



Cyber
Security
for Europe
—

CyberSec4Europe

Vasileios Gkioulos, Ph.D.

Norwegian University of Science & Technology

Department of Information Security and Communication Technology

Center for Cyber and Information Security (CCIS)

Critical Infrastructure Security and Resilience group

2nd CYBERWISER workshop



CyberSec4Europe is funded by the
European Union under the H2020
Programme

Grant Agreement No. 830929

Working Together Towards A Common Objective



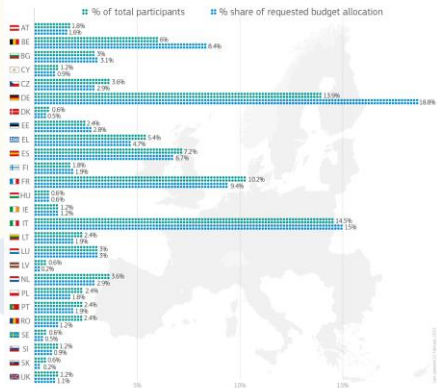
Cybersecurity Horizon 2020 pilot projects

to prepare a European Cybersecurity Competence Network & contribute to the European cybersecurity industrial strategy

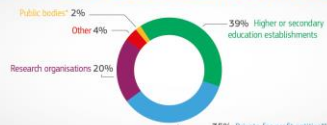
More than **€63.5 million** invested in **4 projects**

CONCORDIA	Cyber Security for Europe	ECH	SPARTA
Partners: 46 EU Member States involved: 14	Partners: 43 EU Member States involved: 20	Partners: 30 EU Member States involved: 15	Partners: 44 EU Member States involved: 14
Key words: SME, Enterprise ecosystem, Ecosystem for education, State research aspects of security, Virtual labs and services, Threat Intelligence for Europe, CSIG Clearing House for Europe, AI for cybersecurity, Post-Quantum cryptography	Key words: Cybersecurity for citizens, Application users, Research Governance, Cyber Range, Cybersecurity certification, Training in security	Key words: Research of Cybersecurity services, Cyber Range, Cybersecurity certification, Cyber Skills Framework, Cybersecurity certification, Cybersecurity early warning	Key words: Research Governance, Cybersecurity skills, Cybersecurity certification, Community engagement, International cooperation, Strategic Autonomy

More than **160 partners** from **26 EU Member States**



diverse cybersecurity ecosystem



A European network of cybersecurity centres of excellence

Changing Europe' cybersecurity research and innovation landscape



Who Are CyberSec4Europe?

43 partners in 22 countries

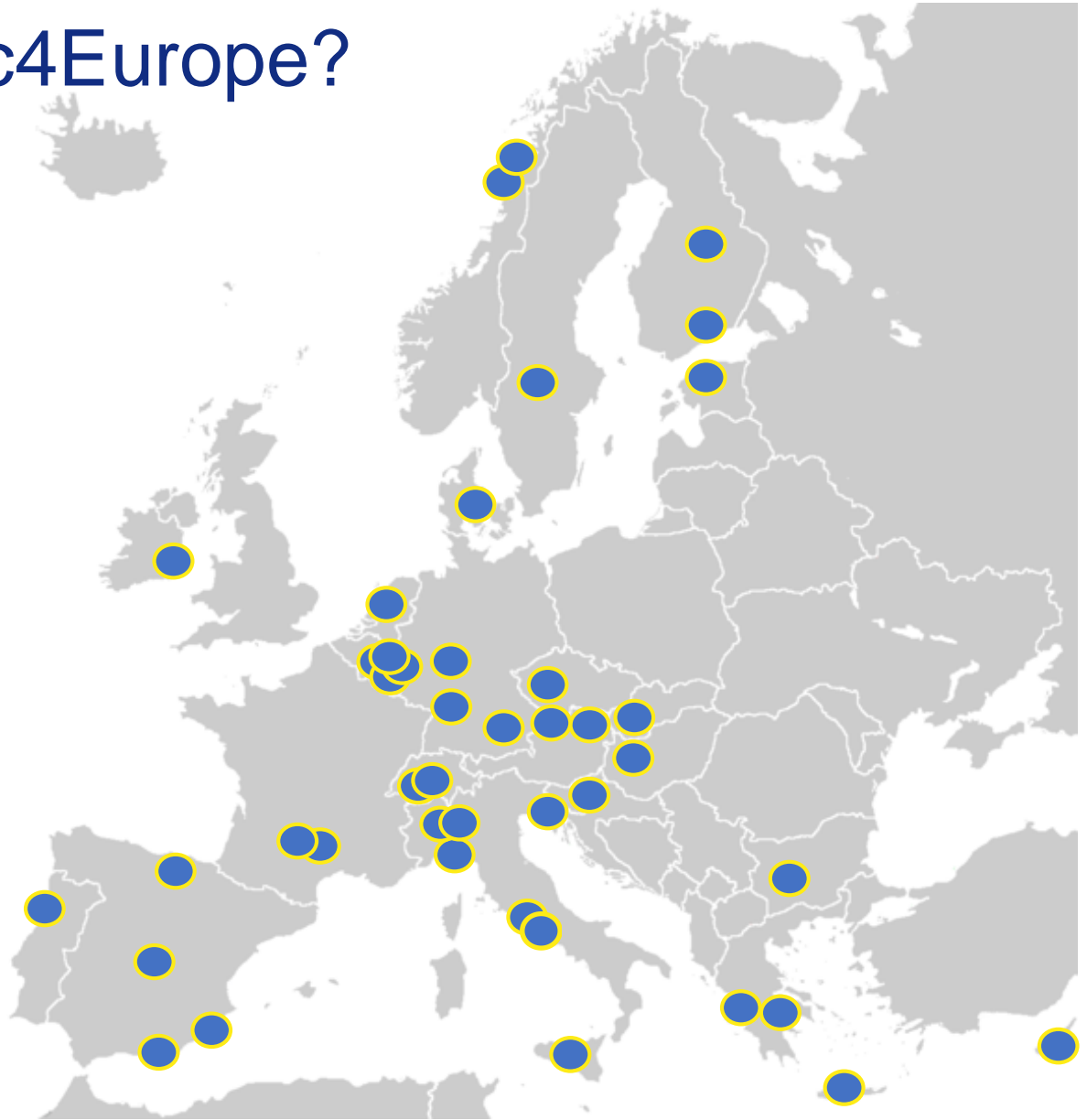
Centres of Excellence /
Universities / Research
Centres / SMEs

26 ECSO members
involved in 6 ECSO
Working Groups

Experience from over 100
cybersecurity projects in
14 key cyber domains

11 technology/ application
elements and coverage of
nine vertical sectors

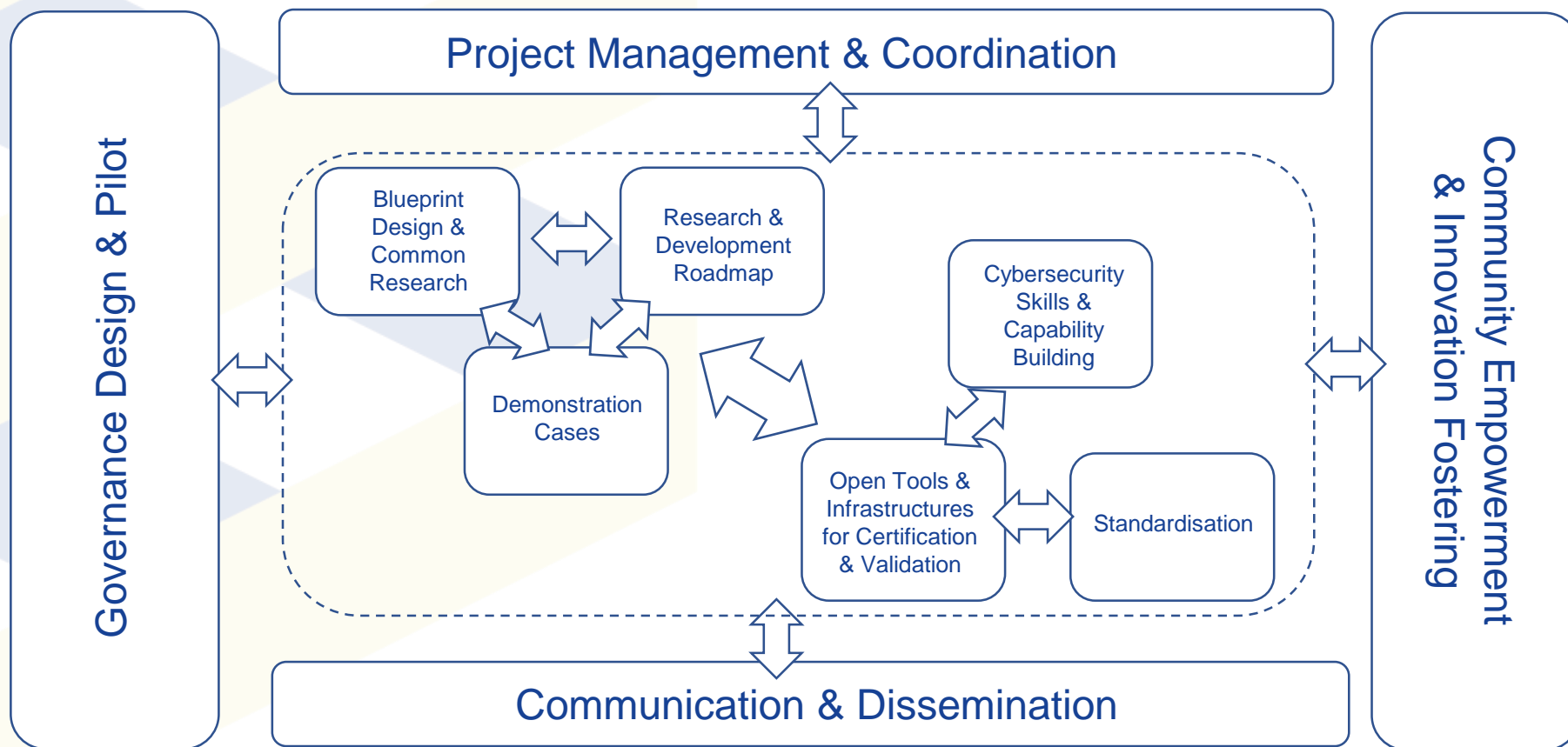
Funding period:
02/2019 – 07/2022



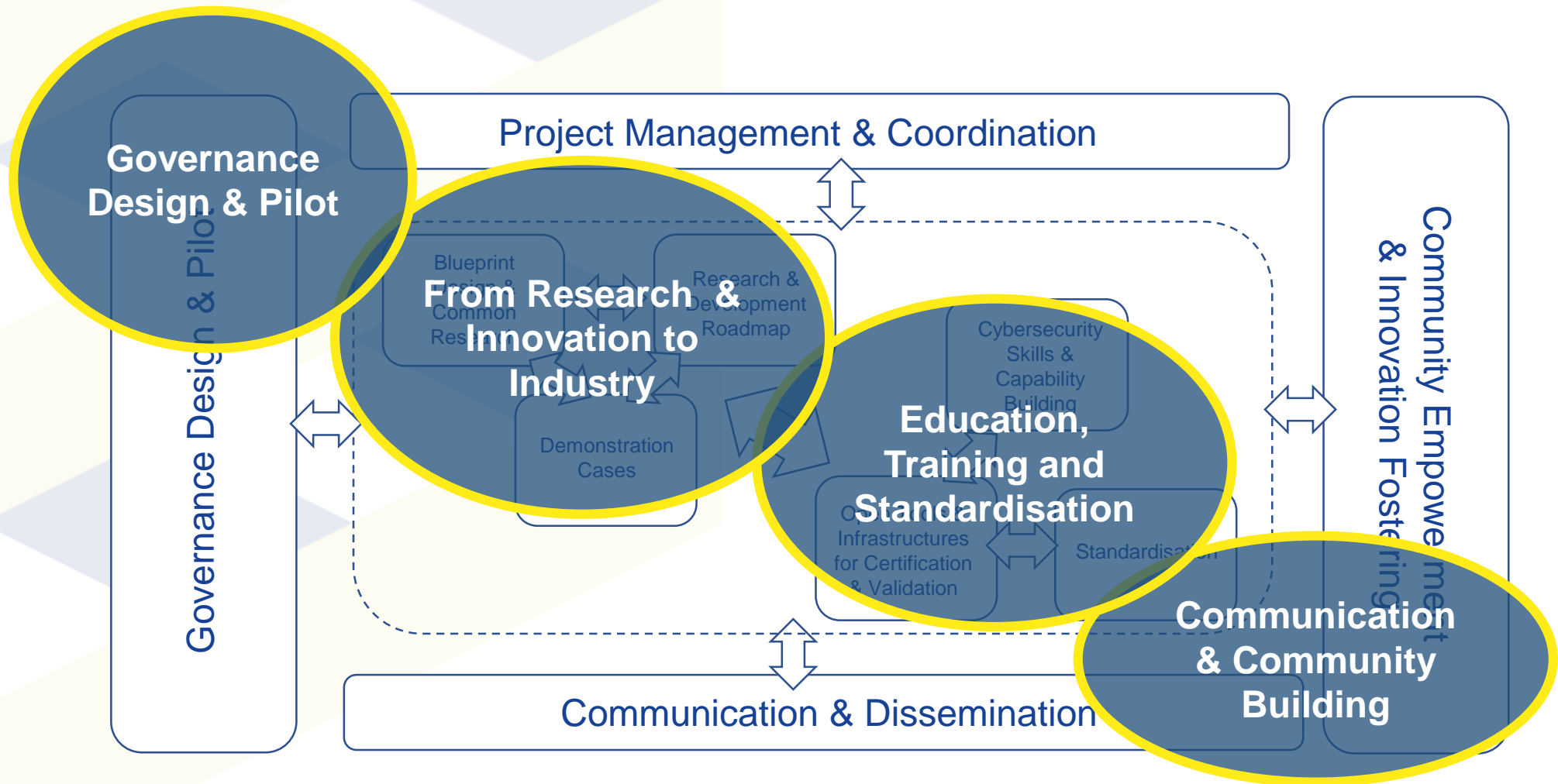
Who Are CyberSec4Europe?

Cybersecurity Expertise	KAU	UMU	AIT	FORTH	JAMK	POLITO	UCY	UMA	UNITN	UPRC	DTU	UM	NEC	CTI	SINTEF	KUL	UNILU	TUD	NTNU	CYB	ATOS	IBM	TDL	UPS-IRIT	
Assurance, Audit, and Certification		X			X							X			X				X		X			X	
Cryptology			X				X				X		X	X				X	X	X	X	X	X	X	
Data Security and Privacy	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Education and Training	X	X	X	X	X	X	X	X	X	X	X	X		X		X		X	X					X	X
Operational Incident Handling and Digital Forensics					X			X				X						X	X		X			X	
Human Aspects	X								X							X		X	X					X	
Identity and Access Management (IAM)	X	X	X	X	X	X	X	X	X	X		X		X	X	X		X	X	X	X	X	X	X	X
Security Management and Governance	X	X	X		X				X	X		X		X	X	X		X	X	X	X	X	X	X	X
Network and Distributed Systems		X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X		X	X	X	X	X
Software and Hardware Security Engineering			X	X	X	X	X	X	X		X		X	X	X	X	X	X	X				X		X
Security Measurements	X	X	X		X	X			X					X		X		X	X	X	X	X			X
Technology and Legal Aspects	X		X	X		X	X	X				X		X				X	X		X		X		X
Theoretical Foundations of Security Analysis and Design			X			X		X			X			X			X	X	X	X			X		X
Trust Management, Assurance, and Accountability		X			X	X		X		X	X			X	X	X					X		X		X

Piloting a Competence Network



Piloting a Competence Network



Demonstration Cases by Industrial Sectors

Finance

- Incident reporting
- PSD2 / GDPR issues

Health

- Medical data exchange

Smart Cities

- Citizen participation/e-Government
- Critical infrastructures
- Education

Transport

- Maritime (port critical infrastructure)
- Supply chain assurance

Boost the success of businesses and protect the rights of citizens in the EU.

- Common Framework Design
- Research and Integration on Cybersecurity Enablers and underlying Technologies
- Software Development Lifecycle
- Security Intelligence
- Adaptive Security
- Usable security
- Regulatory sources for citizen-friendly goals
- Conformity, Validation, and Certification
- Continuous Scouting
- Impact on Society

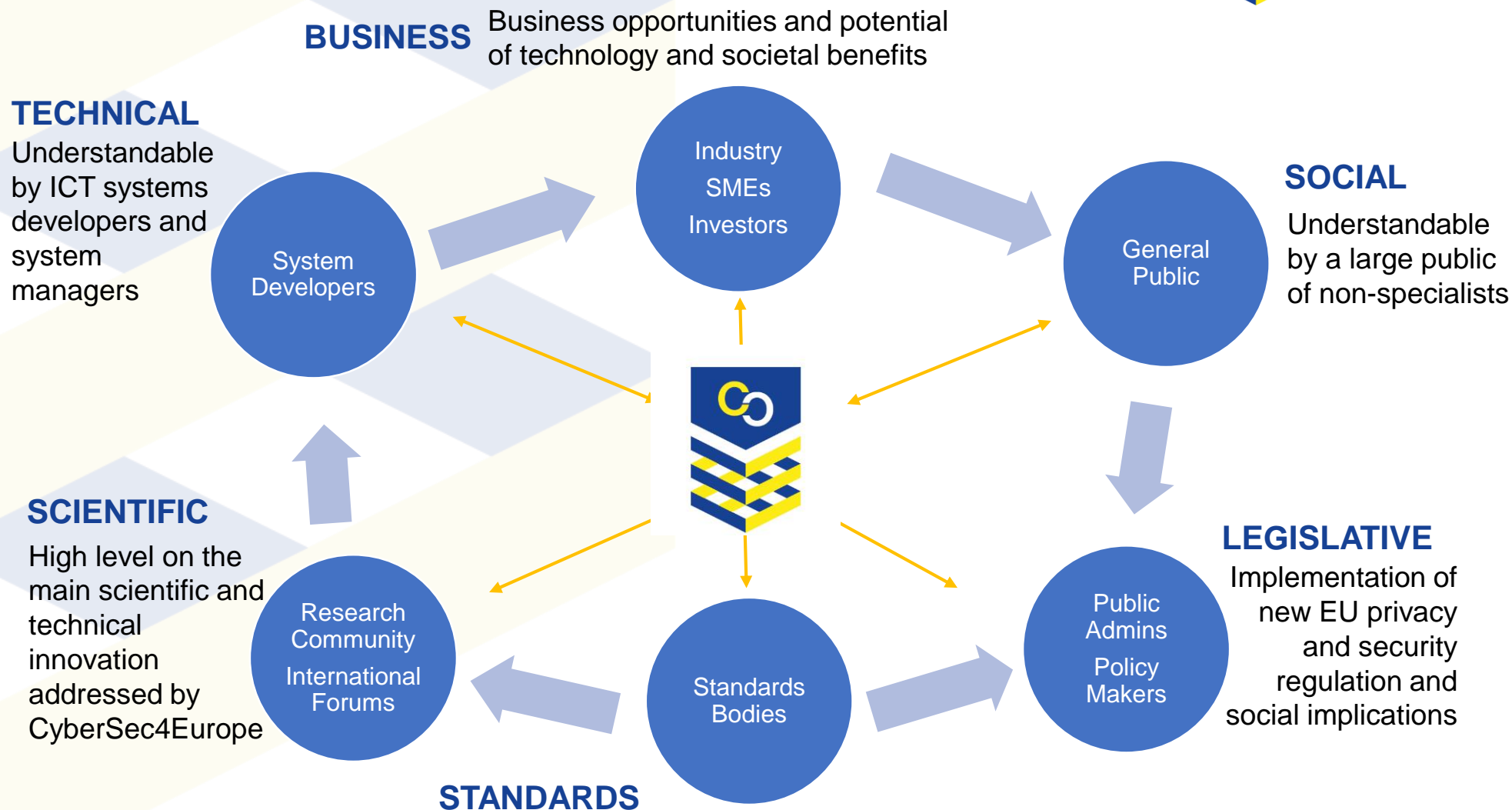
- Task 3.10: Impact on Society

- This task will be devoted to analyse and identify efficient measures and methods for the continuous enhancement of societal security awareness, which should be held regularly to ensure that the staff is knowledgeable regarding the up-to-date security solutions, referring to private usage of digital technologies, human aspects of information security, professional practice and competence-development, governance, management and achievement of results

- Task 9.4: Raising security awareness

- This task will be devoted to analyse and identify efficient measures and methods for the continuous enhancement of societal security awareness, to ensure that the staff is knowledgeable regarding the up-to-date security solutions, referring to private usage of digital technologies, human aspects of information security, professional practice and competence-development, governance, management and achievement of results. One essential target group is SMEs with focus on the potentially serious cybersecurity problems that these SMEs may face and generate for a whole supply chain.

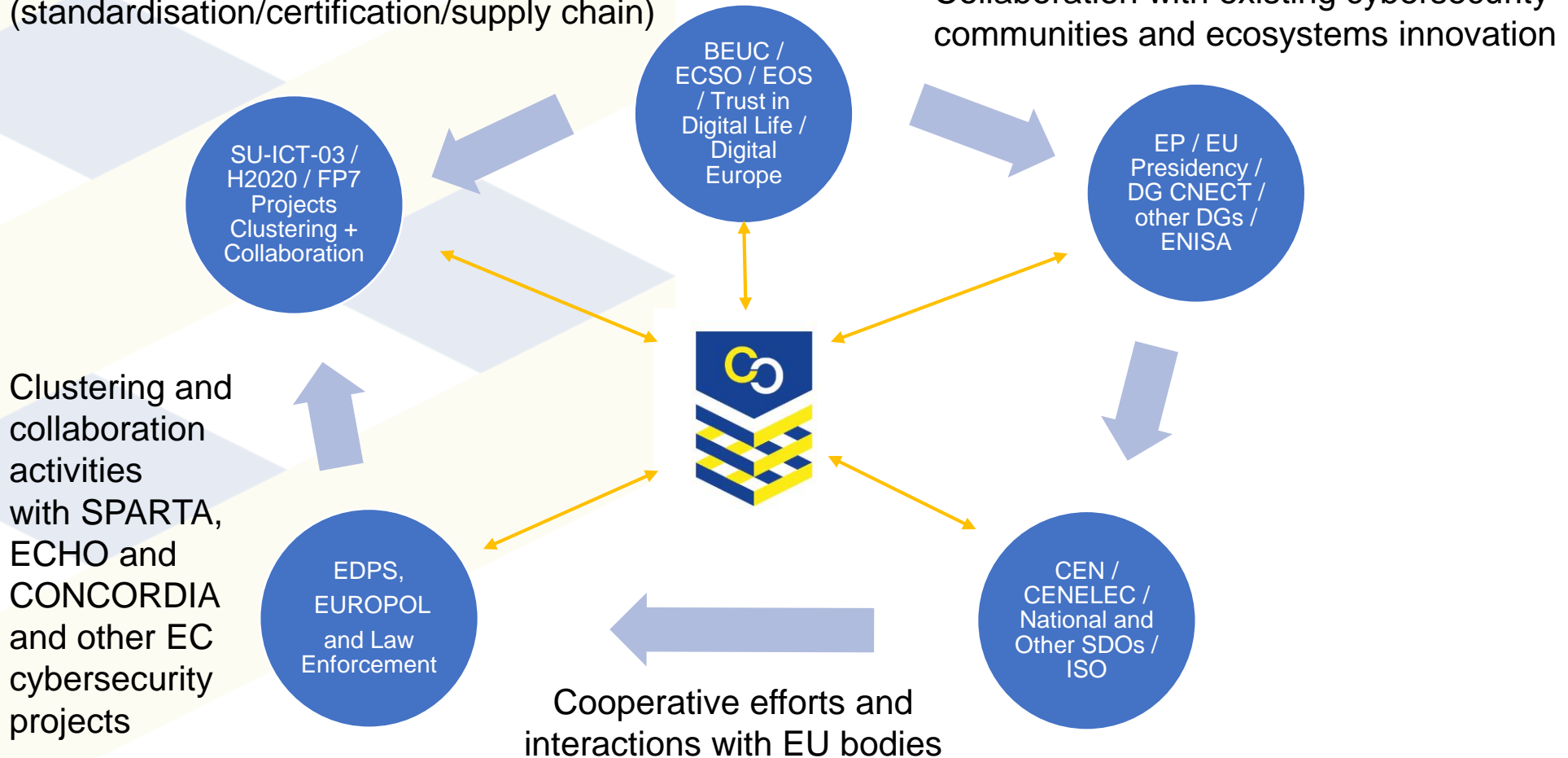
Cybersecurity Stakeholders



Community Empowerment and Innovation Fostering

Close working relationship with ECSO WG1 (standardisation/certification/supply chain)

Collaboration with existing cybersecurity communities and ecosystems innovation





Cyber
Security
for Europe
—

Thank you

Vasileios Gkioulos, Ph.D.
Norwegian University of Science & Technology
Department of Information Security and Communication Technology
Center for Cyber and Information Security (CCIS)
Critical Infrastructure Security and Resilience group