

**Cyber  
Security  
for Europe**

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**EaP connect II CyberSecurity Workshop**  
9-10 February 2022

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**Pierre-Henri Cros**



CyberSec4Europe is funded by the  
European Union under the H2020  
Programme

Grant Agreement No. 830929

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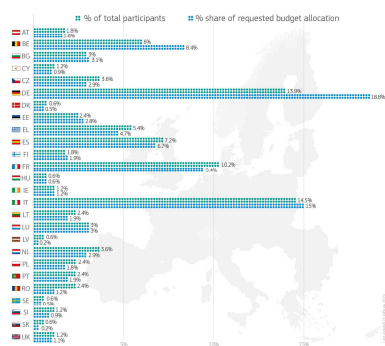
## Cybersecurity Horizon 2020 pilot projects

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

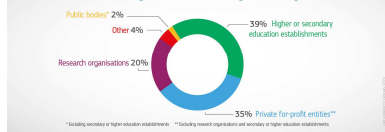
More than **€63.5 million** invested in **4 projects**

<b>CONCORDIA</b> Partners: 46 EU Member States involved: 14 Key words: SMEs, training, education, European for education, Security, resilience, digital skills and innovation, Youth, leadership for Europe, Skills, leadership for Europe, All for cybersecurity, Trust, Quantum, cybersecurity	<b>Cyber Security for citizens</b> Partners: 43 EU Member States involved: 20 Key words: Cybersecurity for citizens, Application cases, Research, Science, Cyber Range, Cybersecurity certification, Training in security	<b>ECH</b> Partners: 30 EU Member States involved: 15 Key words: Institute of Cybersecurity centres, Cyber Range, Cybersecurity demonstration cases, Cyber Skills Framework, Cybersecurity certification, Cybersecurity skills training	<b>SPARTA</b> Partners: 44 EU Member States involved: 14 Key words: Research, Science, Cybersecurity skills, Cybersecurity certification, Community engagement, International cooperation, Strategic Autonomy
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More than **160 partners** from **26 EU Member States**



### A diverse cybersecurity ecosystem



\* Including members of higher education establishments. \*\* Including research organisations and secondary or higher education establishments.



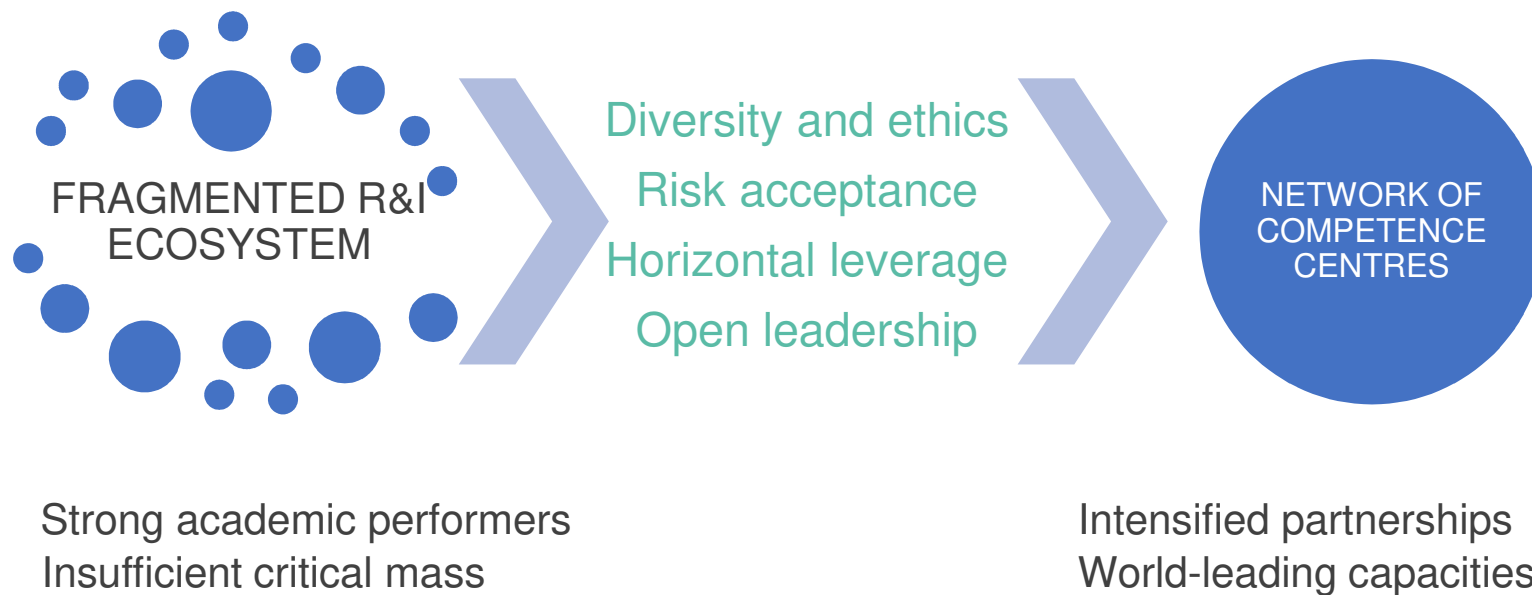
Source: Data European Commission, Directorate-General for Research and Innovation DG-RTD - Unit J5

# Working together towards a common objective



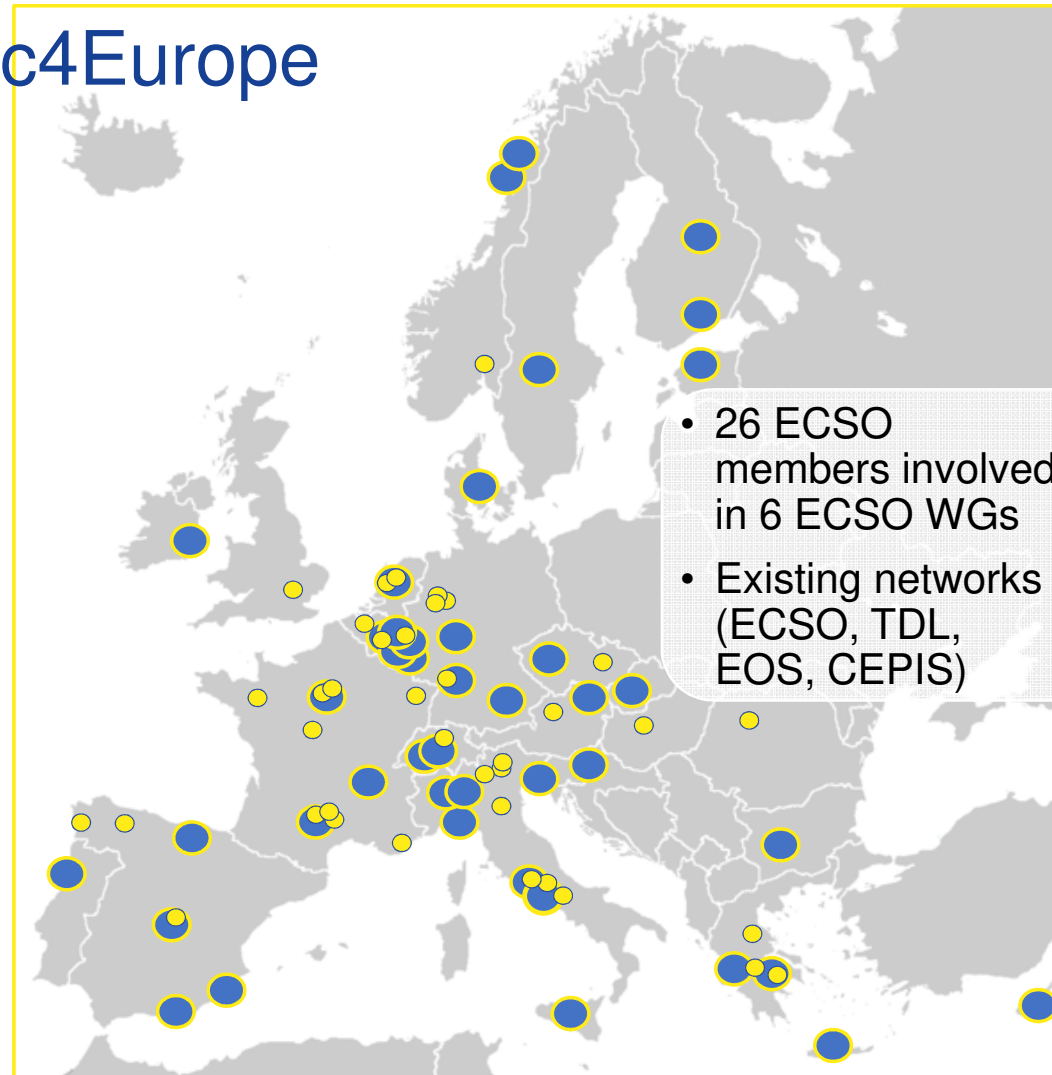
## A European network of cybersecurity centres of excellence

# Changing Europe' cybersecurity research and innovation landscape



# Who Are CyberSec4Europe

- Centres of Excellence / Universities / Research Centres / Enterprises (small and larger)
- 43 members in 22 countries
- 40 associates in 16 countries
- 11 technology/application elements and coverage of nine vertical sectors
- Experience from over 100 cybersecurity projects in 14 key cyber domains
- Funding period:  
02/2019 – 07/2022



● Partner      ● Associate

# Consortium Participants

## Project Lead

Goethe University Frankfurt (DE)

## WP Leaders

TU Delft (NL)

University of Murcia (ES)

FORTH (EL)

NEC Labs Europe (DE)

Trento University (IT)

Masaryk University Brno (CZ)

Cybernetica (EE)

Trust in Digital Life (BE)

Conceptivity (CH)

## Associates

Inclusion during the project

## Partners

ABI Lab (IT)

AIT (AT)

Archimede Solutions (CH)

ATOS Spain (ES)

Banco Bilbao Argentaria (ES)

University Porto (PT)

CNR (IT)

CTI “Diophantus” Patras (EL)

DAWEX (FR)

Denmark Technical University (DK)

Engineering Spa (IT)

Comune di Genova (IT)

Banque Populaire (FR)

International Cyber Investigation Training  
Academy (BG)

Intesa Sanpaolo (IT)

JAMK University of Applied Sciences (FI)

Karlstad University (SE)

KU Leuven (BE)

Norwegian University of Science and  
Technology (NO)

Open & Agile Smart Cities (BE)

Politecnico de Torino (IT)

Siemens AG (DE)

SINTEF (NO)

Time.Lex (BE)

University College Dublin (LERO) (IE)

University of Cyprus (CY)

University of Maribor (SI)

University of Malaga (ES)

University of Luxembourg (LU)

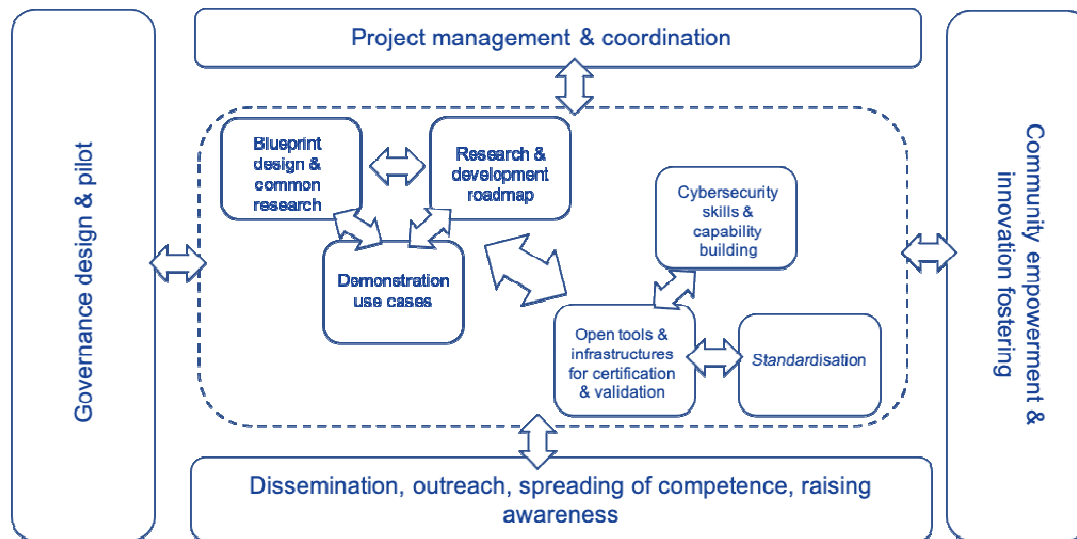
University of Piraeus (EL)

Université Paul Sabatier Toulouse  
(UPS-IRIT) (FR)

VaF (SK)

VTT (FI)

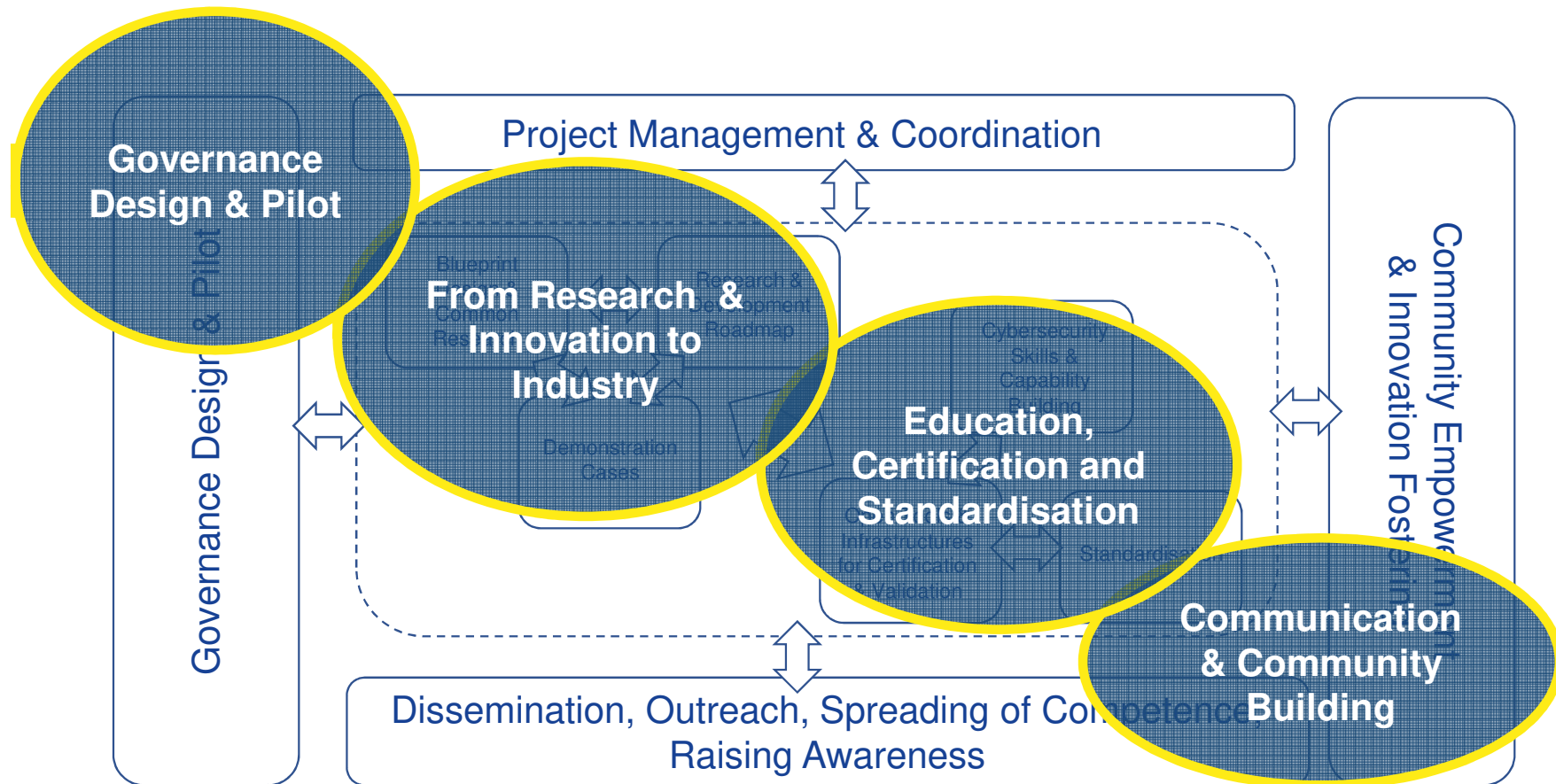
# What is CyberSec4Europe?



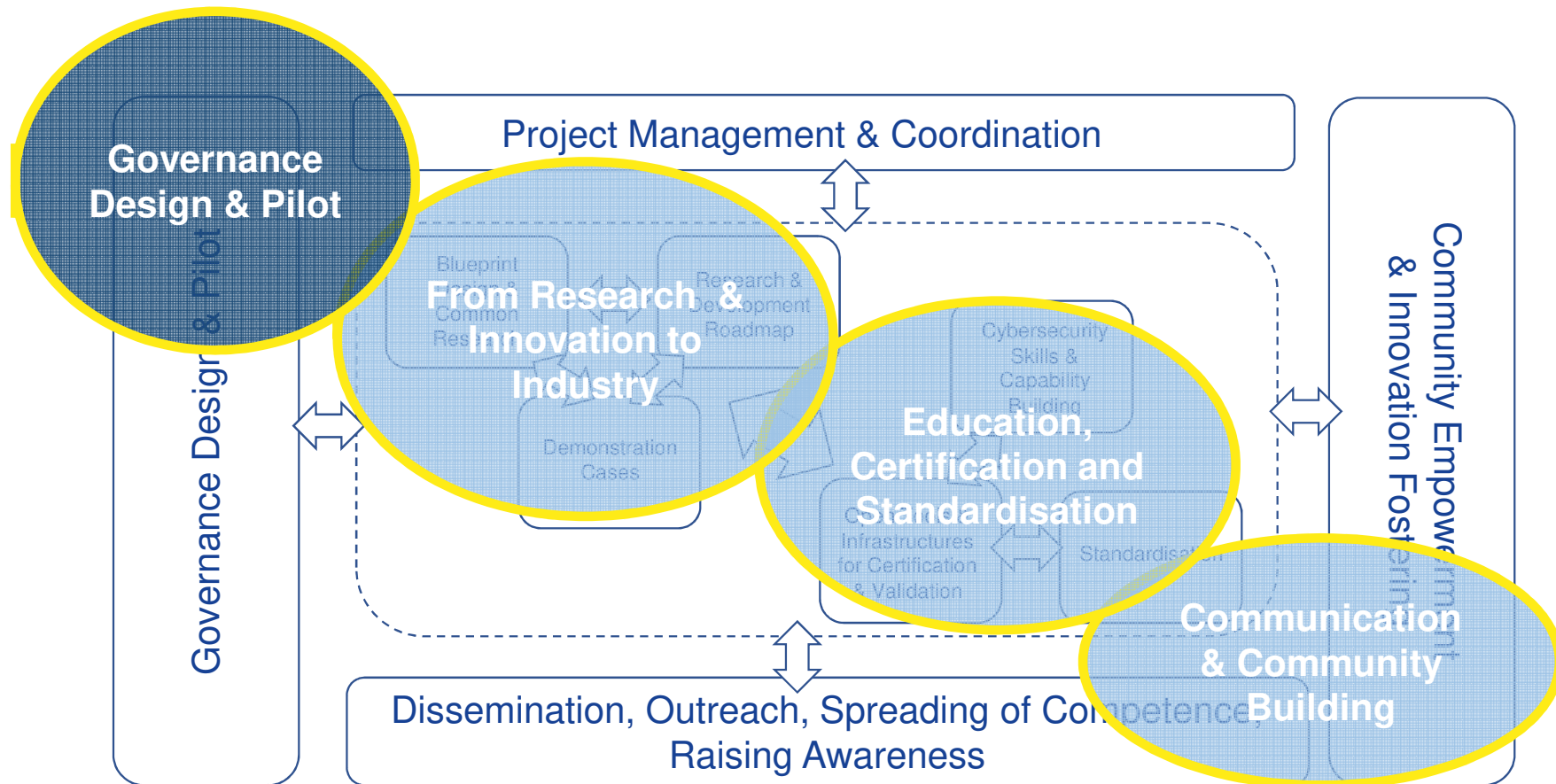
**CyberSec4Europe** is a research-based consortium working across four different but inter-related areas with a strong focus on openness and citizen-centricity in order to:

- Pilot a European Cybersecurity Competence Network
- Design, test and demonstrate potential governance structures for the network of competence centres
- Harmonise the journey from software componentry identified by a set of roadmaps leading to recommendations

# Project Architecture



# Project Architecture





# Pillar I: Governance, Design & Pilot (WP2)



## Goal:

- WP2, within Pillar I, aims to design a governance model based on the ambition to give the cybersecurity research community a common European goal.

## Means:

- Validation of the assumptions on the governance structure in D2.2
- Further development of the governance model in D2.3
- **Research into the case studies of establishment of CHECKs (France, Spain) and the role of touching points in the European cybersecurity ecosystem development**
- Up-to-date and ongoing legal analysis and interpretation of the Regulation (proposal) and other relevant high-level legislature and legal requirements, ensuring a holistic approach to the governance design process
- Cross-pilot Governance Coordination Group

## Solution: CHECKs (Community Hubs of Expertise and Cybersecurity Knowledge)

We developed and started testing a bottom-up governance structure that has the potential to address urgent cybersecurity challenges through capitalising on the community-derived capabilities and ensuring robust cooperation.



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# CHECK-T

1<sup>er</sup> NOEUD du réseau européen  
DE CYBERSECURITE

dans le cadre du projet pilote

CyberSec4Europe



CyberSec4Europe is funded by the European Union under the H2020 Programme Grant Agreement No. 830929



# Objectif



Develop the conditions for the creation of the 1st node of the future European CHECK-T network

CHECK-T (**Community Hubs of Expertise and Cybersecurity Knowledge of a Territory**) should enable its members to :

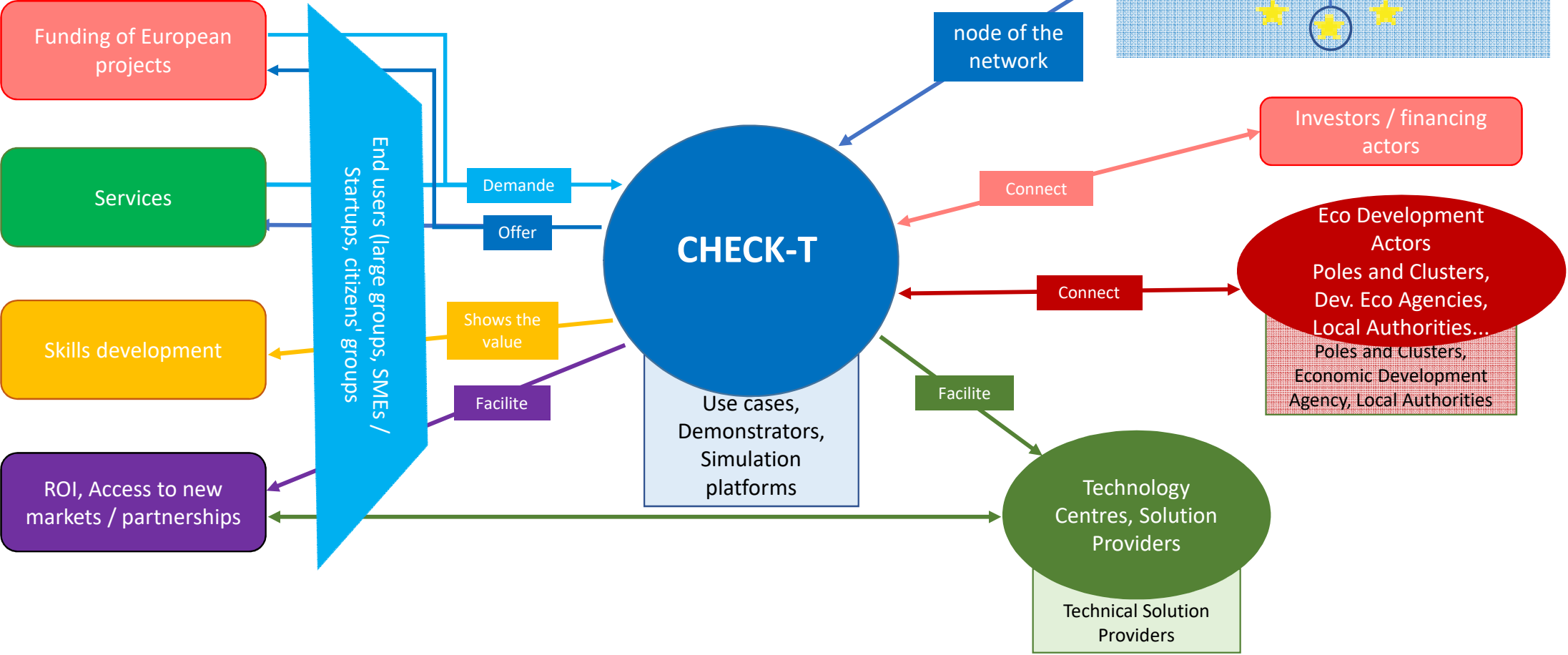
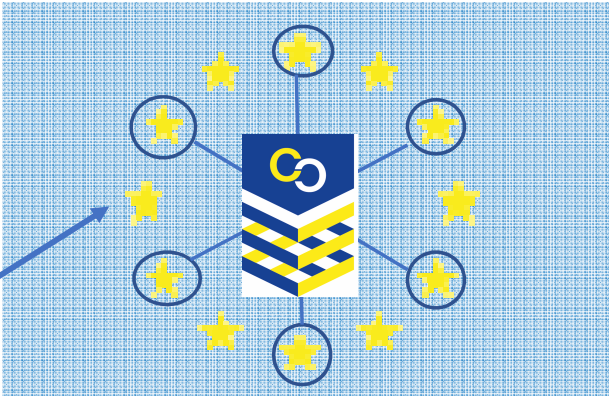
- Obtain human and financial resources to develop innovative projects
- To accompany the rise in skills of all by a personalised watch
- Become visible and credible on their high levels of expertise
- Anticipate and influence political interventions at national and European level

Two workshops have been set up:

1- Consult the public and private communities of a territory that are concerned by cybersecurity on the needs and expectations expressed.

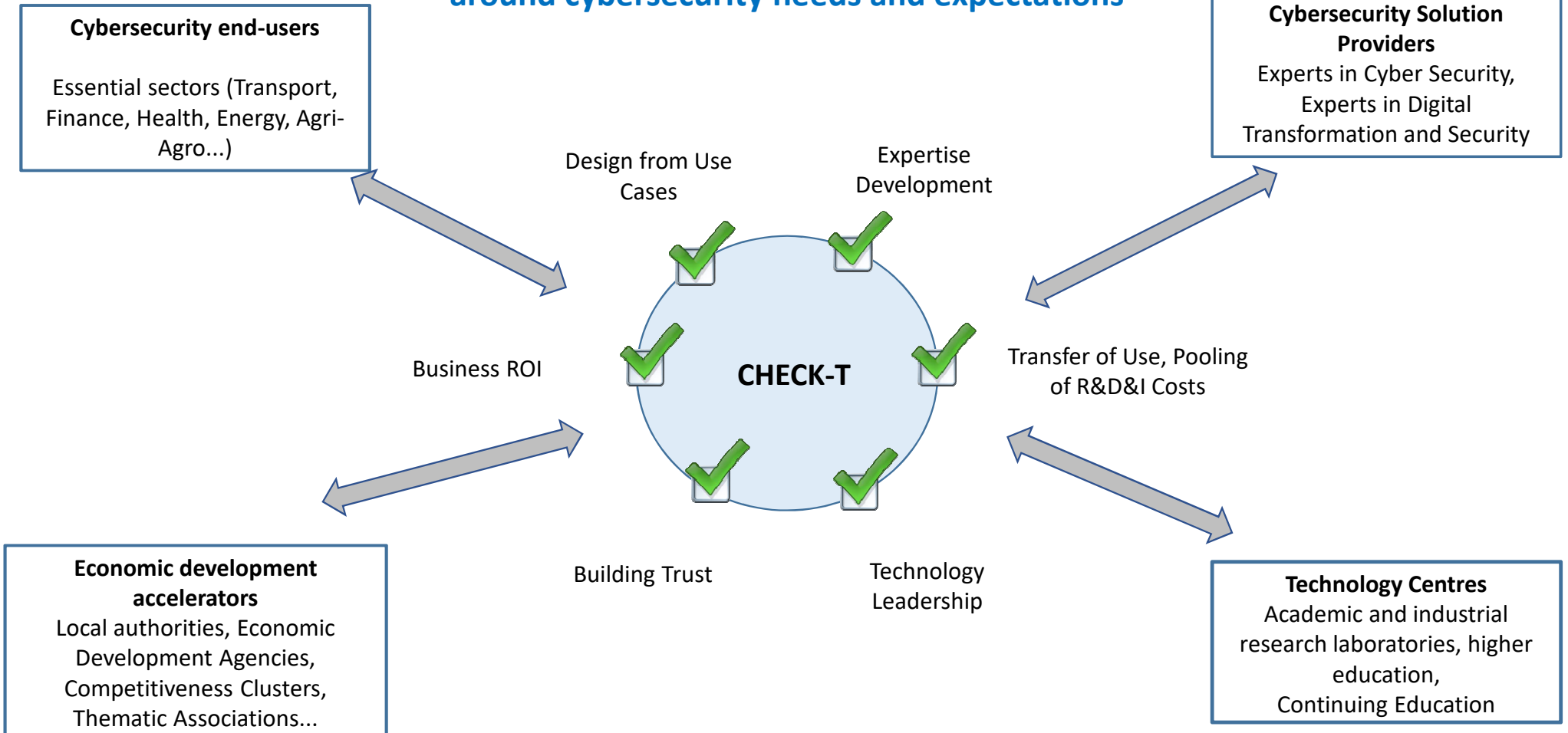
2- Identify the governance structure that will allow them to work together on a roadmap.

# Vision: CHECK-T and its context



# CHECK-T

Bringing together the competences of a territory around cybersecurity needs and expectations



# Methodology (1)

## Elicit cybersecurity needs and expectations



Interview campaign with 50 stakeholders from 4 communities

Method :

- Production of a presentation to guide the interviews
- Selection of method to capture expectations
- Drawing up a list of prospects
- Conducting interviews
- Processing and analysing the information collected
- Integration of proposals into an interaction matrix
- Presentation at a plenary meeting involving all interviewees



## Methodology (2)



Reminder of the questions :

1- In which community would you like to invest yourself in priority?

- Cybersecurity Users College: industry players (transport, health, energy, etc.)
- Technology Centre College: Research, Development & Innovation players, research and academic laboratories
- Industry College: Cybersecurity service providers, SOC
- Economic Development College: institutional and economic development players.

2 - For each mission :

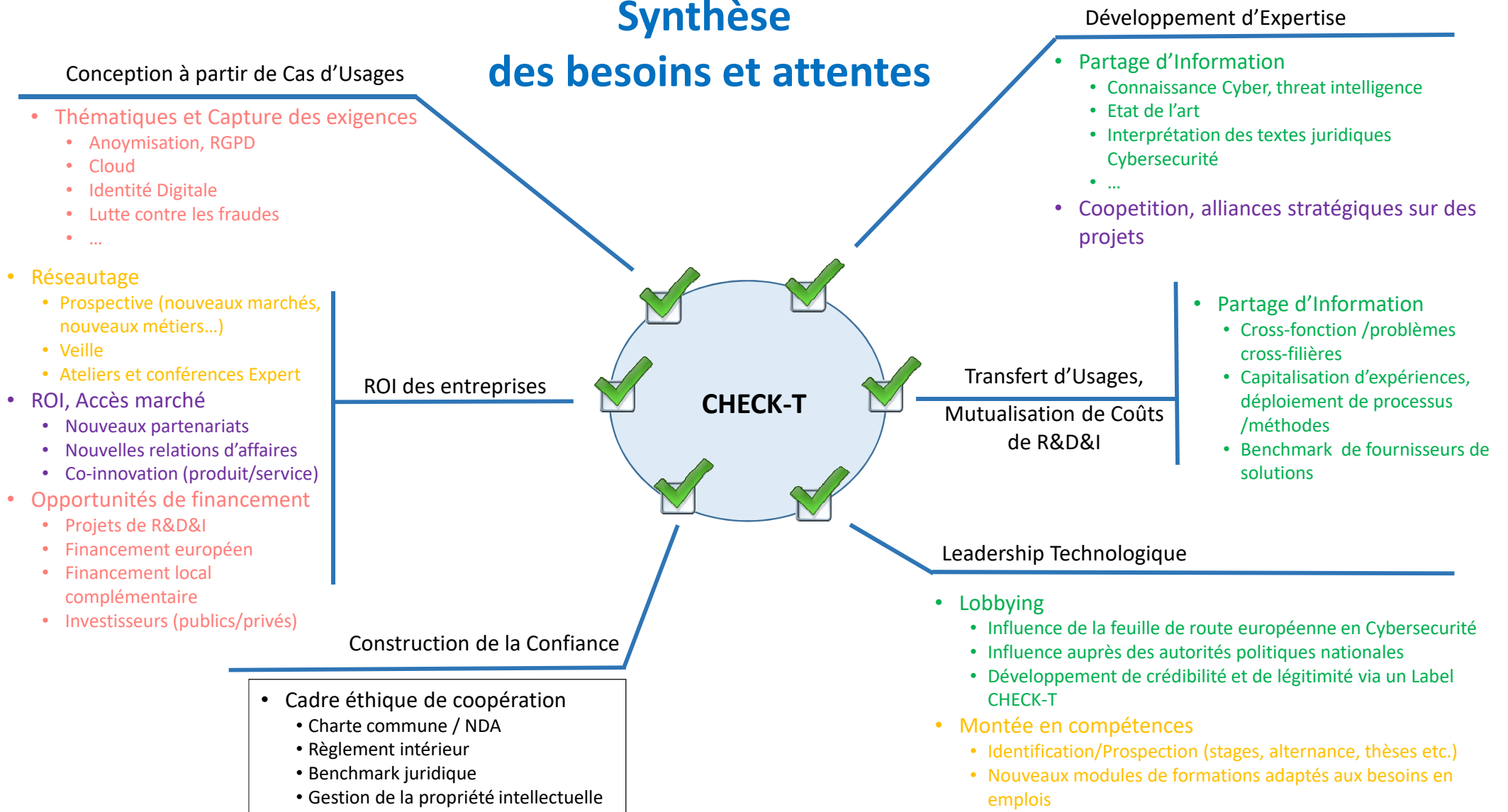
Imagine, with regard to your activity, the potential that you will be able to draw thanks to the community to achieve your objectives and face the pressure of performance

Express the benefits expected from contributing to the platform in terms of :

- Convenience: funding, infrastructure, etc.
- Reach: market access, new partners...
- Value gain



# Synthèse des besoins et attentes





## Partners



Arterris  
Banque Postale  
EasyMile  
IDETCOM  
IMS Network  
Pôle Optitec  
Thales Group  
Pôle EuroBioMed  
Great X  
BoostAeroSpace  
Orange CyberDefense  
Pôle AgriSOI  
LAAS / INSA  
Pôle Aerospace Valley

Continental  
BPOC  
Cemoi  
Collins Aerospace  
Thales Group  
Apsys Airbus  
Pole Star  
Sogeti Cap Gemini  
CGI  
Pierre Fabre  
Sopra Steria  
IBP  
Occitanie Data  
Lyra Network

Atos  
Institut de droit privé  
LAAS / INSA  
Epitech  
AD'OCC (Cyber'Occ)  
MIPIH  
SOCODIT  
Digital 113  
CNES  
Tisseo  
DIH Move2Digital

With the support of:

ANSSI – Délégation Occitanie

DISSE Occitanie (rattaché au SGAR et à la DIRECCTE)

Région Occitanie, Toulouse Métropole

Université Fédérale



Toulouse Midi-Pyrénées

# A first milestone in the implementation of CHECK-T

## **L'Institut de Cybersécurité d'Occitanie (ICO)**

The ICO focusses on Research and Development, having at its core the three leading labs in Occitanie, namely IRIT, LAAS, and LIRMM.

It's primarily academic, with strong links to the industrial ecosystems nurtured by the composing labs. Its initial funding is majorly public and invites partnerships with private actors for the co-funding of research positions like PhD students and post-docs.

The ICO will participate in the implementation of Check-T and the inclusion of our territory in the European cybersecurity competence network.

# Lessons learned and being learned: Participation and trust essential



- Synergy** between **top-down** and **bottom-up** structures
- **integrating stakeholder** groups (**including citizens**)
  - efficient stakeholder **engagement** on **all societal levels**
    - Industry groups, local governments, CERTs → not all the same level of formality as representatives of the EC and Member States
    - May be different per country (so regulation must allow this, e.g. sectoral vs regional)

## **Key** elements of **trust** into an **organisation**

- Secured participation
- Organisational transparency

**Agile, trustful,** and **lively exchange** in and between **Cybersecurity Communities**

# Summary



- CyberSec4Europe is a **vibrant pilot community**.
- **Agile** to spontaneous EU requests – contributions to EC strategy and JRC Atlas cybersecurity roadmap
- Spearheaded the design of a **distributed governance model**
- Progressed research and research planning based on **real** application requirements
- Progressed education, certification and standardization initiatives
- Integrated **all** pilots and ECSO in a single **comprehensive event**:
  - **CONVERGENCE NEXT, 1-3 June 2022 Brussels, hybrid**
- Intensive *contribution* to and interaction with **ECSO**
- Implemented **principles** in **practice**



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Thank you!

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