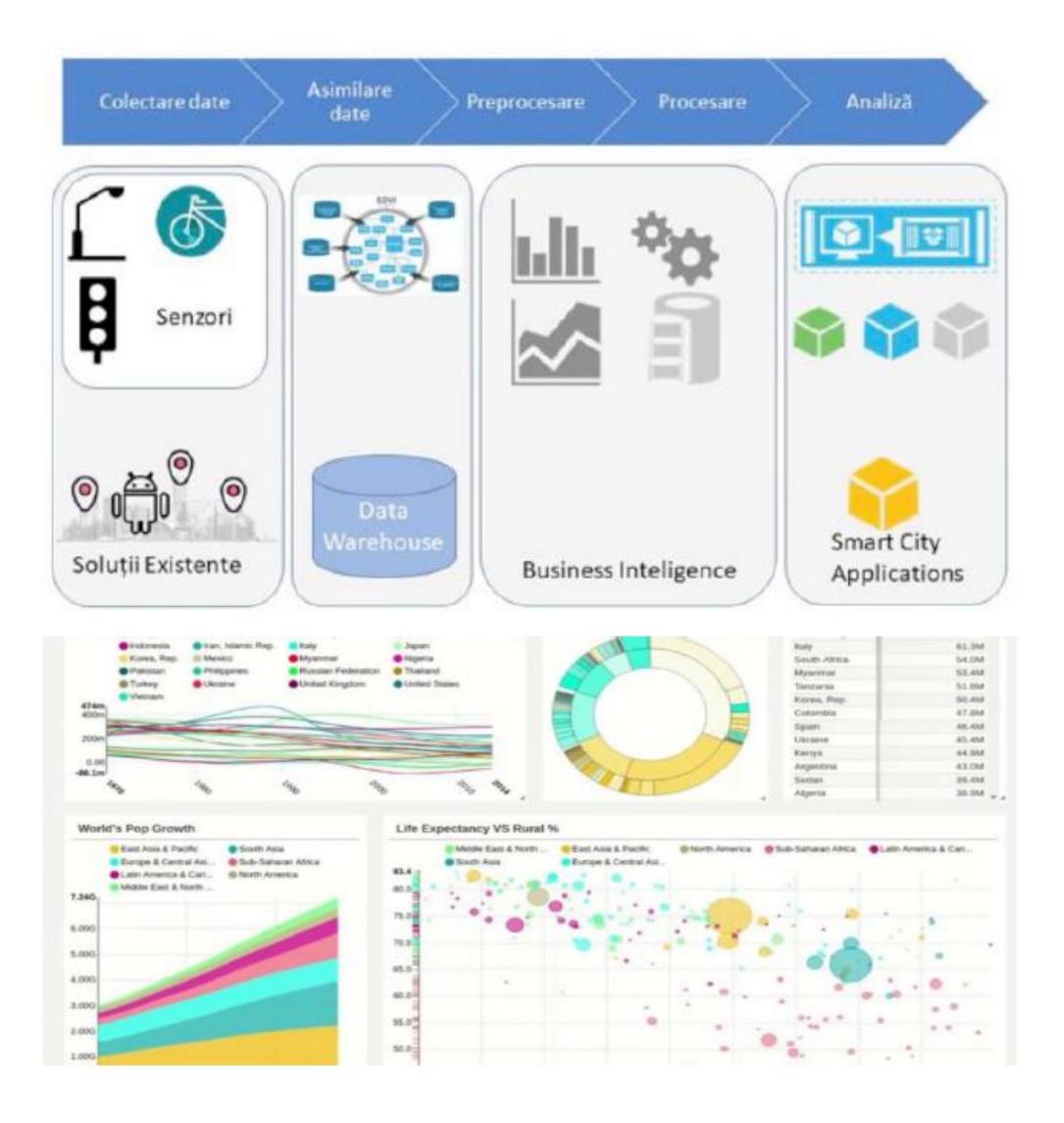


[BASIC]: 1.Connectivity infrastructures in Smart Clties (e-governance, data-driven decision models, IoT, sensors, 5G connectivity, interoperability and open data)
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TAL

ACITAVIC

## Smart City Testing and Experimentation Infrastructure





## **Smart City Sensors**

#### Smart Environment PRO



#### Smart Agriculture XTREME



#### Ambient Control



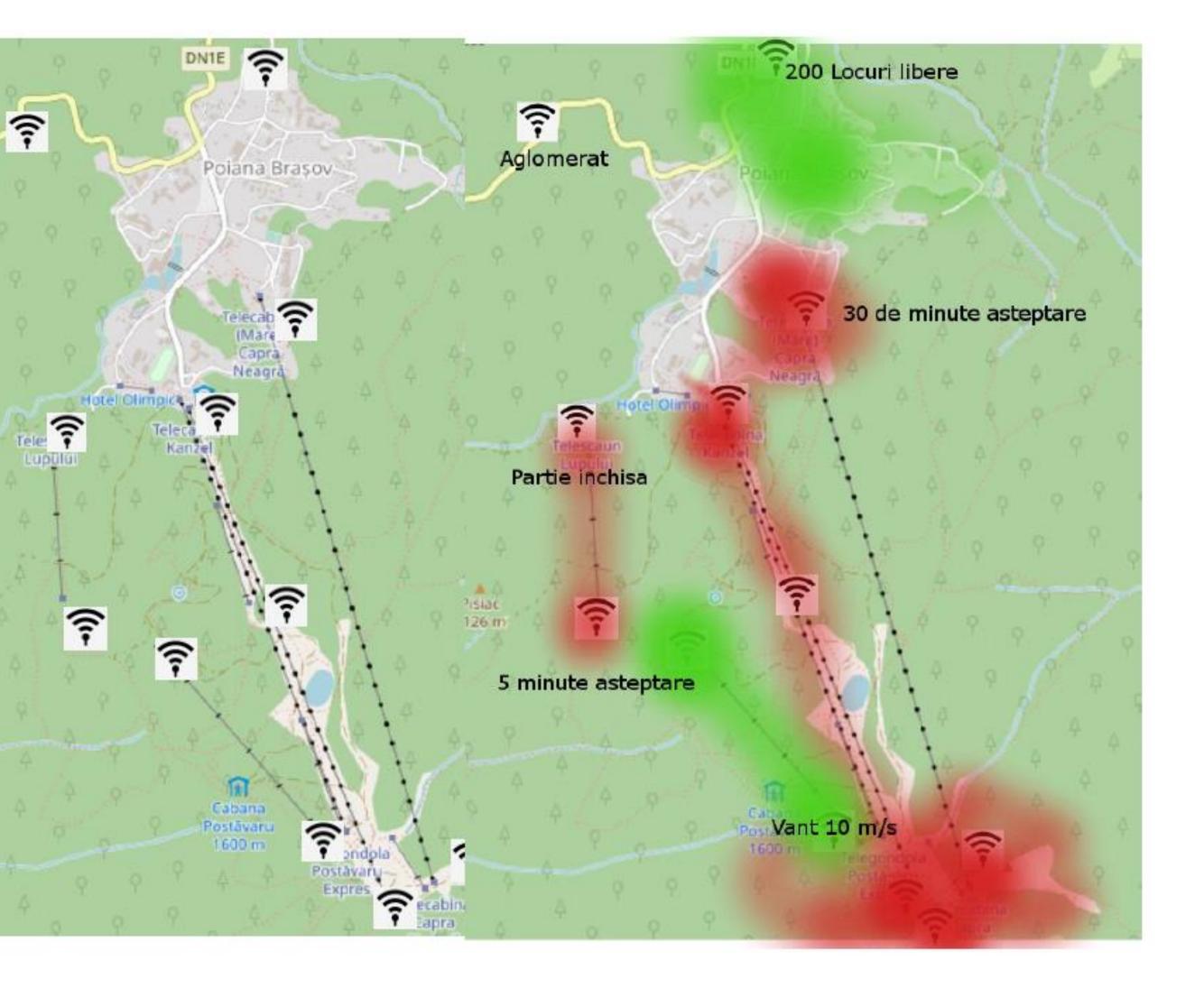
#### Smart Cities PRO



Poiana Brasov	Stare partie	Persoane	Temperatu	Timp asteptare
Bradul				
0 cm	Închis	0	10	10
<u>Kanzel</u>				
2 cm	Închis	100		2
<u>Lupului</u>				
2 cm	Închis	100		30
<u>Sulinar</u>				
2 cm	Închis	20		60
<u>Ruia</u>				
2 cm	Închis	1		20
Drumul F	Rosu			
2 cm	Închis	20		20
<u>Stadion</u>				
2 cm	Închis			20
Subtelef	eric			
0 cm	Închis	10		10
Sub Telet	feric Icpat			
0 cm	Închis	10		10



## Smart City Pilot Project – Poiana Brasov Ski Resort



## FIT EDIH - Services for Public Administrations





HOSPITAL | CLINIC



 [BASIC]: 1. Information Management Systems for Healthcare (EHRs, CRM and UC -Data Security in Healthcare) 2. Live chats, social networks and chatbots to communicate with clients / Remote Collaboration Tools (mHealth, Telemedicine)
 [ADVANCED]: 3. Automation and AI (Medical Devices, Personalized Medicine, Smart Diagnosis, Digital Twin)

#### TAL

NOTAVE

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## E-Health Testing and Exeperimentation Infrastructure

## **E-health Sensors**



Snore



Temperature

ECG



Glucometer





Blood Pressure



SPO2 BLE

Body Position

An Sat





GSR



Airflow.





## Partnering with EIT ecosystem for Digital Skills











# Thank you! Ionut.tata@iceberg.plus

## DIGITAL INNOVATION HUB

## 05. The experience of NordicEdge

(Norway) serving the Public Sector





### Trygve A. Meyer

Head of Cluster @Nordicedge and partner in EDIH Oceanopolis, Norway



# OCEANOPOLIS

NORWEGIAN NATIONAL EUROPEAN DIGITAL INNOVATION HUB







# EUROPEAN DIGITAL INNOVATION HUB OCEANOPOLIS

National European Digital Innovation Hub empowering Digital Transformation in Ocean-Based Industries and coastal regions.













# 356 municipalities - ranging from Oslo to Utsira



### 630 000 people in region

### 296 people on island



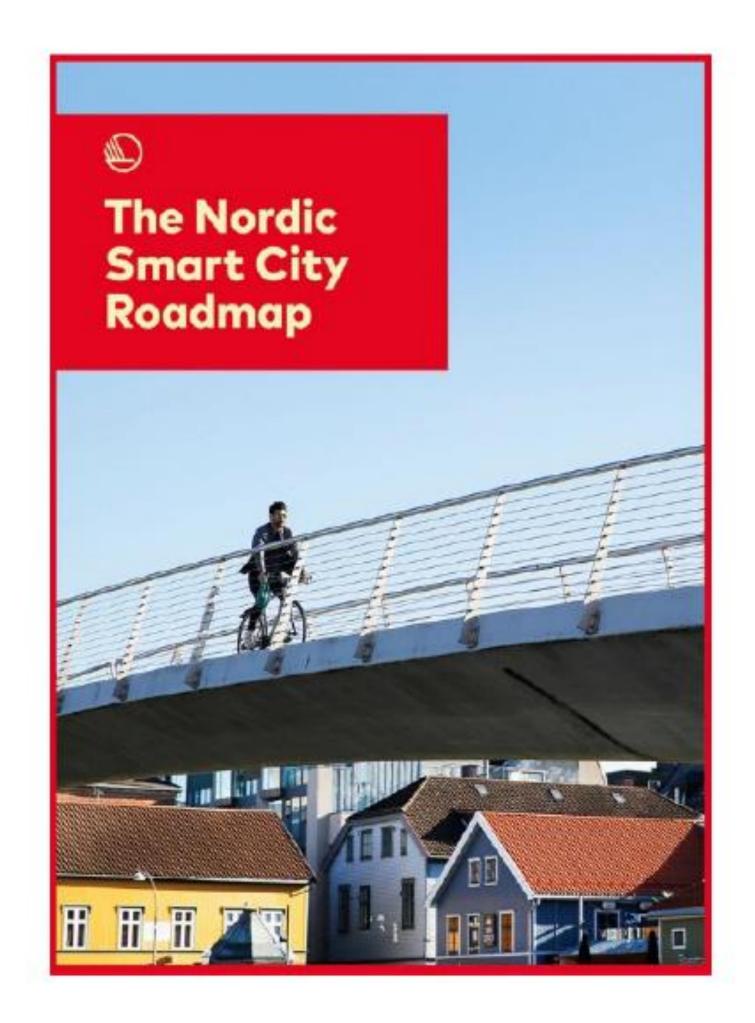


## Build the digitalisation activities on road maps...

**Roadmap for smart** and sustainable cities and communities in Norway

A guide for local and regional authorities developed by Design and Architecture Norway (DOGA), the Norwegian Smart City Network and Nordic Edge.





NO RDIC EDGE



## ... and on various programs we have developed

## Smart regions

## Agile piloting



## Municipal networks

## **Gnist innovation**







# Next appointments

### Next DIH-World webinars

22.11.2022	Regulations that affect the digitaliz
29. 11.2022	Service offering in Al: taxonomies and
December 2022	Ecosystem mapping and analysis
January 2023	DIH network building - best practic
February 2023	Introduction to Sustainability-driver
March 2023	Payment and pricing models

### DIH-World Community meeting in Bilbao: November 15 & 16, 2022



zation of companies

d best practices from the DIH4AI project

ces (in line with the training on networks creation) en Innovation Management (People, Planet, Profit)







