



DIHNET.EU

Europe's Network of Digital Innovation Hubs

A view on the future of the European DIH community

DIH Ecosystem building Event, Auvergne-Rhône-Alpes

27th of October 2021

Maurits Butter (TNO)

TNO innovation
for life

tecnalia Inspiring
Business



eu ROBOTICS

BLUMORPHO
Create value with all forms of innovation



Why a European DIH community?



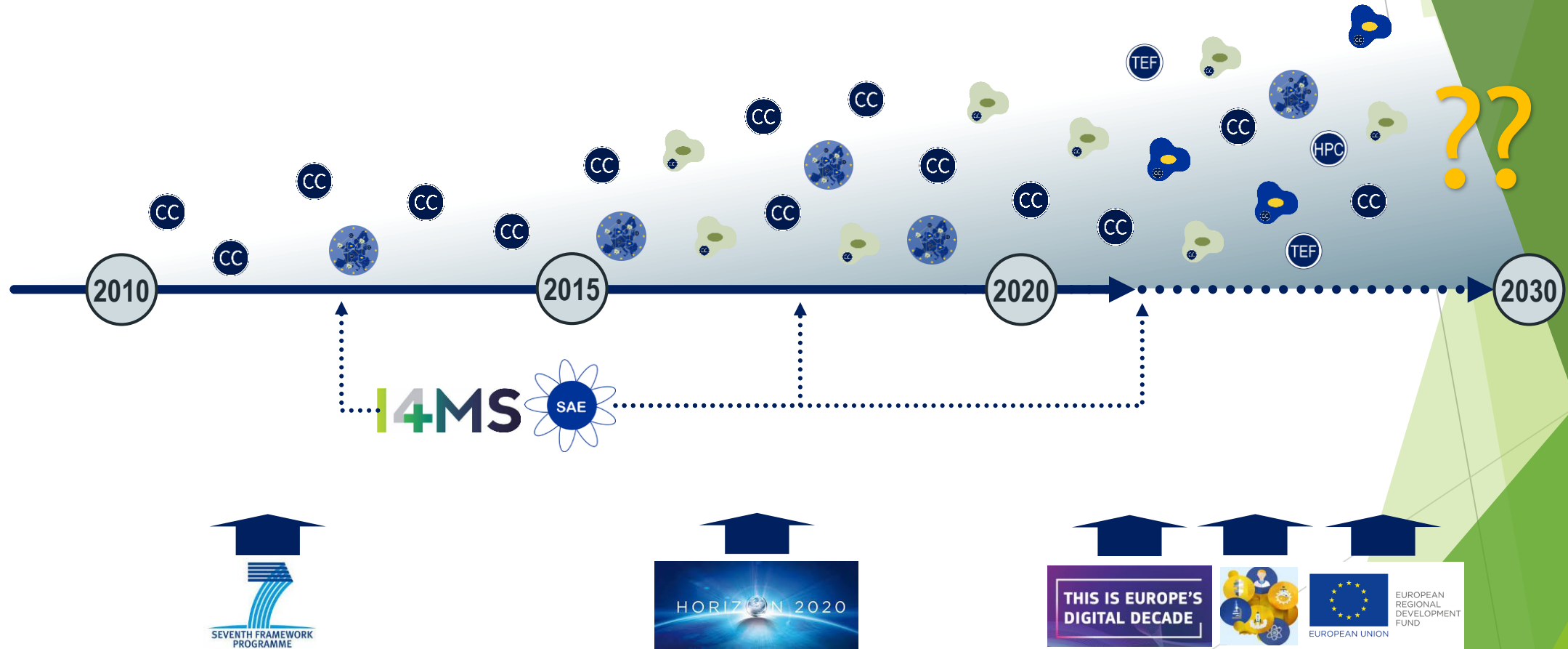
Project Europe: to create value for all



Regions & European networks collaborate



The evolution of DIH community over the years

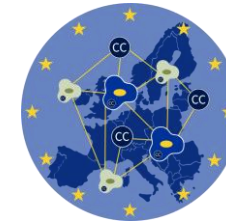
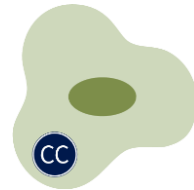


Developments in our community

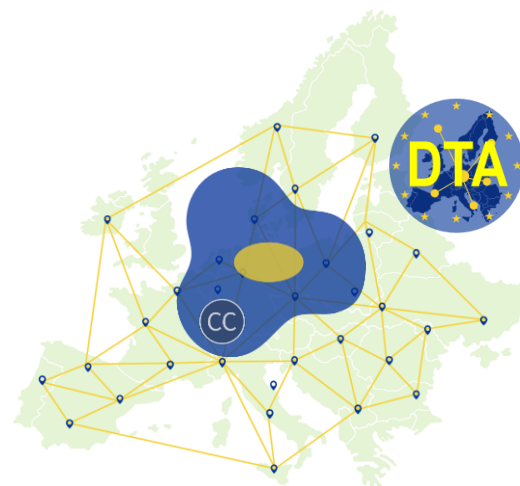
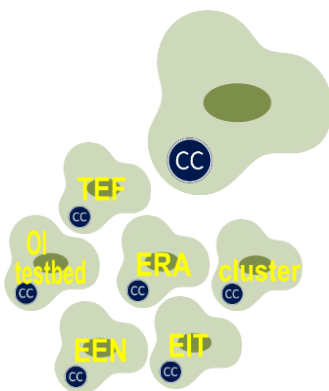
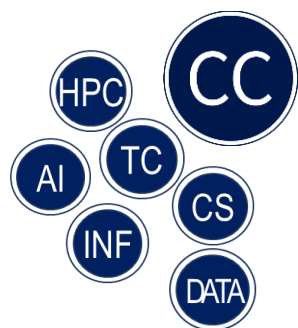
- ▶ **Advanced Digital technologies have become pivotal**
 - ▶ Competitiveness, greening, circular, resilience, the pandemic, social inclusion
- ▶ **Expanding “hubs” to other policies**
 - ▶ DIGITAL, Horizon Europe, ERDF, national/regional policies, SmartSpecialisation, ATI
- ▶ **From manufacturing to other sectors**
 - ▶ Agro, chemical, bio, energy, transport, public, defence
- ▶ **DIHs in all kind of shapes**
 - ▶ ERA-hubs, EIT innovation hubs, Open Innovation Testbeds, Technology Centres, EEN/clusters, Technology Infrastructure Hubs
- ▶ **From EU policy towards regions**
 - ▶ Key in national policies and regional policies

!!!!European Digital Innovation Hubs!!!!

From four to many building blocks in the community



But it is getting busy!

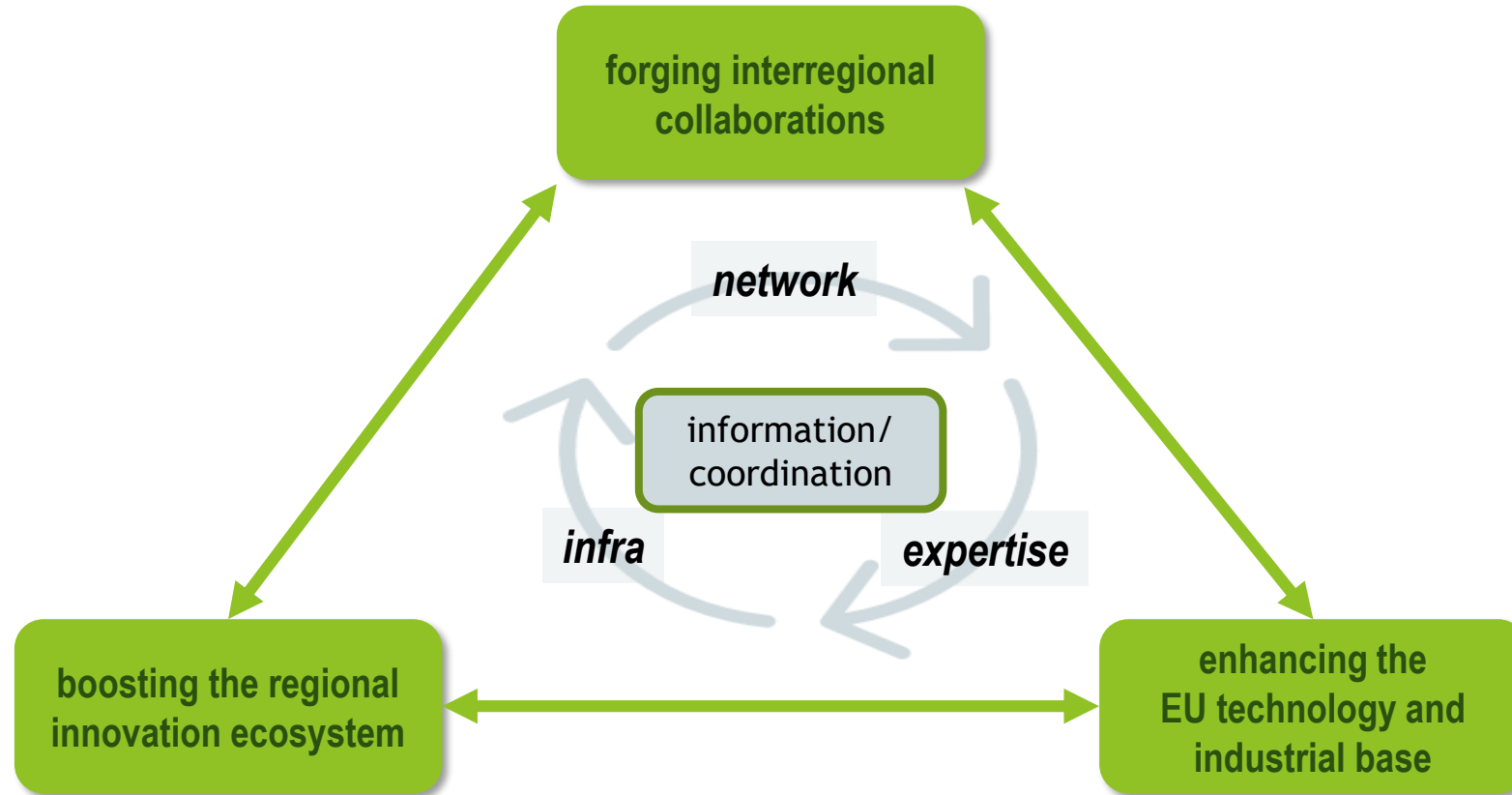


Challenges for the future

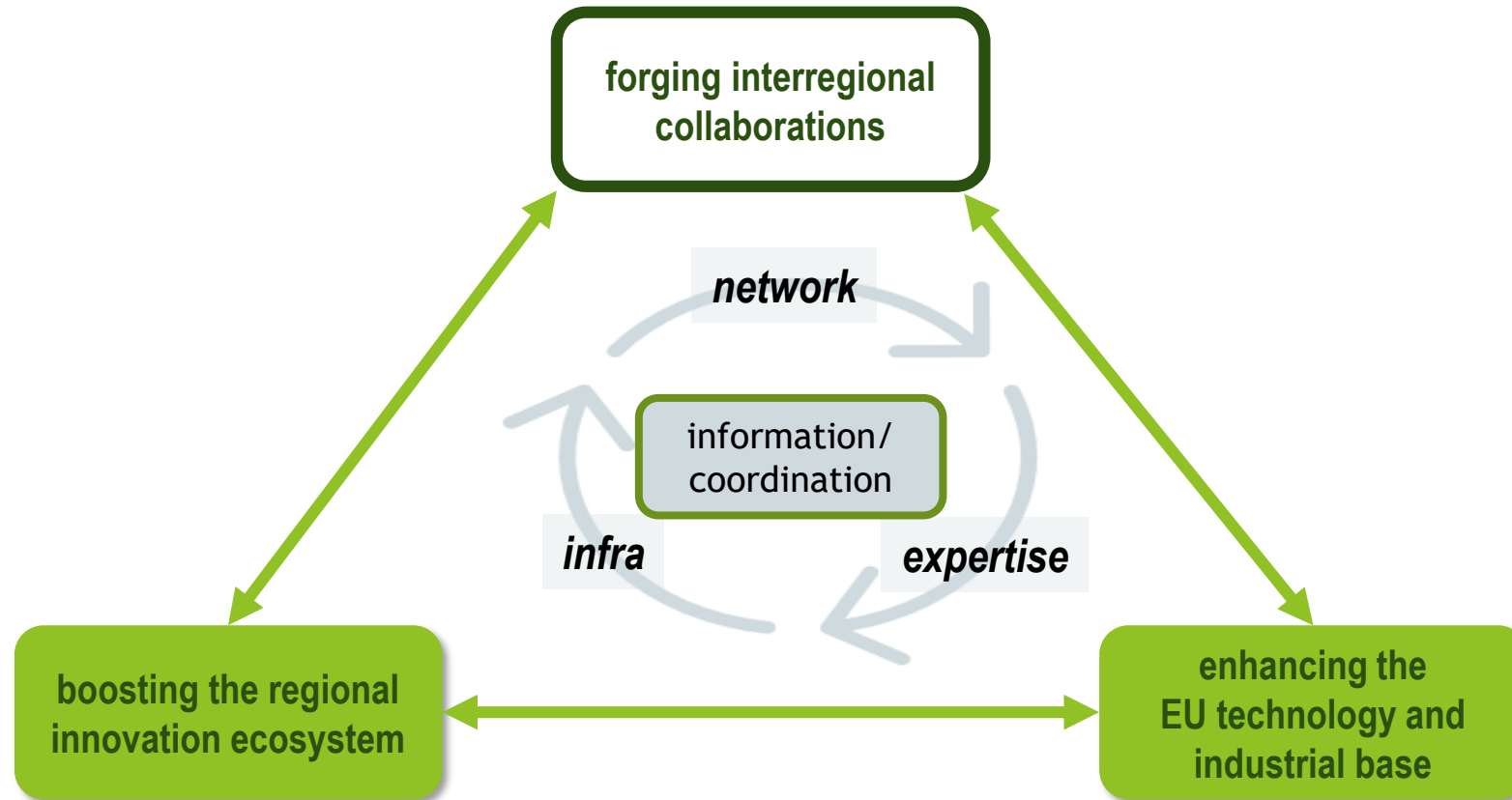
- ▶ Reducing **overlap**, increasing synergies and aligning efforts
- ▶ Getting “**private**” involved, including industry and finance
- ▶ Organising high quality, relevant **information**
- ▶ Creating viable **interregional collaborations** connecting the regions in Europe

Our vision on the future of the European DIH community

Main functions in the community



Main functions in the community



Alignment of the regions and Europe

regional

orchestrate **regional** collaboration on innovation

access to **regional** RDI capacities/capabilities

conduct applied **research**

boost regional **use of advanced technologies**

transform **research** into application



European

orchestrate **EU collaboration** on innovation







access to **EU** RDI capacities/capabilities

forge **EU collaboration** on critical technologies

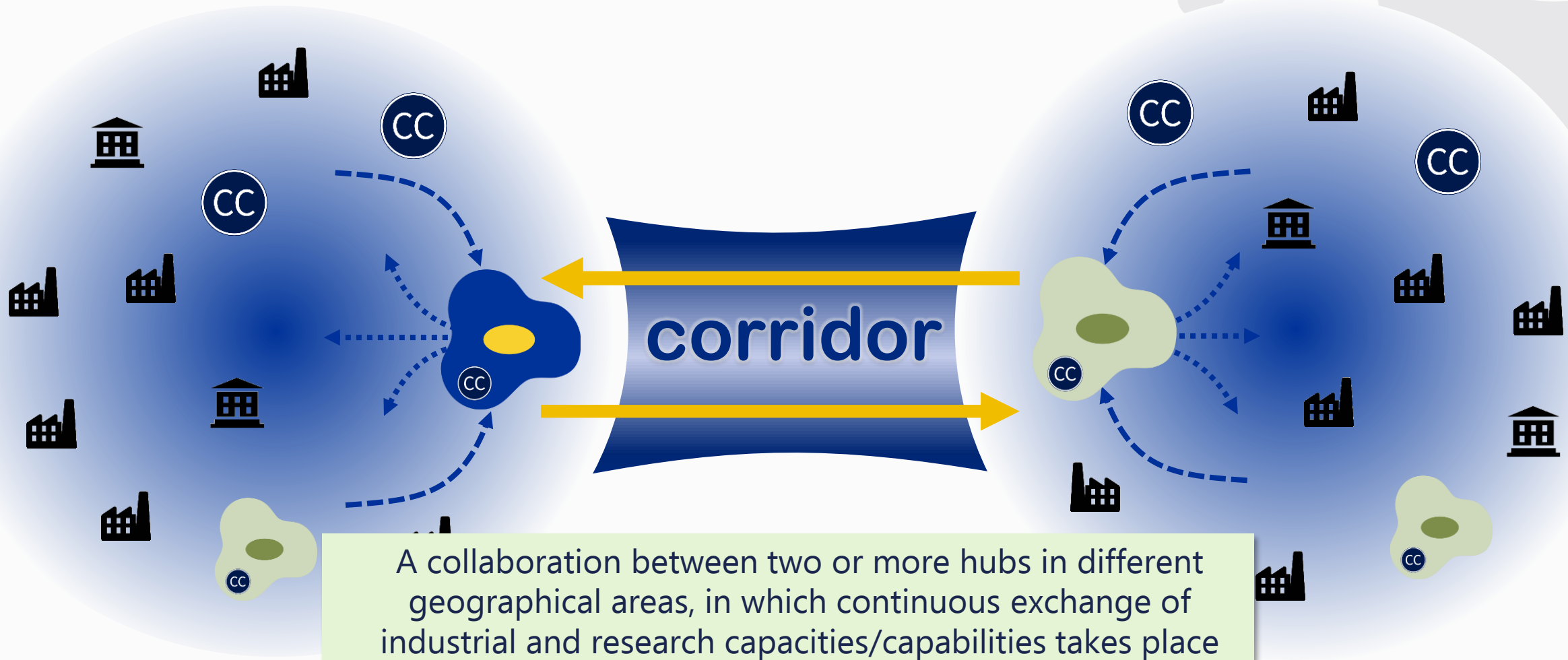
support **access to markets** in Europe

create **European** innovation **strategies**

The future EU DIH community is about: *Demarcating and aligning responsibilities*

	<i>Forging collaboration</i>	<i>Enhancing the base</i>	<i>Boosting the region</i>	<i>Information & coordination</i>
	regional brokerage	aligning regional RDI	coordinating regional capacities	coordinating regional information
	offering capacities	transforming research into business	connecting industry-research	providing regional RDI information
	actual collaboration	conducting RDI	providing infra/expertise	regional RDI data collection
	coordination interregional collaborations	aligning EU RDI activities	connecting interregional capacities	EU RDI data collection
	brokering EU-capacities	connecting interregional expertise	access to experiences	make available data on RDI
	EU specific RDI strategies	EU RDI awareness creation	access to SOTA infra/expertise	coordinating RDI data collection

BOWI Creating Interregional Innovation Corridors!



A collaboration between two or more hubs in different geographical areas, in which continuous exchange of industrial and research capacities/capabilities takes place



The BOWI project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 873155

BOWI Five levels of Interregional Corridor collaboration

IC5 Synchronized

structural participation regional stakeholders, joined funding, synchronization of RDI, joined strategy/actions

IC4 Managed

institutionalised, aligned strategies, active scouting, EU-value chains, pro-active corridor activities

IC3 Structural

basic formalised structures, anticipatory capacity, pro-active industry/research projects, (limited) corridor activities

IC2 Responsive

(limited) preparation to respond, re-active, informal, part of an EU-project

IC1 Casual

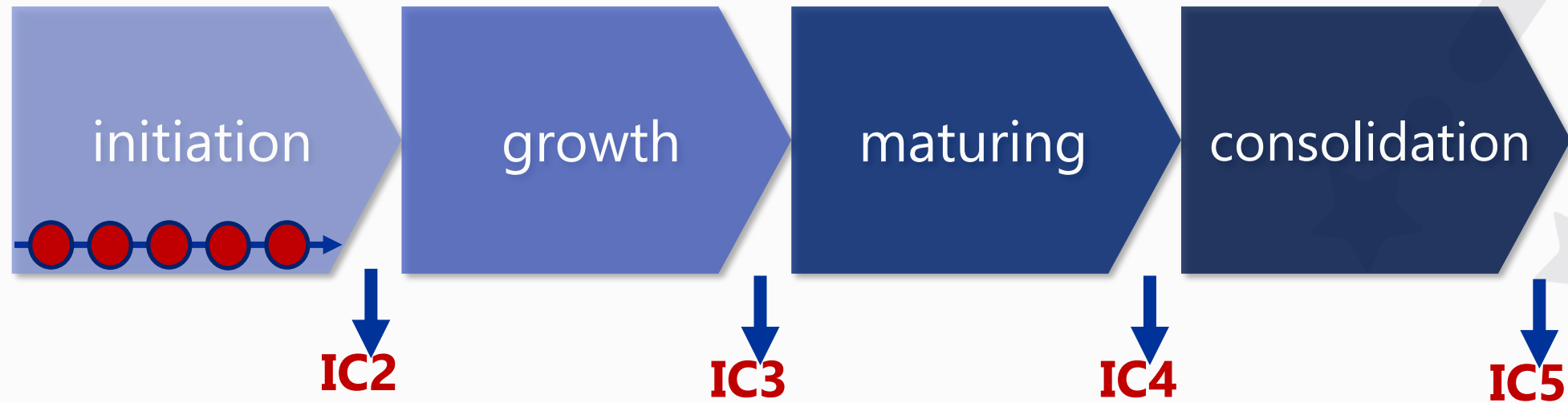
ad-hoc, opportunistic, informal, individual contacts, sharing knowledge



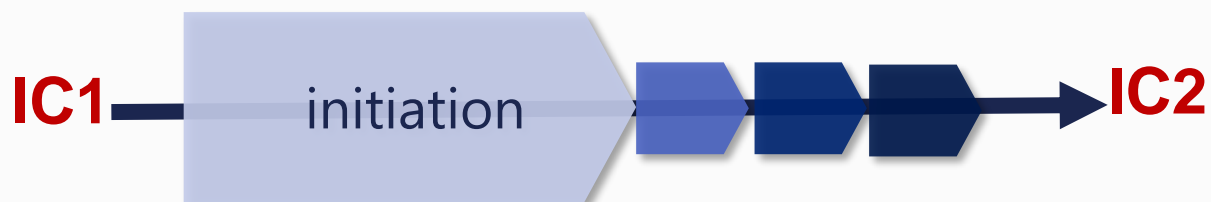
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www.bowi-network.eu

Four stages to develop full corridors

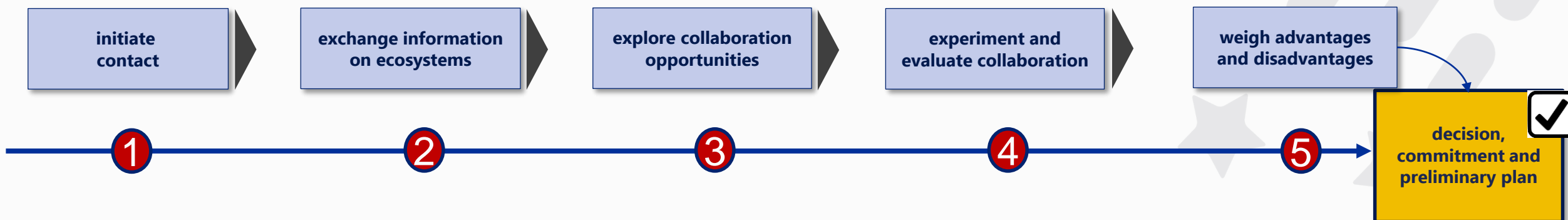


Phase 1: Initiation towards a critical mass



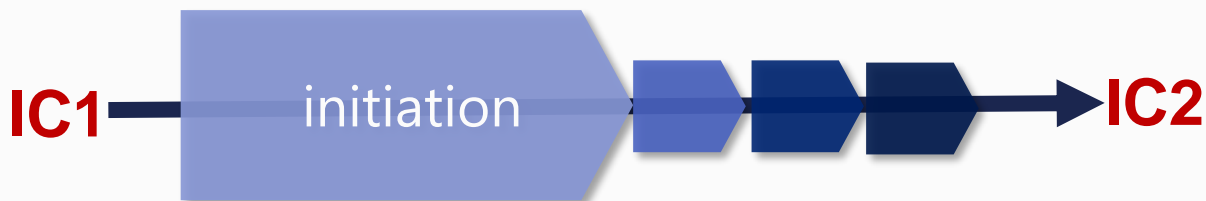
Objective

A critical mass of collaboration, with a committed view and plan on the future development



Tools for the steps in phase 1: Initiation

Overview of tools that can be used to support the activities in the steps in phase 1.



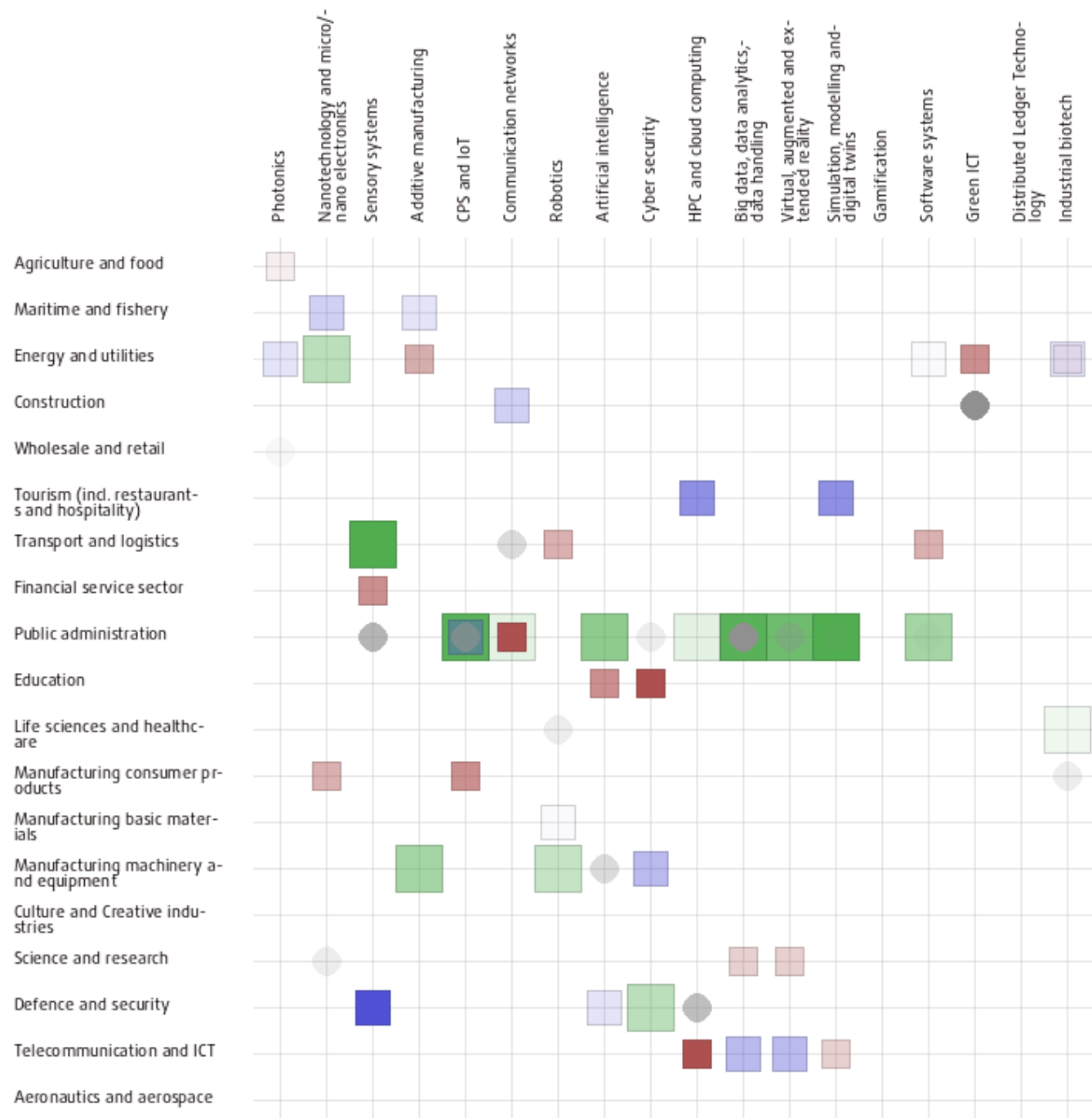
Heatmap: A way to profile the organisation

pEDIH West Bohemia (example) : Table of specialisation : Profile







SPECIALISATION	Photonics	Nanotechnology and micro/nano electronics	Sensory systems	Additive manufacturing	CPS and IoT	Communication networks	Robotics	Artificial intelligence	Cyber security	HPC and cloud computing	Big data, data analytics, data handling	Virtual, augmented and extended reality	Simulation, modelling and digital twins	Gamification	Software systems	Green ICT	Distributed Ledger Technology	Industrial biotech
Agriculture and food											JOINED							
Maritime and fishery		CAPACITY																
Energy and utilities		Spec: 03	Spec: 03	JOINED	CAPACITY			Spec: 03	Spec: 03	CAPACITY	Spec: 03		Spec: 03		Spec: 03			
Construction		CAPACITY	CAPACITY	SEEKING	CAPACITY			SEEKING		CAPACITY	JOINED	SEEKING	CAPACITY					
Wholesale and retail			JOINED		JOINED													
Tourism (incl. restaurants and hospitality)								SEEKING										
Transport and logistics			JOINED		Spec: 02	Spec: 02	SEEKING	Spec: 02	Spec: 02	CAPACITY	Spec: 02	Spec: 02	Spec: 02		Spec: 02			
Financial service sector																		
Public administration			CAPACITY		CAPACITY	JOINED		JOINED	JOINED	CAPACITY	JOINED		CAPACITY		JOINED			
Education																		
Life sciences and healthcare		Spec: 04	Spec: 04	Spec: 04	Spec: 04		JOINED	Spec: 04	SEEKING	CAPACITY	Spec: 04	Spec: 04	Spec: 04		Spec: 04			Spec: 04
Manufacturing consumer products		SEEKING		JOINED	SEEKING		SEEKING	JOINED	SEEKING			CAPACITY	CAPACITY					JOINED
Manufacturing basic materials		Spec: 05		Spec: 05			CAPACITY											JOINED
Manufacturing machinery and equipment		SEEKING	Spec: 01	Spec: 01	Spec: 01		Spec: 01	Spec: 01	CAPACITY		Spec: 01	Spec: 01	Spec: 01		Spec: 01			
Culture and Creative industries																		
Science and research	JOINED	JOINED	CAPACITY	CAPACITY	JOINED		JOINED	JOINED	CAPACITY	JOINED	JOINED	JOINED	CAPACITY					JOINED
Defence and security			JOINED		SEEKING	SEEKING		CAPACITY	CAPACITY	JOINED	JOINED	CAPACITY						
Telecommunication and ICT		JOINED	JOINED		SEEKING	JOINED	JOINED	CAPACITY	CAPACITY	JOINED	SEEKING							
Aeronautics and aerospace								JOINED	JOINED	JOINED	JOINED	JOINED						

● Areas where both nodes want to join efforts

martin.babuska@outlook.com



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So, concluding

- ▶ Limiting overlap and maximizing on synergies of existing initiatives, in a layered and demarcated approach
- ▶ Alignment of information collection, but with a distributed approach
- ▶ Strong interaction with private industries, actively involving commercial service providers and a European VC mechanism
- ▶ Active pursue and support of creating sustainable corridors to limit long-term collaborations
- ▶ *On the backbone of the EDIH network, but expanding its scope to other technologies*



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Thank you!

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 **BLUMORPHO**
Create value with all forms of innovation

