



**CLUST-ER  
INNOVATE**  
INNOVAZIONE NEI SERVIZI

## Emilia-Romagna Service Innovation Clust-ER

**PEOPLE, TECHNOLOGIES & TOOLS  
LEVERAGING DIGITAL TRANSFORMATION**

## “Clust-ER” ASSOCIATIONS in EMILIA ROMAGNA

**Clust-ER Associations** [art-er.it/clust-er](http://art-er.it/clust-er) are communities of public and private bodies (research and training centres and companies) created to support the competitiveness of the most important production systems in Emilia-Romagna.

The **Clust-ER Associations** rely on the innovation capacity of the entire innovation system: within the Clust-ERs, research laboratories and innovation centres that make up the **High Technology Network** [www.retealtatecnologia.it](http://www.retealtatecnologia.it) team up with companies and higher education organizations to face common challenges, develop strategic projects and multiply opportunities.

**CLUST-ER**  
**AGRIFOOD**  
AGROALIMENTARE

**CLUST-ER**  
**BUILD**  
EDILIZIA E COSTRUZIONI

**CLUST-ER**  
**CREATE**  
CULTURA E CREATIVITÀ

**CLUST-ER**  
**GREENTECH**  
ENERGIA E SOSTENIBILITÀ

**CLUST-ER**  
**HEALTH**  
SALUTE E BENESSERE

**CLUST-ER**  
**INNOVATE**  
INNOVAZIONE NEI SERVIZI

**CLUST-ER**  
**MECH**  
MECCATRONICA E MOTORISTICA

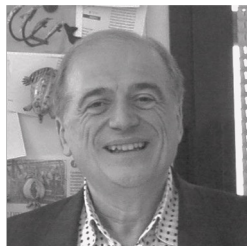
**CLUST-ER**  
**TOURISM**  
TURISMO E TERRITORIO

**CLUST-ER**  
**URBAN**  
ECONOMIA URBANA

associazione  
**BigData**  
from volume to value



# INNOVATE: Board of directors



**President**  
**Antonio Corradi**  
Prof.  
University of Bologna



**Vice-President**  
**Filippo Bosi**  
Ing.  
Imola Informatica



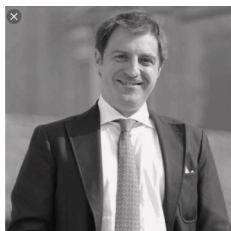
**Member**  
**Roberto Vezzani**  
Prof.  
University of Modena and  
Reggio Emilia



**Member**  
**Cesare Stefanelli**  
Prof.  
University of Ferrara



**Member**  
**Andrea Bardi**  
Dott.  
Fondazione Istituto  
Trasporti e Logistica



**Member**  
**Gianluca Ortolani**  
Ing.  
Net Service S.p.a.



**Member**  
**Stefano Maccaferri**  
Dott.  
Phorma Mentis



**Member**  
**Anna Lisa Minghetti**  
Ing.  
Lepida S.c.p.a.



**Member**  
**Cesare Valenti**  
Ing.  
Itway S.p.a.



**Dott.Ing. Elisabetta Bracci**

**Manager  
Clust-ER Innovate**

+39 3289292518  
elisabetta.bracci@innovate.clust-er.it



**Dott.ssa Célia Gavaud**

**Head of  
International Partnerships**

+39 389 067 1277  
celia.gavaud@innovate.clust-er.it



**Dott.ssa Martina Generali**

**Jr Project Manager  
Communication and Events**

+39 340 652 0823  
martina.general@innovate.clust-er.it



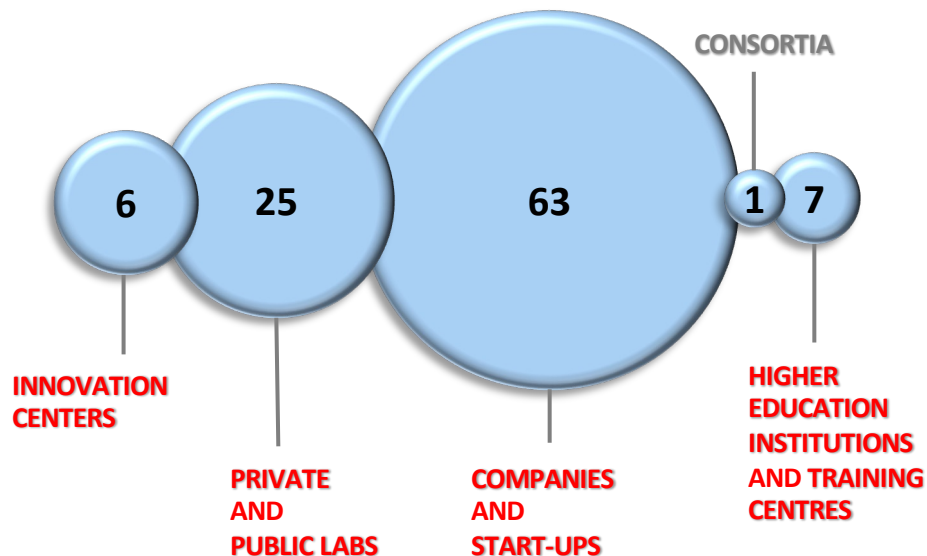
**Dott.ssa Lucia Mazzoni**

**Head of Relations between  
Clust-ER Innovate and ART-ER**

+39 348 477 1746  
lucia.mazzoni@art-er.it

## OUR NUMBERS

- Cluster established **2017**
- 20+ events/year
- 150+ news per year
- 1 challenge for start-ups per year (2023 on Logistics 4.0)
- 102 Members
- Members growth: Jan2022 - Jun2023 + 36% (+27 members)



## CORE VALUES

- Coopetition
- Contamination
- Value Driven Approach

## STRATEGIC FUNCTIONS

- Internationalization and Calls
- Events & Communication
- Matching

## PROJECTS

### ONGOING :

- 1 I3
- 1 Erasmus +
- 1 local project for smart logistics

### SUBMITTED

- 3 local projects public labs + companies
- 1 I3 Capacity Building

### SUPPORTED

- 8 Local / EU Projects

# Open to Innovate Manifesto

1. *The future belongs to people, not to technology.*
2. *Good inventions leave a sustainable footprint.*
3. *A project has a future if its development is ethical and inclusive.*
4. *Digital humanism is about relationships, not only business.*
5. *Networking is our ecosystem. Without it, you cannot innovate.*
6. *Living as a part of a network sharing ideas, values, and enormous challenges.*
7. *The local area is our soil. People and skills are our sap.*
8. *Complexity is the driving force behind evolution.*
9. *Uncertainty is opportunity. Curiosity drives discovery.*
10. *Technology is the key to innovation.*
11. *Connecting different disciplines generates value.*
12. *Open innovation is a game changer.*
13. *Experimenting together brings common benefits.*
14. *Open minds change the world.*
15. *The world evolves. And our narrative is open*

	<b>TOT</b>	<b>LABS</b>	<b>COMPANIES</b>	<b>OTHERS</b>
<b>MECH</b>	135	37	89	9
<b>HEALTH</b>	111	32	60	19
<b>GREENTECH</b>	107	30	66	11
<b>BUILD</b>	102	23	59	20
<b>INNOVATE</b>	101	25	62	13
<b>CREATE</b>	96	19	48	29
<b>AGRIFOOD</b>	88	31	47	10
<b>TOURISM</b>	29	19	6	4
<b>URBAN</b>	26	17	3	6
	<b>795</b>	<b>233</b>	<b>440</b>	<b>121</b>
		<b>30%</b>	<b>55%</b>	<b>15%</b>

**STRATEGIC GUIDELINES**  
VALUE FOR DATA VALLEY

- VALUE CHAINS**
- SCALABLE BIG DATA INFRASTRUCTURE SCABIS
  - SERVICE PLATFORM FOR IOT ER-IoT
  - CYBERSECURITY CySEC
  - INTELLIGENT IT SERVICES Intell\_ITS
  - LOGISTICS Log-EK
  - DIGITAL ETHICS Dig-Eth

- Critical Infrastructures
- Green Data Center
- Logistics 4.0
- Tourism 4.0
- Cyber Security 4SME
- Aerospace Downstream
- Digital Skills
- AgriTech
- Digital Heritage

**WORKING GROUPS**

**STRATEGIC FUNCTIONS**

- INTERNATIONALIZATIONS & CALLS
- EVENTS & COMMUNICATION

**CORE VALUES**

- COOPETITION
- CONTAMINATION
- VALUE DRIVEN APPROACH

**VALUE MODEL**

*people, skills & technologies*  
LEVERAGING  
DIGITAL  
TRANSFORMATION



## VALUE CHAINS

---

- **SCABIS** SCALable Big data Infrastructure
- **ER-IoT** Service platform for IOT
- **CySEC** Cybersecurity
- **Intell\_ITS** Intelligent IT Services
- **Log-ER** Freight Logistics
- **DigETH** Digital Ethics

## WORKING GROUPS

---

- **Digital Talents & Digital Skills**
- **Aerospace Downstream**
- **Critical Infrastructures**
- **Digital Heritage**
- **Logistics 4.0**
- **Tourism 4.0**
- **Cybersecurity for SME**

- Know-how academies managed by Professors and Research Centers' Director
- Here we can find know how on frontier technologies and best practices coming from research Centers and Universities

- Working groups made by a mix of our Members
- 2 co-chairs each: one from a Value Chain, one from Industry
- Activities: matching, white papers, national and international calls, best practices exchange, missions, national and international fairs, idea generation for the ecosystem policies

# Main Partners

Competence Centers, Innovation Centers, Research Centers, Universities



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA



**UNIMORE**  
UNIVERSITÀ DEGLI STUDI DI  
MODENA E REGGIO EMILIA



**UNIVERSITÀ  
DI PARMA**



# Working Group - Digital Talents & Digital Skills

**We work on talent shortage: training and talent attraction - retention**

## Projects from our working groups

- ITS LIME (high level education) Learning Information Modeling Environment
- Ongoing project on aerospace (high level education local school)

## Collaboration with ART-ER

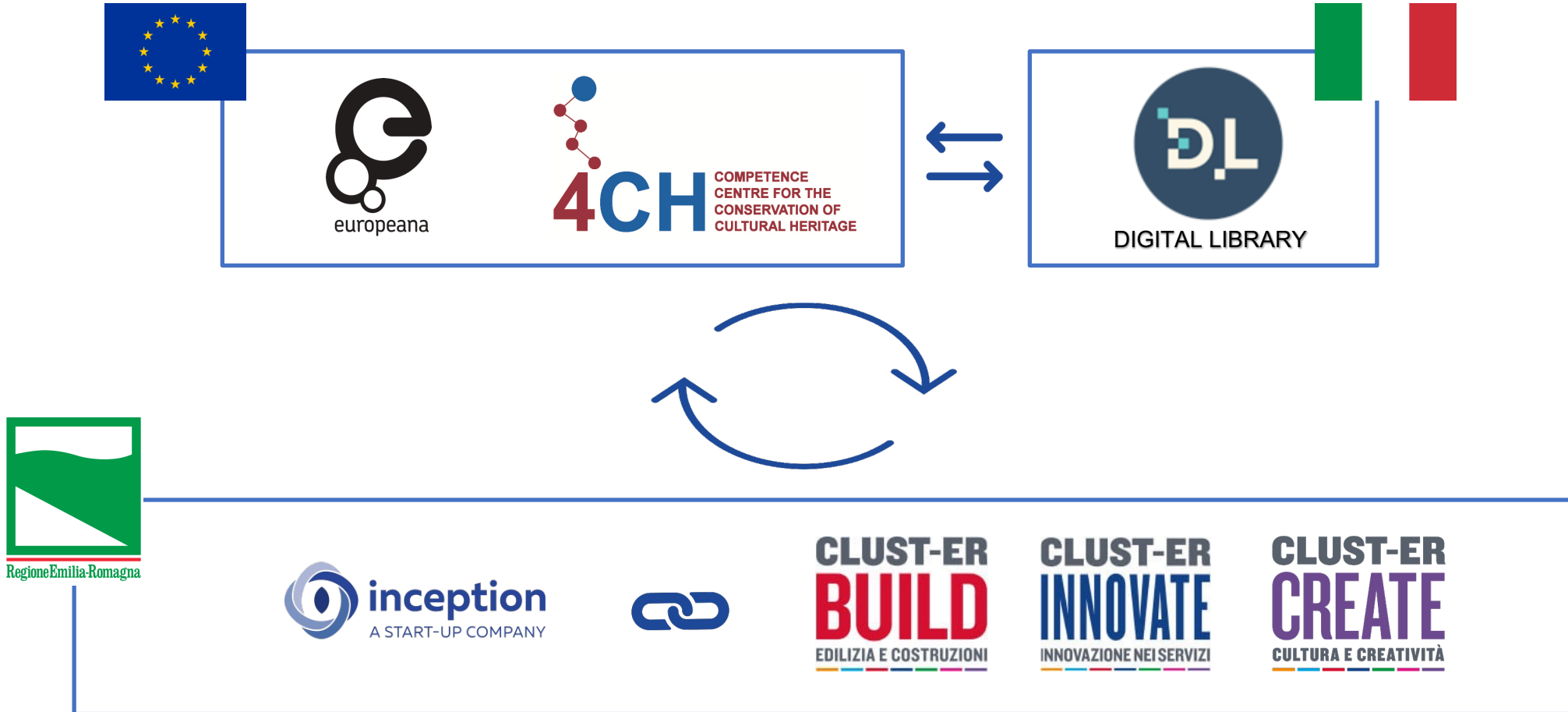
- Supporting regional projects IT-ER (International Talents Emilia Romagna)
- Supporting Interreg DEBUTING on gender equality and diversity
- Supporting Erasmus+ PENELOPE (cluster-based approach to foster gender equality strategies in EU SMEs)
- Supporting Skills Intelligence tool development (to analyze SMEs' talent needs and job offers)

## Projects to be started

Agreement between Clust-ER INS and ART-ER → pilot on best practices exchange: how ICT companies creates the best environment in order to attract and retain talents in EU

# Digital Heritage Ecosystem

We work on Digital Heritage on EU Scale , mapping the value flow and connecting our stakeholder with international entities

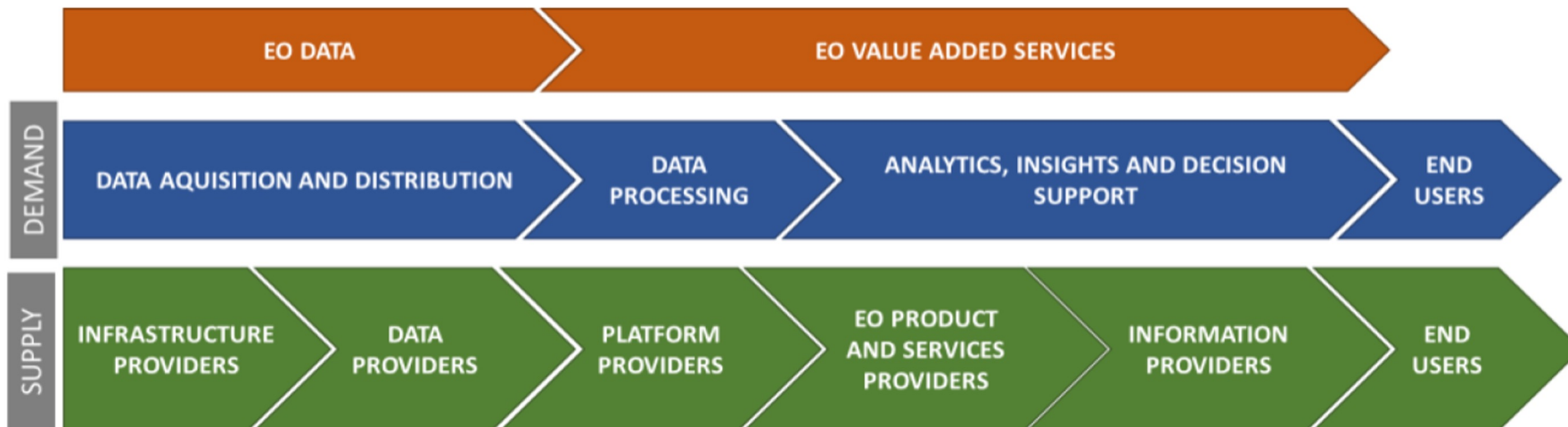


# Working Group Aerospace Downstream

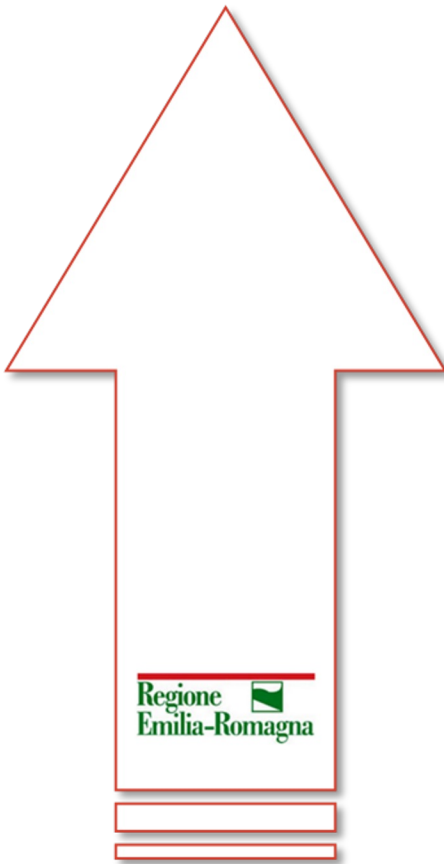
## Earth Observation

Aerospace Downstream - focusing on earth observation and all its applications


- Our members collaborate with Copernicus, ASI, ESA
- Events (e.g. with ESA BUSINESS PARTNER Fondazione Amaldi)
- Missions (Netherlands, Houston, Canada)
- White paper on skills for Aerospace “SPACE PERSONAS” (with Clust-ER MECH and Technopole Forlì-Cesena)
- Sponsor @ Cassini Hackathon 2023



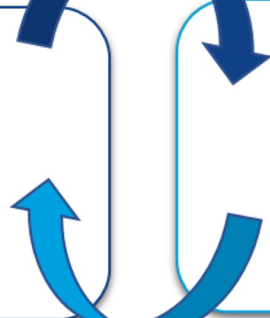
# Regional Value Flow for Aerospace




Regione  
Emilia-Romagna



Open Innovation Ecosystem  
Aerospace Downstream



Open Innovation Ecosystem  
Aerospace Upstream



R&D and  
PRODUCTION




**CIRI** AEROSPACE





SKILLS and  
TALENT



**TECNOPOLO  
MANIFATTURA**  
DATA VALLEY HUB

Data Valley Hub  
70% Italian – 20% EU computing capacity  
Top Three World HPC

HPC

Forum Strategico Aerospazio  
**SYSTEM BOOSTER**

# Working Group Critical Infrastructures

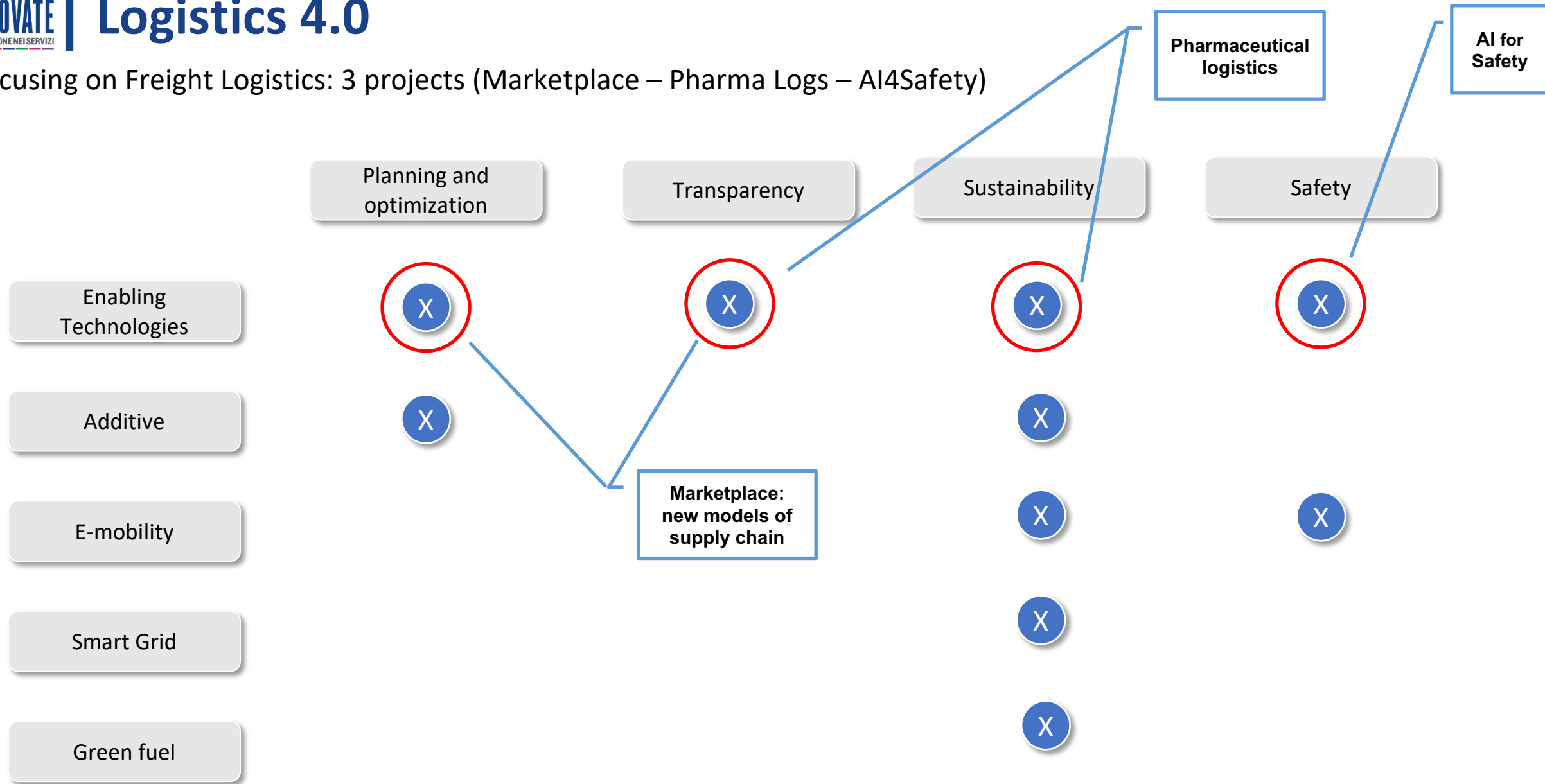
Focusing on Green and Resilient Data Centers for Critical Infrastructures

writing a white paper on this topic, focusing on our Members' **real practices** (CINECA, CRIF, ECMWF, INFN, Honeywell, Rekeep, EXE.IT, etc...)



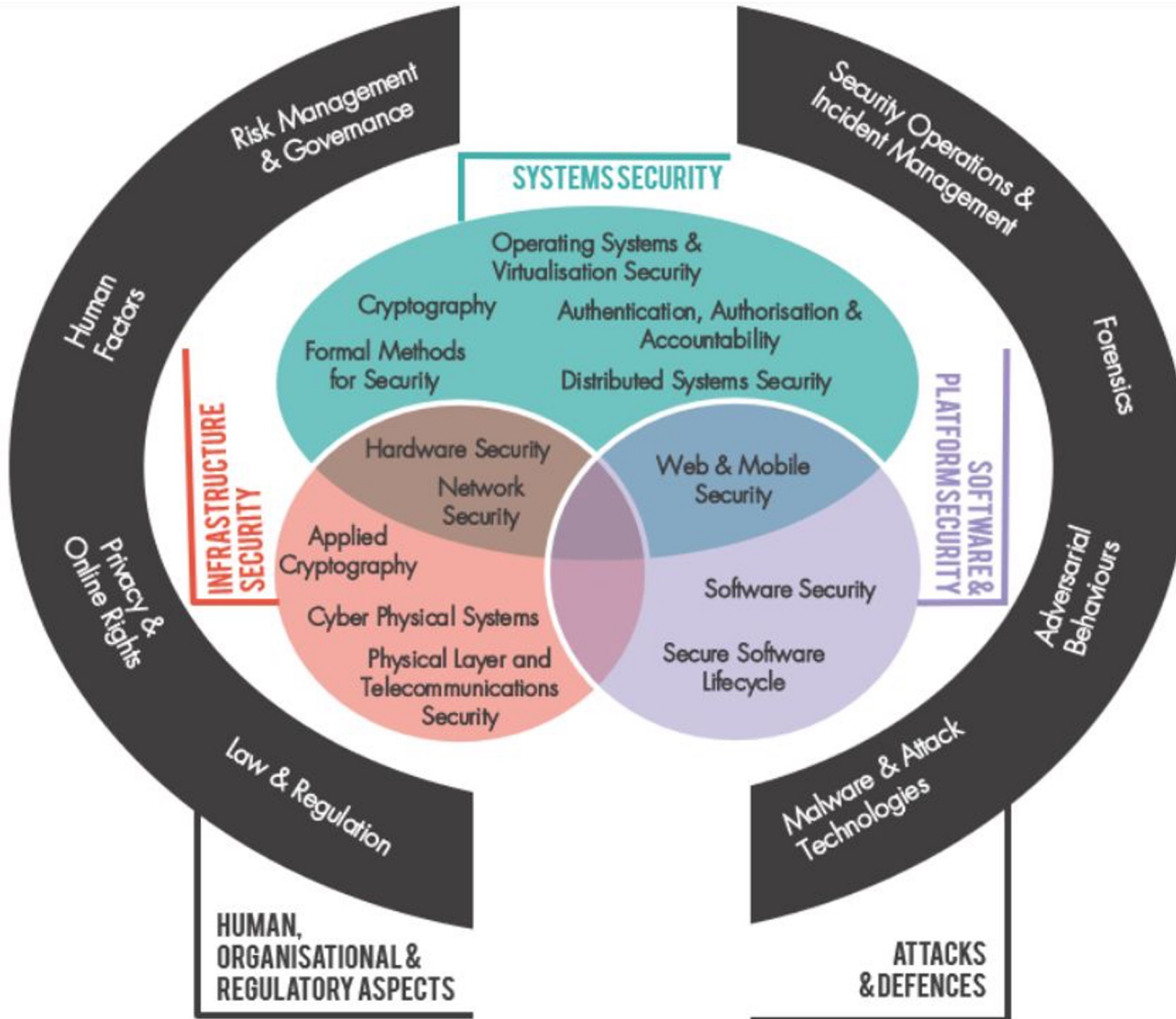
# Logistics 4.0

Focusing on Freight Logistics: 3 projects (Marketplace – Pharma Logs – AI4Safety)





# Working Group Cybersecurity Competence Mapping



We applied to 2 regional calls

We are mapping our local competencies on CyberSec

Software Security 70%

Secure Software Lifecycle 70%

Attacker behavioral analysis 70%

Security of cyber-physical systems and IOT 65%

Privacy and online rights 65%

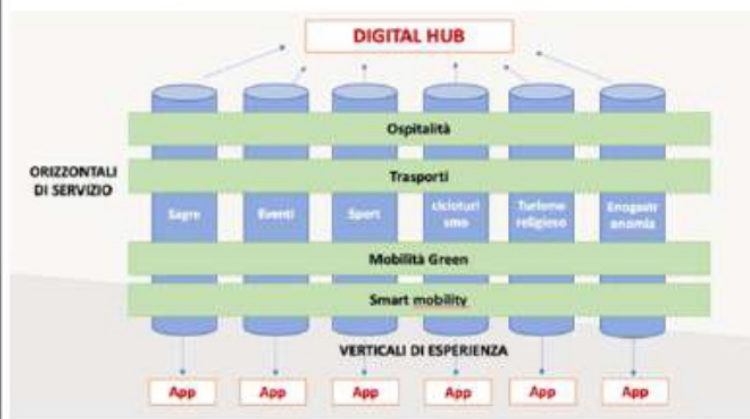
Telecommunications security 50%

# Working Group Tourism 4.0

DIGITAL ECOSYSTEM

CUSTOMER JOURNEY  
DIGITAL EXPERIENCE

DIGITAL REPOSITORY



BIG DATA  
MACHINE LEARNING

PROCESS  
DIGITALIZATION  
FOR HOTELS

ASSESSMENT METHOD TO  
IDENTIFY THE DIGITAL  
AND GREEN LEVEL OF  
INNOVATION IN HOTELS

# International partnerships and networking

Member of the **European Cluster Collaboration Platform (ECCP)**

Member of the **Wireless ICT and Big data & Traceability (BD&T) S3 Platforms**

- Focus on smart land and smart village technologies and projects

Partner in 3 ongoing EU projects – all started in 2023

- **Exceed – Erasmus+** - EXCELLENCE IN GREEN & DIGITAL MANUFACTURING – establish a COVE network of 6 centres in 5 countries (Italy, Spain, Finland, Czechia & Greece) to support innovation and sustainable competitiveness of Advanced Manufacturing (€2.5M circa; 39 partners; 48M)
- **AMBITIOUS - I3 Strand 1** - Advanced CoMputing Continuum Solutions for Boosting DigITalization across European RegionS (€4.4M circa; 18 partners: IT, S, FI, EL, NL; 36M)
- **DEBUTING - INTERREG** – Developing Business Through Inclusiveness and Gender Awareness – New Cluster Competences (51M; 11 partners; 10 countries; all ER Clust-ERs are partners)

Supporting the constitution of a national excellence center for Digital Heritage with **EU Project 4CH** (GA101004468) and **Europeana** to set up the methodological, procedural, and organizational framework of a dedicated Competence Centre

**2 outgoing missions** so far in 2023

- **The Netherlands** (The Hague & Amsterdam)
- **USA** (Houston)

Ongoing contacts with **Canada**

- **Media Ethics Lab** – Toronto
- **Forum AI** – annual event Montréal

# International Mission - The Netherlands

**The Netherlands – Clust-ER Innovate Mission** focus su:

- Digital heritage
- Cyber Security
- Aerospace downstream
- HPC and Green&Resilient Data Centers
- Innovation Ecosystem



**NETWORKING**

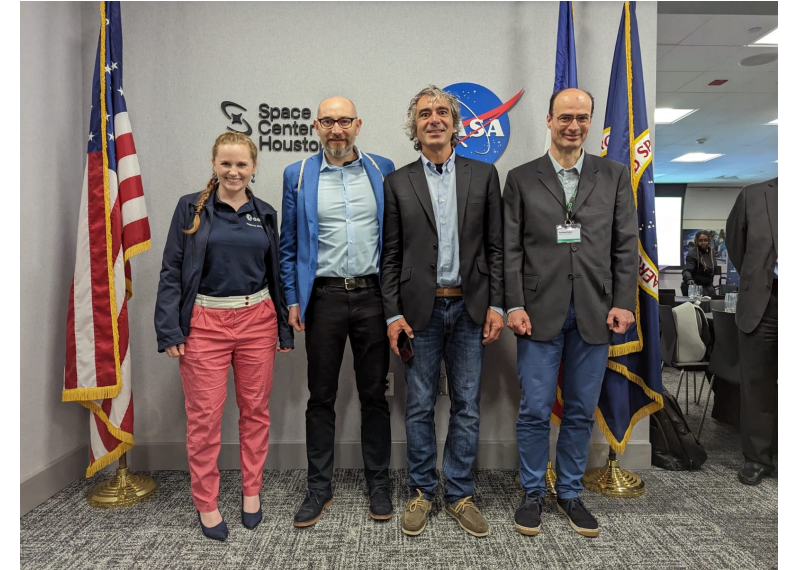
Twinning EuroCC Italy - EuroCC Netherlands

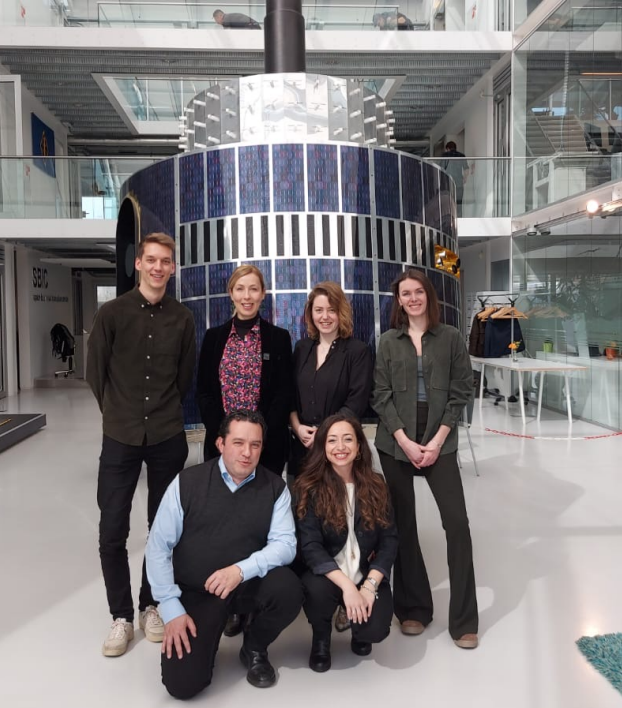
**Connettere, conoscere,  
condividere esperienze**

# International Mission – Houston



# Houston Regional Mission





# Netherlands

Mission Focus on:

- Digital heritage
- Cyber Security
- Aerospace downstream
- HPC and Green&Resilient Data Centers
- Innovation Ecosystem



# R2B – Research to Business

## Events

Metaverse 4 Training

Talent Attraction

Mind the Gap

Sustainable Logistics

Tourism 4.0





## THE NUMBERS OF #WMF2023

+60.000 attendees    +85 countries    +670 exhibitors  
+10 pavilions        +1.000 speakers    +130 institutional guests  
+100 stages         +150 creators        +2.000 startups&investors

#WMF2024 | International Trade Fair and Festival on Tech and Digital Innovation

# WMF We Make Future

## 2 Events:

- Local best practices in open innovation
- Future of open innovation and Venture Capital

## Start-UP Competition jury



# International Delegations

## Nouvelle Aquitaine



## Catalunya



## Flanders

# Eventi, Fiere e Missioni 2023

- KICK OFF WORKING GROUPS
- STAKEHOLDERS' MEETING
- CHALLENGE LOGISTICS 4.0
- HOUSTON MISSION
- “Open to innovate” MANIFESTO

- SPAZIO ALLE SKILLS
- NETHERLANDS MISSION
- CYBER SECURITY EVENT
- R2B
- WMF
- MATCHING
- AIET EVENT ON PNRR
- BOOM & FITSTIC
- SAFER – TRAINING
- DIGITER – TRAINING
- STAKEHOLDERS' MEETING

- REGIONAL CALL DIGITAL HERITAGE
- FARETE FAIR
- LOGISTICS @ AUTODROMO
- OLIMANT - Guinness World Record on METAVERSO
- FRANCE MISSION – Interreg DEBUTING

- MATCHING with DITECFER
- ECOMONDO FAIR
- CONFINDUSTRIA SERVIZI
- CANADA MISSION
- SPACE DAY
- CASSINI HACKATHON
- NEW SPACE ECONOMY EXPOFORUM (NSE)
- MATCHING

Q1

Q2

Q3

Q4

# BENEFITS of join Clust-ER Innovate as a Member

- ✓ **OPPORTUNITIES** : being a member of the Clust-ER will give you privileged access to many opportunities
- ✓ **STRATEGY**: contribute to the definition of regional development strategies
- ✓ **KNOWLEDGE**: receive the latest sectoral science, technology and business news from regional, national and international sources
- ✓ **NETWORK**: leverage the network of international partners to build consortia for research and innovation projects
- ✓ **PARTNERSHIP**: reach new business sectors and create national and international partnership
- ✓ **INNOVATION**: share ideas and innovate your business / find new research themes
- ✓ **ECOSYSTEM**: keep in touch with the regional innovation ecosystem



**CLUST-ER  
INNOVATE**  
INNOVAZIONE NEI SERVIZI

**Phone +39 339 6864367**

**Web: [innovate.clust-er.it](http://innovate.clust-er.it)**

**Mail: [cluster.manager@innovate.clust-er.it](mailto:cluster.manager@innovate.clust-er.it)**

**PEC: [clust-er.innoservizi@legalmail.it](mailto:clust-er.innoservizi@legalmail.it)**

**C.F. 91399940377**

