Agenda:

09:30 - 09:45 am - Welcome and Presentation of the AI, Data and Robotics Association (Adra)
09:45 - 11:15 am - Presentation of topics by the European Commission and Q&A
11:15 - 11:30 am - Presentation of Ideal-ist and Brokerage tool
11:30 - 13:00 pm - Pitches
09:30 - 09:45 am
Welcome and Presentation by Marina Bill, President of the AI, Data and Robotics Association (Adra)
Welcome
The MOU signed between Adra and the European Commission:

- Up to **1.3** billion euros of public investment by the European Commission (through Horizon Europe)
- Up to **1.3** billion euros of private investment through Adra for the period 2021 – 2030
The Adra Office is supported by BDVA, CLAIRE Paris/Inria and euRobotics/University of Twente.
General Objectives of the ADR Partnership and Adra

- Secure European’s sovereignty over AI, Data and Robotics technologies and knowhow

- Establish European leadership in AI, Data and Robotics technologies with high socio-economic and environmental impact

- Reinforce a strong and global competitive position of Europe in AI, Data and Robotics
Adra is needed for the EU Digital Decade policy

Target: 75% of European enterprises have taken up Big data
Baseline (2020): 14%

Target: 75% of European enterprises have taken up AI
Baseline (2020): 25%

Figure 18: Percentage of European enterprises using big data (EU projection to 2030)

Figure 20: Percentage of European enterprises using AI (EU projection to 2030)

Source: Commission services based on data from Eurostat.

NEW INDUSTRIAL ROBOT INSTALLATIONS by REGION, 2017-19

- Asia
- Europe
- North America
- Others
- South & Central America
- Africa

Number of Units (in Thousands)

© Adra 2021 - June 16, 2022 | Slide 9
5. **Conclusion: an urgent call for action!**

294. Believes that the ongoing digital transformation, in which AI plays the key role, has triggered a global competition for tech leadership; stresses that the EU has so far fallen behind with the result that future technological standards risk being developed without sufficient EU contributions, oftentimes by non-democratic actors, which presents a challenge to political stability and economic competitiveness; concludes that the EU needs to act as a global standard-setter on AI;

p.58

Adra’s approach to European AI, Data and Robotics

- Leverage existing **European strengths** in AI, Data and Robotics
- **Openness** and **inclusiveness** are essential to ensure success
- A **broad dialogue** is essential for the European innovation eco-system (Start-Ups, SMEs, Large Industry and Research)
- Safeguard **balance** and **representation** between constituences and industry/research
- Build the AI, Data and Robotics eco-system on **existing** stakeholder communities.
- Ensure representation of **all** important stakeholders including start-ups/scale-ups, SMEs, regional ecosystems
Adra Status – Chronology and Milestones 1/2

- First Board meeting - April 2021
- Office setup - April 2021
- Founding of the association - May 2021
- Election of President Marina Bill - June 2021
- Signing of MoU with the EC - June 2021
- InfoDay organised in collaboration with EC and IDEAL-IST – July 2021
- Initial website launched (www.adr-association.eu) and social media (LinkedIn, twitter)
- Start Bi-Weekly BoD meetings, bi-Weekly VP meetings (+ 45 minutes EC) – August 2021
- GA (between founding members) – October 2021
- Launch Event – November 2021
Adra Status – Chronology and Milestones 2/2

• Open for members – December 2022
• Shaping WP23-24 with EC – February – March 2022
• Exchange with NCPs – today
• Periodic Welcome Event – starting May 17th
• Infoday co-organized with EC and IDEAL-IST – 17 June
• **General Assembly** – Monday June 20th

**Ongoing sub-committees (by the BoD):**
• Communication and Marketing
• Adra Strategy and Vision
• Setup of task-forces
• Regulations and Finance
• Recruitment of Secretary General
## Overview of Members

(June 2022)

### Membership Category

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry Member</td>
<td>6</td>
</tr>
<tr>
<td>Research Member</td>
<td>24</td>
</tr>
<tr>
<td>Associate Member</td>
<td>0</td>
</tr>
<tr>
<td>Strategic Member</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

### Founding Organisations Membership

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDVA Full</td>
<td>12</td>
</tr>
<tr>
<td>BDVA Associate</td>
<td>3</td>
</tr>
<tr>
<td>Claire</td>
<td>6</td>
</tr>
<tr>
<td>Ellis</td>
<td>1</td>
</tr>
<tr>
<td>EurAI</td>
<td>2</td>
</tr>
<tr>
<td>euRobotics</td>
<td>14</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
</tr>
</tbody>
</table>

### Members per Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>4</td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
</tr>
<tr>
<td>Spain</td>
<td>7</td>
</tr>
<tr>
<td>France</td>
<td>3</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3</td>
</tr>
<tr>
<td>Finland</td>
<td>4</td>
</tr>
<tr>
<td>Ireland</td>
<td>1</td>
</tr>
<tr>
<td>Sweden</td>
<td>3</td>
</tr>
<tr>
<td>Norway</td>
<td>1</td>
</tr>
<tr>
<td>Greece</td>
<td>2</td>
</tr>
<tr>
<td>Slovakia</td>
<td>1</td>
</tr>
<tr>
<td>Italy</td>
<td>1</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1</td>
</tr>
<tr>
<td>Turkey</td>
<td>1</td>
</tr>
<tr>
<td>Poland</td>
<td>1</td>
</tr>
</tbody>
</table>
Membership Benefits 1/2

• Access to a large network of ADR stakeholders (Industry, Research and policy makers). This facilitates match-making to enter e.g. EU project consortia

• Impact on EU research programs. As a unique contractual partner to EC, Adra is involved in writing the research programs of Horizon Europe concerning AI, Data and Robotics

• Participate in the authoring of the Strategic Research, Innovation and Deployment Agenda (SRIDA)

• Coordinated response through position documents and white papers to consultations, and policy documents

• Improved visibility at EU-level
Membership Benefits 2/2 *

- Propose candidates to the Board of Directors
- Voting right in the General Assembly
- Lead and participate in topic groups and task forces

* for industry and research members. Slightly different rules for strategic and associate members
Adra asbl: Types of Membership

Industry Members
- Large companies
- Mid-Caps
- Small and Medium Enterprises ("SME") and Start-ups

Research Members
- Research and Technology Organisations (RTO)
- Universities, university colleges and university departments and laboratories or research groups of universities engaging in research, innovation and education (HES)

Strategic Members
- Not-for-profit organisations having their own members and whose main objectives are of essential value for the Purpose of the Association

Associate Members: trade unions, non-governmental organisations, regional clusters, etc. and other stakeholders not falling in the Member categories above
# Annual membership Fees

<table>
<thead>
<tr>
<th>Type of Organisation</th>
<th>Description (total number of employees)</th>
<th>Annual fee</th>
<th>Maximum Discount if member of Founding Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Enterprise</td>
<td>&gt;3000 persons employed</td>
<td>10,000.00 €</td>
<td>5,000.00 €</td>
</tr>
<tr>
<td>Mid-caps</td>
<td>250 – 3000 persons employed</td>
<td>5,000.00 €</td>
<td>2,500.00 €</td>
</tr>
<tr>
<td>SMEs</td>
<td>1- 249 persons employed</td>
<td>2,000.00 €</td>
<td>1,000.00 €</td>
</tr>
<tr>
<td>Research and Academia</td>
<td>&gt;= 50 employees</td>
<td>2,000.00 €</td>
<td>1,000.00 €</td>
</tr>
<tr>
<td>Small research entity</td>
<td>&lt;50 employees</td>
<td>500.00 €</td>
<td>250.00 €</td>
</tr>
<tr>
<td>Strategic members</td>
<td>Any size</td>
<td>3,000.00 €</td>
<td>NA</td>
</tr>
<tr>
<td>Start-ups</td>
<td>Any size (3 years)</td>
<td>250.00 €</td>
<td>125.00 €</td>
</tr>
<tr>
<td>Others</td>
<td>Any size</td>
<td>500.00 €</td>
<td>250.00 €</td>
</tr>
</tbody>
</table>
How to apply

**STEP 1:** Download the template of the Adra Membership Application form from the Adra website www.adr-association.eu

**STEP 2:** Send an electronic copy of the Adra Membership Application Form filled in and duly signed to membership@adr-association.eu

**STEP 3:** Your application will be reviewed by the Adra Secretary General / Office that will inform you if any modifications or additional information needed.

**STEP 4:** The Board of Directors reviews the application and decides on granting the temporary membership status.

**STEP 5:** The General Assembly grants the final membership status upon proposal of the BoD

Do you need any support? Send an email to secretary-general@adr-association.eu
Get in touch

secretary-general@adr-association.eu
www.linkedin.com/company/adr-association
adr-association.eu
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

09:45 - 11:15 am
Presentation of topics by Evangelia Markidou and Antonio Puente Rodero from the European Commission
11:15 - 11:30 am

Presentation of Ideal-ist and Brokerage tool by Géraud Guilloud from Luxinnovation
Full Proposal Checks & Online brokerage

Horizon Europe Information & Brokerage
AI, Data, Robotics Partnership
17 June 2022

Géraud Guilloud
HE delegate & NCP Luxembourg
Who?

https://www.youtube.com/watch?v=zIdtz1yLKrE
Who?

Made up individuals with lots of experience to help you!

Ideal-ist has been active since 1996!

from 48+ countries!

Albania Argentina Armenia Austria Azerbaijan (Belarus) Belgium -Brussels Belgium -Federal Belgium -Flanders Belgium -Wallonia Bolivia Bulgaria Canada Croatia Cyprus Czech Republic Denmark Dominican Republic Estonia Faroe Islands Finland France Georgia Greece Guatemala Hungary Iceland Ireland Israel Italy Latvia Lithuania Luxembourg Macedonia Malta Mexico Moldova Netherlands Norway Poland Portugal Romania Serbia Slovakia Slovenia Spain Sweden Switzerland Tunisia Turkey Uganda Ukraine United Kingdom
Our Benefit: Transnational Support to Applicants
Fantastic services!

Trainings, Seminars & Webinars

Partner match/search

Toolbox for proposers

Brokerage events

Pre-proposal check & Full proposal review

Personalised weekly notification

Topic Tree
BROKERAGE
VIRTUAL AGORA

Register
Create a profile
Share cooperation offers
  • Project ideas
  • Expertise
  • Requests
Find & contact partners

A service offered by:
the network of ICT National Contact Points

LONG TERM NETWORKING

(horizon-digital-2022.ideal-ist.eu)
Ideal-ist

Full Proposal Check

Date established 24-28/10/2022
T4.5 Proposal Checks

Flagship Idealist service
Mock evaluation of the advanced draft

Score Distribution

- funded
- Not Funded

16/11/2022
HORIZON-CL4-2022-DIGITAL-EMERGING-02
HORIZON-CL4-2022-HUMAN-02
10 topics
+
HORIZON-CL3-2022-CS-01
4 topics?

FPC-2022-1
Probably hybrid
24-29/10/2022

FPC for cluster 1 & 6
Probably hybrid
25-29/07/2022

Today
ADRA infoday

28-30/06/2020
Full Proposal Checks – how can you benefit?

- 2 streams of actions:

  **Coordinators:** if you are interested, you must *retro-plan to have an advanced draft for end October*.

  **Partners:** poke your coordinator.

  **Volunteer as paid evaluators**

  Help us find evaluators: *forward the call for EoI DISCRETELY – NOT IN A NEWSLETTER*.
Find us
Find us @

https://www.ideal-ist.eu

https://twitter.com/ICT_IDEALIST

https://www.linkedin.com/in/idealisticproject

We’re also on Youtube!
The best place to benefit from H2020’s know-how, know-what, know-who and knowledge!

Geraud Guilloud
NCP Luxembourg
geraud.guilloud@luxinnovation.lu
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

11:30 - 13:00 pm
Pitches
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17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Flandres Research Institute for Agriculture, Fisheries and Food
ILVO

HORIZON-CL4-2022-DIGITAL-EMERGING-02-05: AI, Data and Robotics for Industry optimisation (including production and services) //Together with BDVA Members
HORIZON-CL4-2022-DIGITAL-EMERGING-02-07: Increased robotics capabilities demonstrated in key sectors. //Willing to join

Panagiotis Ilias, PhD, Researcher at ILVO, BDVA TF.AgriFood Leader

T: +3292722831
E: panos.ilias@ilvo.vlaanderen.be

EXPERTISE OFFER

✓ Integrated Institute – AgriFood Industry - From Farm to Fork
✓ Network of Farmers – AgriFood Tech Living Lab – DIH Smart Digital Farming
✓ Relevant project experience AI Data Robotics – Strong Track Record
✓ “exploit the latest robotics advances and demonstrate at TRL6-7 use-case scenarios considering end-user needs and expectations” ... “real-world scenarios”: Robotic Soil Sensing, Row spraying, Precision seeding, Fertilization
✓ “an interdisciplinary approach“ ...”address non-technical issues hampering the adoption of AI, data and robotics in the selected application domain”
✓ H2020 & HE proposal writing experience and project management.
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Robust all-weather GNSS-free localization
Mika Vainio, D.Sc.(Tech.)

Email: mika.vainio@gimrobotics.fi
ROBUST ALL-WEATHER GNSS-FREE LOCALIZATION

**Topic:** HORIZON-CL4-2022-DIGITAL-EMERGING-02-07: Increased robotics capabilities demonstrated in key sectors

**Type of project:** IA

**Project objectives:**
Create GNSS and supportive infrastructure free full stack automation software working in all-weather conditions with centimetre level positioning.
WANTED

Competences & Skills wanted
• Coordination, HQ software, HQ testing

Types of partners sought
• Industry, SME, RTD center, Universities, Field&Service robot manufacturers/users

Work to be performed
• Prototyping, Programming, System Integration and testing, Dissemination
EXPERTISE OFFER

- GIM Robotics founded in 2014.
- Strong academic background. Mobile robotics since 1986 at Helsinki University of Technology (later Aalto University).
- 10 senior staff members have more than 200 years of combined robotic experience.
- 45 robotics professionals, with 7 having PhD.
- Tight R&D collaboration with sister company Sensible 4 with 100+ automation engineers.

Email: mika.vainio@gimrobotics.fi
Prof Caj Södergård
Adra Board and VP

VTT Technical Research Centre of Finland

Caj.Sodergard@vtt.fi

16/06/2022  VTT – beyond the obvious
VTT – beyond the obvious

VTT is a visionary research, development and innovation partner

One of the leading research organisations in Europe.

Our networks
- Adra (board), BDVA (board)
- euRobotics, eurAI, CLAIRE
- EARTO (president)
- Finnish Centre for AI, FAIR EDIH
- ....

2,093 employees

Turnover 254 M€

45% of net turnover from abroad

530 scientific articles/year

~ 430 patent families

VTT won 265 M€
EU funds 2014–2021

#18 out of 7000+ actors

Source: Researchranking.org

© Adra 2021 | 16/06/2022 | VTT – beyond the obvious
We innovate tomorrow’s solutions together with our customers and partners.

We enable the development of a high-performing and sustainable digital society.

We create cutting-edge digital technologies and identify future opportunities to solve global challenges.

- Quantum technologies
- Next-generation microelectronics
- Integrated electronics and photonics
- Personalised health and wellness solutions
- Connectivity in critical environments
- Security & defence technology
- Competitiveness in an uncertain, complex, and ambiguous world
- Space-based communication and observation
- Strategic foresight
AI, Data and Robotics expertise at VTT

- 100+ AI & data scientists
- 30+ PhDs

Annual AI project volume

20+ M€

- Computer vision
- Voice recognition*
- Natural language processing
- Machine learning
- Optimisation
- Rules-based systems
- Planning & scheduling
- Robotics

*provided by partners
Demos Helsinki / Demos Research

Horizon Europe CL4 calls

17.6.2022
Atte Ojanen, atte.ojanen@demoshelsinki.fi
+358509177994
www.demoshelsinki.fi/
Demos Helsinki / Demos Research Institute is the leading independent nordic think tank in transformative AI and digital policies.

Our ongoing data/AI research projects:

**Avoiding AI biases** - Finnish framework non-discriminatory AI. Demos develops a framework for public organizations to assess fairness and biases in AI systems. (Finnish PMO, 2021-2022)


**ATARCA** - New economic models through anti-rival tokens. The project employs anti-rival DLT technology to better govern industrial data markets (H2020, 2021-2023).

**Artificial Intelligence 4.0 programme** for the Ministry of Economic Affairs and Employment

**Experimentalist policy-making in technology** for Open Loop.

We are a consortium member in five Horizon Europe projects, and a WP leader in six Academy of Finland research projects.
Our expertise

Demos has extensive expertise in:

- **Societal implications** of emerging technologies.
- **ethics, trustworthiness and responsibility** in AI and data
- **bias and discrimination in AI**
- **participatory co-design** with citizens
- **gender and intersectionality in AI**
- **data and AI governance**, including EU policies.

We have an interdisciplinary research background from **social sciences, ethics and political sciences.**
Horizon Europe Cluster 4

We are especially interested in the following cluster 4 calls for fall:

- HORIZON-CL4-2022-DIGITAL-EMERGING-02-07: Increased robotics capabilities demonstrated in key sectors
- HORIZON-CL4-2022-HUMAN-02-01: AI for human empowerment

Possible roles:

- SSH and ethics partner, looking at the societal context, diversity and power structures of the AI use cases
- Trustworthiness and AI ethics in practice: mapping citizen attitudes, acceptability and explainability
- Participatory design and deliberation, democratizing algorithmic fairness
- Building on and scaling up our soon-to-be published *assessment framework non-discriminatory AI systems*
- EU AI policy interaction and dissemination

We coordinated a proposal that got reserve listed for HORIZON-CL4-2021-HUMAN-01-24: *Tackling gender, race and other biases in AI* last fall. It’s possible we might try to repurpose it for the 2022-HUMAN-02-01 call with existing partners. If you have specific expertise that could complement us in mixed human-AI initiatives / hybrid decision-support systems (HRI/HCI) we might be interested in hearing from you.
Eindhoven University of Technology
Department of Industrial Design

Dr Diana Stah
Project Development Officer

T:+31636248506
E: d.stah@tue.nl
Future Everyday

Bridging the gap between emerging technologies and people’s everyday life.

Systemic Change

Using design and technology to study socio-technical systems at the level of a group/community.

Vitality, Learning and Social Resilience

Future Living and Health Continuum
Industrial Design Research Themes and application Domains

- Health
- Social Robotics
- Aesthetics of Intelligence
- Interactive Materiality
- Social Resilience
- Design Research Methodology
- Education

Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST
Eindhoven Artificial Intelligence Systems Institute (EAISI)

Scientific Roadmap

Moonshots

Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
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In collaboration with the European Commission and Ideal-ist

The University of Sheffield
Natural Language Processing Group
Prof. Kalina Bontcheva

Twitter: kbontcheva
E: K.Bontcheva@sheffield.ac.uk
EXPERTISE OFFER as PROJECT PARTNER

Deep Learning Methods for Natural Language Processing  
Cloud-based Infrastructures for Natural Language Processing  
Knowledge Graph Extraction and Population  
Large-scale, Real-time Analysis of Social Media Content  
Detection of Online Abuse  
Detection and Analysis of Online Misinformation  
FAIR open-source NLP methods and tools

Over 20 years of world-leading research and EC project coordination
Institute for Energy Technology

HADRON

István Szőke

T: +47 45498721
E: Istvan.Szoke@ife.no
Host of the OECD NEA Halden HTO (earlier HRP) project

The first designated IAEA International Collaborating Centre in the field of nuclear decommissioning

Founding member of the Cluster for Applied AI & Cluster for Decom. and Repurposing
Integrated industrial process management system

- 3D scanning/mapping
- Characterisation
- Job planning
- Costing
- Risk management
- BIM
- Digitalised Training
- Requirement management
- Info management
- Scheduling
- Open BIM compliant system
Robots & Digitalisation

Hazard Aware Digitalisation and Robotics in Nuclear and other domains

Support for design, testing, safety demonstration, mission control, training, ...

Input data

Assets (robots, sensors, humans, ...)

Safety and other requirements, The deployment environment incl. risks & hazards, The process / use-case
DigiDecom 2022
October 18 - 20
Norway - hybrid event

AI, data and robotics powered transformation for a sustainable decommissioning in nuclear and other industries

www.smartinnovationnorway.com/events/digidecom-2022/
MuseIA proposes to bring innovation and creativity to Horizon Europe projects « AI, data and robotics »

Cécile Calé & Régis Guyonnet
Presentation of MuseIA founders & expertise

Cécile CALE
Researcher CNRS/Arts professor
Exhibition curator & ArtAdvisor
Direction of artists of intl. stature
Conceptor workshops & Conferences Arts & Innovations

Régis GUYONNET
Chief Engineer
Head of innovation department
(French ministry of interior)
Manager cyber&IA

Our approach is based on the fusion of high quality creative processes and those at the cutting edge of engineering, in order to create business value and provide a broad competitive advantage.

Involved areas of expertise:
- Strategic and prospective dimensions of art mobilized to innovate
- Research in AI & cybersecurity
- Design of Command & Control Centres (C2)
- Jury management, contemporary art practice, training and selection of emerging or renowned artists or creatives
- Information Design / data visualisation
- Scenographic direction of exhibitions / art centers to maximize perception and information capture
- Partner and WP leader in ASGARD (H2020), CYBERSPACE (ISFP), POLIIICE (Horizon Europe FCT)

Envisioned Partnership:
- Joining any CL4 European Consortium as a full SME partner

cecile.cale@museia.eu
regis.guyonnet@museia.eu

This Muse + IA fusion becomes a catalyst of innovation for the future
What does MuseIA bring into projects?

- Stimulate creativity and boost innovation in AI, robotics, improve data visualization through the involvement of our network of artists, researchers and innovators of very high levels.
- Develop the ability to think "out of the box" in order to develop a creative and prospective mindset.
- Bring together profiles from the arts and humanities with other fields to work (workshops, hands-on workshops, ...) in a transdisciplinary way and go as far as prototyping of innovative objects related to robotics.
- Enrich and refine the visualization of data, better showing and perceiving the complexity of data. Artists and designers make information more visually understandable.
- Working with designers and artists to produce information, communication and awareness-raising campaigns, including the production of films, cartoons, video games, digital material and social media, etc.
- Create immersive digital artworks and environments wherever necessary to facilitate training, education and user experience.
- Establish digital platforms for stakeholders and partners to easily and securely exchange research activities, digital strategies and scientific projects, as well as to share information between partners and stakeholders.
- Organise events and exhibitions when required by European projects and interior architecture, interior design, digital environments. We are very experienced in aesthetics and how to design harmonious and pleasant spaces.
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Teknopar Industrial Automation/ TEKNOPAR

Expertises Pitch

presented by

Dr. Özlem ALBAYRAK

T: +90 312 395 9907
E: albayrak@teknopar.com.tr
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Five continents, 27 Countries, more than 500 successful projects.
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Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

M2M/IoT
Big Data/ Artificial Intelligence
Computer Vision
Digital Twin
# Digital Platforms for Energy, Manufacturing and Process Industries and Use Cases

## Selected R&D Software Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COGNITWIN</strong></td>
<td>Cognitive Plants Through Proactive Self-Learning Hybrid Digital Twins</td>
</tr>
<tr>
<td><strong>FACTORY4.0</strong></td>
<td>Development of Industry 4.0 Based Digital Twin Platform for Production Data Processing and Analysis</td>
</tr>
<tr>
<td><strong>MACHINAIDE</strong></td>
<td>Knowledge-based services for and optimisation of machines</td>
</tr>
<tr>
<td><strong>TC-VISION</strong></td>
<td>Digital Transformation of Bearing Quality Control with Computer Vision and Artificial Intelligence</td>
</tr>
<tr>
<td><strong>TX-VISION</strong></td>
<td>Automatic Defect Detection for X-Ray Test Systems</td>
</tr>
<tr>
<td><strong>WELDVUE</strong></td>
<td>Optimized Resource in High Value Sectors</td>
</tr>
</tbody>
</table>

### Business Level

<table>
<thead>
<tr>
<th>TIA Platform</th>
<th>Community</th>
<th>Marketplace</th>
<th>Customer</th>
<th>Stakeholders</th>
</tr>
</thead>
</table>

### Enterprise Level

<table>
<thead>
<tr>
<th>Integration</th>
<th>ERP/MES</th>
<th>VR/AR</th>
<th>CAD/CAE</th>
</tr>
</thead>
</table>

### Asset Level

<table>
<thead>
<tr>
<th>Data</th>
<th>Time Series</th>
<th>Vision</th>
<th>Sensor</th>
<th>Synthetic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Models</td>
<td>Analytical</td>
<td>Behavioral</td>
<td>Ontology</td>
<td>Physical</td>
</tr>
<tr>
<td>Algorithms</td>
<td>Optimization</td>
<td>Analytics</td>
<td>Mach. Learning</td>
<td>Deep Learning</td>
</tr>
<tr>
<td>Resources</td>
<td>Edge</td>
<td>Cloud</td>
<td>On-Premise</td>
<td>Container</td>
</tr>
</tbody>
</table>

### Physical World

<table>
<thead>
<tr>
<th>IoT</th>
<th>PLC</th>
<th>SCADA</th>
<th>Sensor</th>
<th>Actuator</th>
</tr>
</thead>
</table>

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Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Teknopar Industrial Automation/ TEKNOPAR

Digital Platforms for
Energy, Manufacturing & Process Industries

presented by
Dr. Özlem ALBAYRAK

T: +90 312 395 9907
E: albayrak@teknopar.com.tr
PROJECT IDEA

Development and Deployment of Digital Platforms for Energy, Manufacturing and Process Industries that bring AI, Data and Robotics in order to have quality lives and a better world

OFFERS by the CURRENT CONSORTIUM

Use cases from the energy sector
– especially in solar power

Technology providers in
– computer vision, data fusion, deep learning based automated inspection, smart camera AI based image sensor, robotics platform

Research institutes for
– machine learning, SLAM and SWARM algorithms
<table>
<thead>
<tr>
<th>RELEVANT CALLS AND TOPICS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digital and emerging technologies for competitiveness and fit for the Green Deal</strong></td>
</tr>
<tr>
<td>2022-DIGITAL-EMERGING-02-07</td>
</tr>
<tr>
<td>IA/ Project Size: 6.0M, Budget: 36M Euro</td>
</tr>
<tr>
<td>Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership)</td>
</tr>
<tr>
<td>- Development of robotics technologies in ways to autonomously take over dangerous, dull and dirty jobs, or tasks beyond human capabilities</td>
</tr>
<tr>
<td>- Easy to use, explainable and compliant AI tools</td>
</tr>
</tbody>
</table>

| **A human-centred and ethical development of digital and industrial technologies** |
| **2022-HUMAN-02-01** |
| - RIA/ Project Size: 4.0M, Budget: 16M Euro |
| - AI for human empowerment (AI, Data and Robotics Partnership) |
|  |
| - Human-AI hybrid decision-support systems |
|  |
| - Human-centric AI for supporting professionals in decision making |
| - Developing AI/Data/Vision algorithms for Robotic Systems |
| Due: 16 November 2022 |
WANTED …

More application oriented use cases:
- dangerous/dull and dirty tasks beyond human capabilities
- strenuous for humans
- in extreme environments
- manufacturing and process industry

Experts with Social Sciences and Humanities
- Ethics
  Trustworthiness and acceptability by humans at the design phase

Users/Technology providers and research institutes in
- 6G networks
- explainable AI and human centric AI
- Innovative HMI
- Quantum science/computing/simulation/communication/sensing
- Graphene
- Sensing

DIH networks

- Robotics
- AI
- Data
REFERENCES

Use case: https://www.mdpi.com/2220-9964/11/3/208/htm
SSH: https://schoolweb.tdsb.on.ca/yorkmillsci/Departments/Social-Science-and-Humanities
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

punal@teknopar.com.tr
albayrak@teknopar.com.tr

Thanks for your attention
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Loughborough University (LU)
Artificial Intelligence on the Edge
Dr. Shirin Dora

T: 01509635704
E: S.Dora@lboro.ac.uk
PROJECT IDEA

Topic: HORIZON-CL4-2022-DIGITAL-EMERGING-02-05 - AI, Data and Robotics for Industry optimisation

Type of project: **RIA** for developing new/improved solutions involving fundamental or applied research. **IA** for contributing towards improvement of existing products, processes or services.

Project objectives:

**RIA** Develop effective Artificial Intelligence techniques for edge computing.

**IA** Adapt existing AI techniques to meet the requirements of specific applications.
WANTED

Competences & Skills wanted: **Coordination** for managing the whole project, **Industrial/academic domain expertise** for developing complementary research ideas and exploitation.

**Types of partners sought:** Industrial partners with real-world use cases of AI and for data sharing, **academic partners** in other relevant areas of research.

**Work to be performed:** Research, Prototyping, deployment and evaluation/validation of solutions in real/simulated scenarios.
EXPERTISE OFFER

• Artificial Intelligence to address issues like edge computing, energy-efficiency, real-time decision-making, online learning, lifelong learning, federated learning.
• Main area of expertise is neuromorphic computing and other forms of bio-inspired AI.
• LU provides infrastructure for high performance computing, industrial robotics (intelligent automation centre, SMART manufacturing) and sports equipment (Sports Technological Institute) and aerial robotics (LUCAS).
• Proposed activities: Writing, Brainstorming, Reporting, Leading research (dissemination and exploitation) and other necessary activities (except coordination).
Horizon Europe Info Day and Brokerage event
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17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

Koçtaş Yapı Marketleri / Koçtaş
Smart Retail Robotics
Hilal Özdemir

T: +90 536 359 91 51
E: hilal.ozdemir@koctas.com.tr
PROJECT IDEA

Topic: HORIZON-CL4-2022-DIGITAL-EMERGING-02-07-Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership)

Type of project: IA

Project objectives: Help customers during their shopping experience
- smarter recommenders for customers
- conversational AI --- Virtual Smart Clerk
- digitalization of the routine operations in stores
WANTED

Competences & Skills wanted
Use Case partners conducting e-trade and owning the bulk of related data
R&D partner working in AI and big data processing
Research Partners (Universities and Research Institutes)
Technology Providers (Large Industry Firms, Research Institutes and SMEs)

Types of partners sought
Industry, SME, RTD center, University, User-groups, etc

Work to be performed
Prototyping, Programming, System Integration, Dissemination, Engineering, etc
EXPERTISE OFFER

Retail company in Home Improvement Sector
280+ stores and 1 Research and Development center in Istanbul
90+ Researchers
100 K+ customers
Software Developers in Robotics
AI Solutions
Mobile Application Development
Prototyping, dissemination, engineering
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

SESTEK
Tuba ARSLAN KIR

T: +90 212 286 25 45
E: tuba.arslan@sestek.com
22 YEARS OF TRACK RECORD IN CONVERSATIONAL TECH

+200 CLIENTS IN 16 COUNTRIES USE SESTEK SOLUTIONS

%70 70% of WORKFORCE ARE R&D ENGINEERS

100% In-house Developed Technologies

Sestek is a Gartner-recognized vendor for Speech-to-Text technology
2 R&D CENTERS

88% OF REVENUE = R&D ➔ COMMERCIALIZATION

11 PATENTS

+60 PUBLICATIONS

+35 FUNDED R&D PROJECTS

R & D CAPABILITIES

CALLS WE ARE INTERESTED IN

- CL4-2022-DIGITAL-EMERGING-02-05
- CL4-2022-DIGITAL-EMERGING-02-07
- CL4-2022-HUMAN-01-01
- CL4-2022-HUMAN-01-19
- CL4-2022-DATA-01-01
- CL4-2022-DATA-01-04
Virtual Assistants
- Speech Recognition (SR)
- Text-to-Speech (TTS)
- Artificial Intelligence (AI)
- Natural Language Processing (NLP)

Active Verification
- Passive Verification
- Blacklist Identification

Speech & Text Analytics
- Real-time Analytics
- Automated Quality Management
Thank You

Tuba ARSLAN KIR
R&D&l Manager
tuba.arslan@sestek.com
www.sestek.com
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

feedgy
Automatisation and optimisation of processes in Solar PV Value Chain
Laurent Thibaudeau, Innovation Director feedgy solar

T: +33 6 40 60 42 49
Email: lthibaudeau@feedgy.solar
PROJECT IDEA

Topic:
HORIZON-CL4-2022-DIGITAL-EMERGING-02-05 - AI, Data and Robotics for Industry optimisation (including production and services)

Type of project: IA

Project objectives:
The objective is to enhance efficiency of processes in the PV value chain, accelerate PV project identification, optimize PV plants performance by means of AI techniques
WANTED

Competences & Skills wanted
Coordination (we have no resources for that), AI technologies specialists, users in the Renewable energy value chain in order to build a use case for this Topic.

Types of partners sought
Industry, SME, RTD center. Any partner with strong competences in IA, data mining, Machine Learning, Geographical Information Systems, Predictive Maintenance
Possible synergies with other value chains (renewables such as wind for example)
Other partners in the Renewable Energy value chain are welcome to contact us.

Work to be performed
Prototyping, programming, integration into user’s information systems
EXPERTISE OFFER

Feedgy develops innovative solutions to 1/ extend the lifetime and improve the performance of existing photovoltaic power plants, and 2/ contribute to the massification of solar PV in Europe by accelerating processes.

Our expertise:
- Solar PV business (performance optimization, monitoring, fast identification and evaluation of potential new PV projects, repowering of existing plants, photonics)
- Artificial Intelligence: ML, algorithmics, Deep Learning, programming, integration

Strong collaborations today with French labs (CNRS, universities) and strong knowledge of the PV value chain.

Looking for EU partners to:
- build a use case, leverage on synergies with other value chains
- reinforce collaboration and integration in the EU ecosystem
Systematic Paris Region

MoniTerra project

Alain DINIS

T: +33 (0)6 81 68 43 21
E: alain.dinis@systematic-paris-region.org
PROJECT IDEA

**Topic:** HORIZON-CL4-2022-DIGITAL-EMERGING-02-07
Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership)

**Type of project:** (IA)

**Project objectives:**
Monitoring human, technological and social impacts on the earth environment through smart devices and digital technologies
### WANTED

**Competences & Skills wanted**
Coordinator, WP leaders, Cascade funding, multi-sided platform development

**Types of partners sought**
- Industry: Environment, sustainability, DeepTech
- SME, RTD center & University: Robotics, drones, IoT, IA, data sciences
- User-groups: Quadruple Helix (public authorities, industry, academia and citizens)

**Work to be performed**
Prototyping, Programming, System Integration, Dissemination, Engineering

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### Horizon Europe Info Day and Brokerage event

**Cluster 4 AI, Data and Robotics**

17 June 2022, 9:30am to 1pm CEST

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#### Work to be performed

<table>
<thead>
<tr>
<th>WP1</th>
<th>WP2 – Stakeholders involvement and co-creation process</th>
<th>WP3 – Open Call Management</th>
<th>WP4 – Incubation process and Startup coaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>WP5 – Creation of a catalogue of operating connected devices</td>
<td>WP6 – Development of multi-sided platform and applications toolbox</td>
<td>WP7 – Development of sets of digital data with providers</td>
<td>WP8 – Verification and validation of services and experimentations</td>
</tr>
<tr>
<td>WP9 – In field deployment and demonstration organization</td>
<td>WP10 – Communication, Dissemination, Impact maximization plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EXPERTISE OFFER

European & International Ambition

- Strengthening European innovation projects
- Facilitating international business development

- PARTNERSHIPS with European clusters
- Reinforced INNOVATION process
- VISIBILITY at European level
- PROMOTION of the Deeptech ecosystem
- Accelerating international GROWTH
- Technological PARTNERSHIPS

Marketing, networking, communication and dissemination
NAITEC

RESEARCH CENTER EXPERTISE OFFER

María Pedrosa (Head of European Projects)

T: Telephone number +34 696 786 946
E: Email mpedrosa@naitec.es
NAITEC

- Private non-profit foundation
- 75 researchers
- 22% PhD
- 40% female, 60% male

Main calls of interest
HORIZON-CL4-2022-DIGITAL EMERGING-02-05
HORIZON-CL4-2022-DIGITAL EMERGING-02-06
HORIZON CL4-2022-DIGITAL EMERGING-02-07

- Experience as WP Leaders in HE, Interreg, Eureka……

MEMBER OF:

- ADRA
- CCAM
- ERRIN
- COST
- OE-A
EXPERTISE IN ARTIFICIAL INTELLIGENCE

DIGITALIZATION
- Sensor development for critical parameters control in real time
- Sensor integration and implementation
- Communications
- IoT, IIoT
- Cybersecurity

Machine learning
- Smart management, security, governance and data analysis
  - Design of Experiments
  - Existing data study system and predictive model integration
  - Analytical and computational models
  - Time series, online learning and optimization

Computer Vision
- Images recognition
  - Acquisition systems (cameras, lightment)
- Deep Learning
  - Spectral images, resolution improvement

Digital Twin
- Digital Twins for operation and maintenance physical and industrial processes

SIMULATION
- Finite element simulation
- Structural simulation
- Dynamic fluid, fluid-thermal, chemistry, electromagnetic, multiphysic simulation

KNOWLEDGEMENT APPLICATIONS
- Process optimization
- Product optimization
- Process automation
- Predictive Maintenance
- Management and traceability of assets, logistics
- Anomaly detection
- People and objects detection
- Diagnostic fault in product and process
- Diagnosis and prognosis of diseases
- Industrial plants prediction
- Physical processes prediction

APPLICATIONS
- MLOPS design solutions
- Cloud solutions
- Edge solutions
- Embedded IA system design and development

SOLUTIONS
- Predictive models customization in embedded devices
- Methodologies and architecture design for training and export of predictive models
- Custom user interfaces (GUI) development
# INFRASTRUCTURE

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AI and Data Analytics laboratory</strong></td>
<td>The AI and DA laboratory aim the development of methodologies that allow a new concept of workflow, based on automation, adaptation and servitization (MLOps) as a solution that can tackle the complexity and growth of machine learning in companies.</td>
</tr>
<tr>
<td><strong>Digital Technologies laboratory</strong></td>
<td>The Digital Technologies laboratory aim the development of electronics devices where communications, embedded hardware and software, and mechanical integration are designed ad-hoc. A huge portfolio of laboratory instrumentation and simulation software are available to develop the IoT devices required for digitalization.</td>
</tr>
<tr>
<td><strong>Cybersecurity laboratory</strong></td>
<td>The Cybersecurity laboratory aim the development of testing electronics devices and applications for the fulfilment of the IEC62443-1 norm, relative to Secure product development lifecycle requirements.</td>
</tr>
<tr>
<td><strong>Autonomous System laboratory</strong></td>
<td>The autonomous system laboratory is a facility in NAITEC devoted to the use of unmanned vehicles for different applications: logistics, agriculture, industrial, inspection, safety and security, etc. It includes simulation capabilities. The laboratory is part of the Uspace Test Center “NAITEC- Aerodromo Lumbier”, where multi vehicle automatic use and coordination is tested (in the image for safe and security applications).</td>
</tr>
<tr>
<td><strong>Urban Circuit facility</strong></td>
<td>The urban circuit is a 2.3 Km infrastructure around NAITEC. It is a highly instrumented area for checking models of traffic, implementation of elements in smart cities, and check of Autonomous vehicles. The infrastructure is supported by a simulation and calculation knowledge. NAITEC can simulate models of mobility and checking them in real location.</td>
</tr>
</tbody>
</table>
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

University of York, United Kingdom
Dr. Simos Gerasimou
Assistant Professor

@: simos.gerasimou@york.ac.uk
EXPERTISE OFFER
- Software/Model-Driven Engineering
- Safety, Assurances, Self-Adaptation
- Institute for Safe Autonomy

HORIZON-CL4-2022-DIGITAL-EMERGING-02-06

HORIZON-CL4-2022-DIGITAL-EMERGING-02-07

Deliver an approach supporting the systematic engineering of dependable MRS
- Open, modular, configurable, reusable, model-based
- Use public meta-models and configuration tools
- Enable reasoning about the dependability of MRS
- MRS may employ AI and operate in open configurations
- Consider uncertainty during operation (including cyber-attacks)
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

17.06.2022
Zeynep Yumrutas
zeynepyumrutas@farplas.com
Farplas

With its 50 years experience, Farplas is a leading automotive Tier1 company in its region and an international player in the global automotive supply industry.

Farplas
• designs,
• develops and
• manufactures

vehicle sub-assemblies.

Customers
Industry 4.0 for Manufacturing Excellence

Capabilities of Manufacturing Excellence R&D Center

**Advanced manufacturing techniques**
- Research and applications on plastic material assembly
- Algorithm development for artificial intelligence and optimization techniques
- Logistic optimizations

**IoT**
- Data send/receive application with manufacturing machines
- Digital twin

**Advanced robotics**
- Autonomous transport system
- Research on robot kinematics and Dynamics
- Safety guidance robots

**Machine vision**
- Computer vision techniques and image
- AR and VR systems adaptation in production

**AI in management**
- RPA (Robotic process automation)
- AI optimization for human resource
- AI optimization for manufacturing planning
Supporting the Electric Vehicle REVOLUTION through maximising Electric Vehicle Range and End-of-Life Vehicle Recovery through optimisation of recycled plastics and advanced light materials

Advanced and sustainable recycling processes and value chains for plastic-based multi-materials

Human-AI Teaming Platform for Maintaining and Evolving AI Systems in Manufacturing

InnoVatlve processing Technologies for bio-based foAmed thermopLastics

Mitigating Diversity Biases of AI in the Labor Market

Industrial Data Services for Quality Control in Smart Manufacturing
BETTER.
FUTURE.
TOGETHER.
APPENDIX
Relevant HE Call Topics

- HORIZON-CL4-2022-DIGITAL-EMERGING-02-05: AI, Data and Robotics for Industry optimisation (including production and services) (AI, Data and Robotics Partnership)
- HORIZON-CL4-2022-DIGITAL-EMERGING-02-06: Pushing the limit of physical intelligence and performance
- HORIZON-CL4-2022-DIGITAL-EMERGING-02-07: Increased robotics capabilities demonstrated in key sectors (AI, Data and Robotics Partnership)
- HORIZON-CL4-2022-DIGITAL-EMERGING-02-20: 2D-material-based composites, coatings and foams

- HORIZON-CL4-2022-HUMAN-02-01: AI for human empowerment (AI, Data and Robotics Partnership)
• Research center focused on aerospace with more than 14 years of experience

• CATEC is a **leading technology center in Europe in the development of drones for civil application** and the largest private research center linked to the aerospace sector.

• More than 100 engineers and technicians working on:
  – **UAS/drones/aerial** robotics technology development

• Important experience participating in European projects
  – Involved in 25 European projects in the last 12 years
  – Coordinating PILOTING H2020 project, more of 9 M€

• 6 international awards in the last 5 years
  – MBZIRC 2020 with 250K$ award
  – Overall Innovation Radar Prize 2017

• Direct collaboration with the major companies of the sector in Spain
• State of the art equipment and facilities including a flight test center for UAS
• Member of BoD of euRobotics
Main technologies: Autonomous Systems

- Implementation of advanced Guidance, Navigation and Control (algorithms)
- Customization of Control Station and Mission SW for applications
- Captor drone technologies
  - Use of autonomous drones to minimize collateral damages in neutralization operations (specially in urban environments)
- Multi-vehicle trajectory planning
- Swarming (flight formation)

Video: https://youtu.be/Cq87ZAXz7xo

Video: https://youtu.be/w7F4cnbr48A
Main technologies: AI & Perception

• Artificial intelligence technologies
  – Automatic detection of other aircrafts: Detect and avoid algorithms
  – On-board autonomous detection and tracking of persons
    • On-board and real-time processing of DNN algorithms
    • Automatic guidance of the gimbal and the aerial vehicle to maintain persons in the field of view of the camera
    • Embedded AI being able to autonomously handle new situations where the target is temporally lost or actively hidden to recover tracking of the objective

Automatic detection of other aircrafts
Video: https://youtu.be/GONHO9q5rvU

Mult-objective detection
Video: https://youtu.be/rT_UG6ZUKKM

Automatic detection and tracking (gimbal and aerial vehicle movements)
Video: https://youtu.be/sXYRg9ksHWM
Experience and technologies applied to UAS
María José Peña Manrique
mjpena@catec.aero
Horizon Europe Info Day and Brokerage event
Cluster 4 AI, Data and Robotics
17 June 2022, 9:30am to 1pm CEST

In collaboration with the European Commission and Ideal-ist

KONTOR 46 (SME)
Applied and integrated AI, Robotics, Digital Twins
Paolo Barattini

T: +39-328-1250084 (preferably Whatsapp)
E: paolo.barattini@yahoo.it
PROJECT IDEA

**Topic:** HORIZON-CL4-2022-DIGITAL-EMERGING-02-05 / AI, Data and Robotics for Industry optimisation (including production and services)
HORIZON-CL4-2022-DIGITAL-EMERGING-02-06 / Pushing the limit of physical intelligence and performance
HORIZON-CL4-2022-DIGITAL-EMERGING-02-07 / Increased robotics capabilities

**Type of project:** RIA/IA,

**Project objectives:** Integration of AI, Digital Twins, Robotics demonstrated in at least three use case per project
PROJECT IDEAS  All include: STANDARDS, AI, Decision support systems, Digital twins

AI-ML-Robotics-DTs for the industry/maintenance/production of alternative energy

ROBOTICS ENABLED AUTOPSY.

DENTIST THIRD HAND Decision support system & DT to plan intervention and follow-ups.

AI- MACHINE LEARNING & DT for citizen empowerment with use cases: fake news, environmental impact, personal finance, cybersecurity

AI, Data and Robotics for FOOD INDUSTRY optimisation OR White Goods recycling/disposal
WANTED

Competences & Skills wanted
Technical

Types of partners sought
Industry, SME, RTD center, University, User-groups, END USER FOR USE CASES

Work to be performed
Prototyping, System Integration, Components development
EXPERTISE OFFER

Project technical innovative concepts
Safety and risk assessment, standards & certification, verification and validation.
AI and Machine learning
Human robot interaction design
Visual ergonomics and interfaces design (AI, Robotics, Cybersecurity)
Physical ergonomics, work psychology.
Interfaces and applications for the control of connected devices (industrial, medical, technical)
Biosensors based connected monitoring devices for the environment, biomed, veterinary
EXPERTISE OFFER

We worked in many projects
ESA: HEWS, MARES, PEMS II
FP7 & H2020: ROBOTICS: LOCOBOT, ENRICHME, FLOBOT, APRIL, VOJEXT
BIOSENSORS AND SENSORS: THERAEDGE, BURBA, MARIABOX, SWINOSTICS

ENI CBC-MED: TRANSDAIRY

We are involved in ISO working groups in AI and in Robotics
EXPERTISE OFFER

HORIZON-CL4-2022-DIGITAL-EMERGING-02-05 / AI, Data and Robotics for Industry optimisation (including production and services)
HORIZON-CL4-2022-DIGITAL-EMERGING-02-06 / Pushing the limit of physical intelligence and performance
HORIZON-CL4-2022-DIGITAL-EMERGING-02-07 / Increased robotics capabilities demonstrated in key sectors
- HORIZON-CL4-2022-HUMAN-02-01 / AI for human empowerment
- HORIZON-CL4-2022-HUMAN-02-02 / European Network of AI Excellence Centres: Expanding the European AI lighthouse
BDVA Brokerage – ICT Standards Experts

Prof Ray Walshe
ADAPT Research Centre
Dublin City University, IRELAND
Ray.Walshe@DCU.ie
HSbooster.eu has received funding from the European Union’s Horizon Europe Framework Programme (HORIZON) - under grant agreement no 101058391.
HSbooster.eu – The essentials

HSbooster.eu - Standardisation Booster for H2020 and Horizon Europe Research Results

- Coordination & Support Action (101058391)
- April 2022 – March 2024
- Budget €2m

HORIZON-WIDERA-2021-ERA-01-32 - Standardisation Booster for fostering exploitation of FP-funded research results and managed by the European Research Executive Agency (REA).

“A new service for EU research projects that want to ensure that their results create real impact by contributing to standards development.” - Peter Droell, Director at the European Commission’s Research and Innovation Unit

- Strong consortium with expertise and experience in standardisation, training and delivering EC Booster services

Projects

- Project Coordinator
- COMMpla Platform manager
- Automated services management
- EAG management
- Open calls and EPE management
- Training academy management
- Proactive services management
- Premium services management
External Advisory Group

- Backed and supported by experts with complimentary expertise and roles
  - Vertical sectors
  - Technologies
  - Standardisation
  - Advisory roles
  - Market needs
  - Innovation

EAG provides high-level strategic guidance and provides expert input into standardisation urgencies for open calls

Chair – Ray Walshe, Dublin City University
HSbooster.eu reports and policy briefs can contribute to the EU Standardisation ecosystem providing live information on the activities, status and impact of projects in the standardisation field.
Facilitating R&I innovation related stakeholders in EU projects towards EU standardisation and ensuring two-way flow of information that can contribute to identification of new areas for standardisation.
Cluster Meeting for Smart Communities

HSbooster.eu
Horizon Standardisation Booster

5 OPEN CALLS

Covering topics related to the standardisation urgencies highlighted in the EU Strategy on Standardisation.

The 1st OPEN CALL will start on 21st June until 30th September

2nd OPEN CALL > October 2022 - January 2023
3rd OPEN CALL > February - May 2023
4th OPEN CALL > June - September 2023
5th OPEN CALL > October 2023 - January 2024

Open to all Horizon Europe and H2020 ongoing or finished projects | More info: www.hsbooster.eu/open-calls.eu-projects
First OPEN Call for EU Funded Projects

Deadline to submit applications: 30th September 2022

Topics based on EU Standardisation urgencies, EC call topics & focus of ESOs, NSBs, SDOs.

Sustainable Digitalisation
- Data quality & Artificial Intelligence
- Access to & usage of data
- Space
- Data and cybersecurity
- Quantum technology

Health
- Pandemics
- E-Health & personalized services
- Design & use of medical devices
- AI in Healthcare

EU Green Transition
- Clean energy
- Materials (raw and secondary)
- Green & sustainable production
- Environmental impact

Resilience
- Robust supply chains
- Climate resilience
- Hybrid civil/defence
- Data protection & cybersecurity

Smart City & Circular Economy
- Circular economy
- Transportation
- Infrastructure
- Green buildings

https://hsbooster.eu/open-call-topics
OPEN CALL for Standardisation Experts
Supporting Horizon Europe and H2020 projects address Standardisation priorities in Europe

Join our pool of experts
Standardisation Expert Open Call

57 Standardisation Experts Recruited since 30th May 2022
Open call open until January 2024.

Experts by Open Call Topic:
- Sustainable Digitisation: 43%
- Resilience: 20%
- Green transition in Europe: 15%
- Smart Cities and Circular Economy in Buildings: 11%
- Health: 11%

Experts by Role:
- Experts: 36%
- Chairs: 15%
- Delegates: 9%
- Editors: 8%
- Head of delegation: 6%
- Other: 26%

Representatives from:
- National Standardisation Bodies: 50%
- International SDOs: 34%
- European Standards Organisations: 16%

Gender:
- Female: 28%
- Male: 72%

Average Years of Experience in standardisation: 5.3

Standardisation practices & procedures | State of the art | Where are revisions or new standards needed? |
Optimal standardisation workflows and timelines | Unique inside knowledge to facilitate contributions

Applications open: www.hsbooster.eu/epe/REGISTER
Next steps

- First Open Calls for projects opens 21\textsuperscript{st} June 2022
- July – August
  - Finalisation of service platform & testing
  - Allocation and notification of experts to project applications
- 5\textsuperscript{th} September
  - Service delivery commences
- September 2022 – March 2024
  - Services delivered on first come first serve basis
Thank you

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Ray Walshe – DCU and Director EUOS StandICT.eu 2023
Key-Achievements of StandICT.eu 2023 so far

- **6 Open calls Completed**
  - Open Call #7 now launched & running until 06 July

- **Functional Grants Platform**
  - Applications & evaluation process (58 contractualised EPEs)

- **8 Webinars on topical subjects (AI, Cybersecurity, EU ICT Policies, Trusted Information, Education in Standardisation, Blockchain)**

- **Participation to 33 third-party events + 9 SDOs meetings**

- **16 Memorandum of Understanding signed with relevant players**
  - Synergies with 56 Stakeholders

- **EUOS Release** (March 2021) + Publication of AI Landscape Report + Smart City Landscape Report + Trusted Information Report

- **11 EUOS TWGs on key ICT domains**
  - To work on dedicated Landscape & Gap Analysis
  - 4 Landscape Reports completed

- **EUOS Release**

- **COMMUNITY**
  - 1484 registered users
  - 3165 LinkedIn Followers
  - 790+ Twitter Followers

- **Expert Advisory Group (EAG)**
  - Members from SDOs, European Commission & Industry (20 members contributing to keep topic list updated)

- **3 Impact Reports**
  - Released to disseminate the concrete outputs of fellows funded under Open Call #1 e #2
  - 4th issued in June 2022

- **More Landscape Analysis reports in release pipeline for 2022**
  - (Blockchain, IoT, EDGE, Robotics, Ontologies)
Consistent number of proposals coming from applicants coming from SMEs and/or IT field as well as from Academia/Research: Cybersecurity, 5G, Artificial Intelligence, Blockchain & DLT proved to be yet the most popular topics.

A wide range of different topics tackled: e-Health; Semantics; Smart Grids; Smart Cities and more.
“Landscape of Artificial Intelligence Standards”, “Landscape of Smart Cities Standards” and “Landscape of Trusted Information Standards” are the fruit of the dedicated Technical Working Groups.

The Reports provide an encompassing compilation of standardisation efforts underway in the framework of European SDOs, such as CEN and ETSI, Government, Public Bodies and Agencies, Global SDOs, and initiatives.

11 Technical Working Groups that encompass +100 renowned Standards experts in key ICT and technological domains:

1. Artificial Intelligence
2. Blockchain
3. Smart Cities
4. Cybersecurity
5. Trusted Information
6. Digital Twin
7. Big Data Interoperability
8. IoT & Edge Computing
9. Ontologies
10. Robotics
11. EUOS Academy
#7 Open Call

The #7 OC will run until the 06th of July. The leading theme will be “AI, Data & Robotics” and the list of eligible topics has been augmented with the introduction of new topics of the recently released ICT Rolling Plan and more (i.e. Data Economy, 6G, U-Space).

https://www.standict.eu/standicteu-2023-7th-open-call
Thanks from

StandICT.eu 2023
ICT STANDARDISATION OBSERVATORY AND SUPPORT FACILITY IN EUROPE

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To find out more visit:
standict.eu

Stay in touch on Twitter
@Stand_ICT

Join us on Linkedin
linkedin.com/in/standict

24° March 2022
Standards in ADRA-e

European Partnership on Artificial Intelligence, Data and Robotics

Ray Walshe
ADRA-e

Call: HORIZON-CL4-2021-HUMAN-01

(A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES 2021)

Topic: HORIZON-CL4-2021-HUMAN-01-02

Type of Action: HORIZON-CSA

Proposal acronym: Adra-e

Type of Model Grant Agreement: HORIZON Action Grant Budget-Based

Budget: €4,000,000
Standardisation methods for trustworthy and ethical AI to foster AI, data and robotics industry, and in support of the Commission regulatory framework.

- The project will develop the ADR online Observatory of standards and standardisation activities, leveraging on the StandICT.eu project. After the first iteration, which will cover the standards at European level, further iterations will pave the way at international level for the sustainability of the activities in Adra-e. [Technological impact, T5.2 through the building of a feasible European regulation framework.]

- In a wider impact, the adoption of standards will improve the trustworthiness of EU industries and processes and increase their acceptance by the civil society. Driven by ethical principles, standards and efficient regulations will safeguard the interests of EU citizens.
Scale and significance of the project’s contributions to the expected outcomes and impacts

- **50 standards** - Having the experts group supporting the technical WG on ADR will impact on average 50 documents own to the multiplier effect typical of the TWG & TCs technical committees. To maximize the impact on Europe needs, a focus on harmonized standards needs will be made.

- **Scale: 30% of new standards analysed.** An effect of this type immediately contributes to bringing the European standardisation community at a remarkable level of impact on international standardisation.

- **Significance:** Europe will have a corpus of standards harmonized with its regulation and Europe’s voice towards standard development activities will be reinforced when Adra takes over at the end of Adra-e.
Adra-e’s Value Proposition to Target Groups

Value proposition to ADRe target groups

- **AI, data & robotics stem mapping**
  - FOR STANDARDS DEVELOPMENT ORGANISATIONS
  - Gain insights from ecosystem mapping activities and provide a reference point for standards in ADR

- **Dialogue forum and joint task forces**
  - FOR RESEARCH & ACADEMIA
  - Bringing innovative ADR research closer to the market through closer cross-sectorial links

- **ADR Standards Observatory**
  - FOR GOVERNMENT & POLICY ACTORS
  - Provide recommendations to the SRIDA, a platform for better cross-stakeholder links and be a reference point to support policy discussions on the European and MS level

- **AI Trust Label to Promote Adoption of AI Solutions**
  - FOR DEVELOPERS AND DOMAIN EXPERTS
  - Encouraging new innovations through more accessible EO data & tools for non-technical users

- **Community-Sourced Recommendations for Adra & SRIDA**
  - FOR THE PRIVATE SECTOR
  - Involve them in mapping activities and encourage adoption of trustworthy AI solutions and standards

- **ADR Awareness Centre**
  - FOR CITIZENS & CIVIL SOCIETY
  - Raise awareness on the benefits of trustworthy AI and address misconceptions

- **Community Building and Convergence Events Programme**

Coordinating Trustworthy AI development and use in Europe
ADRA-e Standardisation and regulation

OBJECTIVES

▪ Provide support and contributions for the implementation and the update of the SRIDA standardisation actions for trustworthy and ethical AI to bolster the AI, Data and Robotics market in Europe.

▪ Set up a competent and authoritative Experts Group for standards.

▪ Deliver a comprehensive, relevant, and inclusive AI, Data & Robotics Standards Observatory

▪ Task 1 – Expert Group animation, state-of-the-art in AI, Data and Robotics standards, and monitoring of ongoing standardisation activities.

▪ Task 2 Alignment and mapping with regulations and research recommendations.
BDVA Brokerage – ICT Standards Experts

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Thank you for joining!