

Artificial intelligence, Data and Robotics ecosystem

<https://adra-e.eu/>

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¹ **PU**: Public; **CO**: Confidential, only for members of the consortium (including the Commission Services)



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Author(s):	Jozef Geurts (Inria), Katerina Linden (LiU), Caj Södergård (Adra) Elizabeth El Haddad (Inria), Marc Schoenauer (Inria), Emmanuel Vincent (Inria).
Reviewers:	Eloísa Villar (Atos/Eviden)
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Disclaimer :

This document contains description of the Adra-e work and findings.

² R: Report, **DEC**: Websites, patent filling, videos; **DEM**: Demonstrator, pilot, prototype; **OTHER**: Software Tools

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Document summary

This deliverable reports on the cross-community workshops organized as part of task 1.1 “Connecting European AI, Data and Robotics communities”. Half way into the Adra-e project, a total of five Cross-community workshops have been held with stakeholders from the AI, Robotics and Data communities. The initial objective of the workshops, to strengthen relations and communication between the stakeholder communities, was successfully achieved. The workshops were well attended and the participants were appropriately balanced from the three communities; in part this was facilitated by the choice to co-organize the workshops with conferences such as the ERF or the EBDVF.

Tangible outcomes from the cross-community workshops include the definition of shared topics of interest for the SRIDA, as well as the launch of a mobility topic group following the 2022 EBDVF workshop.

A final report, D1.4 “Cross-community WS synthesis 2” will detail the final workshops as well as plans for the future sustainability, and will be submitted at the end of the project (M36).

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1. Introduction

As defined in Task 1.1 “Connecting European AI, Data, and Robotics communities”, the Cross-community workshops are designed to bootstrap and stimulate exchange between stakeholder communities (e.g AI, Data, and Robotics, as well as industrial R&I and academia). They are organized on topics where there is clear mutual benefit to consider the three disciplines together, but where sustainable collaboration may not emerge naturally. Reasons for this lack of organic convergence are numerous, including for example insufficient shared meeting opportunities, or cultural differences between the stakeholder communities. As such, the Adra-e consortium, and by extension the Adra community, feel it is a priority to invest additional efforts to overcome existing hurdles and to stimulate sustainable exchange between the respective communities.

The approach for organizing cross-community workshops include the following steps:

- Select a topic that has clear mutual benefit (i.e. stakeholders should be motivated to participate)
- Identify (possible) hurdles and a strategy to overcome them
- Recruit domain experts from the respective stakeholder communities as co-organizers/ animators of the workshop
- Prepare the program of the workshop, including inviting known keynote speakers/ panelists
- Motivate and mobilize stakeholder communities to participate by repeated communication campaigns
- Report on the outcomes of the workshop, including follow-up actions (e.g. preparing a topic group charter), and disseminate widely.

In the remainder of this deliverable, we report on the cross-community workshops that were held during the first half of the project. Often times, they were structured around shared challenges and provided input or feedback to the Strategic Research, Innovation and Deployment Agenda (SRIDA) that was under development at the same time.

Besides convergence on the topics for a shared roadmap for AI, Data and Robotics, supporting exchange between the various stakeholder communities is a key outcome of the cross-community workshops. Therefore, the workshops were organized to be highly interactive with break-out groups and panels.

2. First ADR Cross-community workshop – Brussels, October 18, 2022

The ADR partnership⁴ aims to leverage convergence between AI, Data, and Robotics to reach the ambitious objectives of the partnership: Objective 1 - Secure European sovereignty over AI, Data and Robotics technologies and know-how; Objective 2 - Establish European leadership in AI, Data and Robotics technologies with high socio-economic and environmental impact; Objective 3 - Reinforce a strong and global competitive position of Europe in AI, Data and Robotics.

While there are clear strategic and technology links between AI, Data, and Robotics, in practice these communities overlap insufficiently to generate the necessary synergies between them to leverage each other's strengths to boost research and innovation. This is reinforced by the fact that communities work well in their own right, while cultural differences complicate breaking barriers (e.g. physical constraints nearly always apparent in Robotics is less of a concern for purely digital scenarios).

For the first cross-community workshop we invited a number of European projects that each themselves are active in mobilizing (a part of) the ADR community. The objective of this first event was to get to know one another, and to identify synergies and opportunities for collaboration.

To this end, the day was divided in two parts. In the morning, each project shortly presented itself, its principal objectives and achievements, with the objective to raise awareness of the running projects and initiatives that aim to mobilize ADR communities, and to identify synergies between the projects. The presentations were recorded, and made publicly available⁵.

The afternoon session investigated and developed a (novel) shared narrative to leverage European ADR within Adra. For this we organized 3 break-out groups that each focused on one of the UN Sustainable Development Goals⁶ to get a handle on how AI, Data and Robotics can contribute.

The event was held in "Maison d'Irène et Frédéric Joliot-Curie", Troon 100 in Brussels. Time: October 18, 9:00 - 17:00

Participants

The participants invited to the workshop are representatives of a project whose task (in part) includes mobilizing their respective communities. Oftentimes they are closely related to communities that were shaped by the prior H2020 partnerships on Big Data and on Robotics, complemented with the Network of Excellence Centers in AI, as well as the AI on Demand platform.

The projects that were invited include:

- [EUHubs4Data](#) (Data)
- [DS4EU](#) (Data)
- [VISION](#) (AI)
- [AI4Europe](#) (AI)
- The 6 Network of Excellence centers in AI: [Tailor](#), [AI4Media](#), [HumaneAINet](#), [Elise](#), [euROBIN](#), [ELSA](#)
- Rodin (Robotics)
- Robotics4EU (Robotics)

⁴ For further information about the ADR Partnership, read the Fiche: https://ec.europa.eu/research-and-innovation/sites/default/files/bmr-2022/ec_rtd_bmr-2022-ai-data-and-robotics-fiche.pdf

⁵ <https://adra-e.eu/events/ai-data-and-robotics-community-event-october-18-2022>

⁶ UN Sustainable Development Goals: <https://sdgs.un.org/goals>

Representatives:

	Name	Project	Email
1	Mattia Trino	EUH4D	mattia.trino@core.bdva.eu
2	Cristina Sandoval	DS4EU	cristina.sandoval@core.bdva.eu
3	Holger Hoos	Vision	hh@aim.rwth-aachen.de
4	Gabriel González	AI4Europe	gabriel.castane@insight-centre.org
5	Reinhard Lafrenz	Rodin	reinhard.lafrenz@eu-robotics.net
6	David Bisset	Rodin	david@itechnic.de
7	Anneli Roose	Robotics4EU	anneli.roose@civitta.com
8	Iddo Bante	Adra-e	i.bante@utwente.nl
9	Marc Schoenauer	Adra-e	marc.schoenauer@inria.fr
10	Viviane Habert	Adra-e	viviane.habert@inria.fr
11	Joost Geurts	Adra-e	jozef.geurts@inria.fr
12	Caj Sodergard	Adra-e	caj.sodergard@gmail.com
13	Filomena Minichiello	Adra-e	f.minichiello@trust-it-services.com
14	Micael Frideros	Adra-e	micael.frideros@liu.se
15	Paul Lukowicz	HumaneAINet	paul.lukowicz@dfki.de
16	Trine Vikinge	TAILOR	trine.vikinge@liu.se
17	Mario Fritz	ELSA	fritz@cispa.de
18	Vassilis Mezaris	AI4Media	bmezaris@iti.gr
19	Christophe Leroux	euROBIN	christophe.leroux@cea.fr
20	Charlotte Peyrat-Vaganay	Inria	charlotte.peyrat-vaganay@inria.fr
21	Petri Myllymäki	Elise	petri.myllymaki@helsinki.fi

Agenda

9:00 – Welcome

9:10 – Presentations

- Adra-e (15 min + 5 min Qs)
- AI4Europe (15 min + 5 min Qs)
- VISION (+ 2-3 min per NoE present) (25 min)

10:15 – Pause (15 min)

11:00 – Presentations

- EUHubs4Data (15 min + 5 min Qs)
- DS4EU (15 min + 5 min Qs)
- Rodin (15 min + 5 min Qs)
- Robotics4EU (15 min + 5 min Qs)

12:20 – Lunch (1:10h)

13:30 – Intro working sessions (15 min)

13:45 – Parallel working sessions

16:30 – Wrap-up, conclusions

17:00 – End of Meeting

Pictures



Break-out session – Developing a shared narrative for Adra

Adra was founded in May 2021 based on a shared sense of responsibility that a strong partnership for European AI, Data and Robotics is necessary. This is still true today, but articulating a narrative that gives merit to the individual communities, and at the same time clarifies what Adra is about, turns out to be less trivial.

Around the time of the workshop there seemed to be some convergence within the Adra Board of Directors that Adra's focus should be around long-term socio-economic and scientific challenges at the cross-roads of AI, Data and Robotics. This is for some a controversial issue as there are also short-term needs, notably with regards to industry ability to adopt AI technologies as well as compliance with AI and Data regulations. Moreover, small and medium enterprises, as well as start-ups, who are an intrinsic part of the European economy and important for the European AI, Data and Robotics ecosystem, generally may find challenges in positioning themselves with respect to long-term socio-economic and scientific challenges that require durable investments for a long period of time.

The Sustainable Development Goals (SDGs) were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. For the break-out sessions, we selected the following: clean and affordable energy (SDG #7), climate action (SDG #13), and life below water (SDG #14). Each of the groups explored the following questions:

- Get a concrete handle (e.g. examples) on what ADR can bring to advancing the SDGs.
 - What are the ADR sub-challenges that will make a difference?
 - How to operationalize the expertise in the ADR community in an effective manner to contribute to advancing the SDGs?

The groups were provided minimal background material on their respective SDG, and pen and paper. They worked individually for 45 minutes, and made a plenary constitution of their results that was followed by a short discussion. Find below a synthetic overview of the principal results.

Group - Life below water (SDG #14)

- A digital twin of the ocean is a pre-requirement
- Robotics: Plastics removal, fusing plastics together in the ocean, drag it somewhere
- Need a lot of knowledge:
 - Satellite, digital model following the weather to direct the robot
 - In-sea sensing
 - Water quality monitoring
 - Can we fingerprint the plastics to know where it comes from and prevent it to come there at first (using currents)
- Can we degrade the plastic (fungi, bacteria to digest the plastic)
- Smart fishing: when we fish, only take the ones we want

Group – Climate action (SDG #13)

- AI, Data and Robotics are part of the climate problem. Training models requires enormous amounts of data and computing power. We need to build technology that is more efficient (i.e less resource-hungry). Europe is well positioned in this area as firstly the ADR community is aware and concerned about the problem and secondly there is the political will to solve the the issue.
- Need to develop holistic models that are cheap, open and accessible.
- Earth observation for monitoring and predictions.
- Robotics for first aid during natural disasters, but also water management.

Group – Energy (SDG #7)

- Using optimization in AI to built infrastructures for storage and distribution of renewable energies.
- Energy footprint of deploying AI solutions needs accountability. Not an easy question to answer.
- Trust and security are critical.
- Nuclear fusion plants require robotics for operations and maintenance and operations.

Discussion and Conclusion

The SDGs or Horizon Europe Missions provide a shared purpose that stimulates convergence. Many of the technologies developed by the stakeholder communities can also be used to advance the large socio-economic challenges; the cross-fertilization of communities and technologies also advances the disciplines individually. While there is value in convergence, additional vision is necessary to sustain convergence in AI, Data and Robotics. Arguably this vision should be more motivated and impulsed by politics (i.e. the EC) than the stakeholder communities, otherwise the convergence would have happened organically already (in some application domains, such as automotive, the convergence is apparent).

Follow-up questions then include: How to operationalize ADR grand-challenges within the partnership? How will it increase European competitiveness on the global scale, and justify substantial private investments? Start-ups and SMEs are critical in the European AI, Data, Robotics ecosystem: how can they be involved?

3. Cross-community workshop on R&I tools and platforms for automotive and mobility at EBDVF 2022 – Prague, November 21-23, 2022

Automotive and mobility is an application domain at the cross-roads between AI, Data and Robotics, as well as industry and research. This workshop, facilitated by the Adra-e project, supported convergence by leveraging tools and platforms of mutual interest as a means to raise awareness and identify potential synergies between them (e.g. use/integration, API compatibility, etc.). The workshop included a presentation of Adra to set the context followed by an overview of a few R&I tools and platforms in use by the various stakeholder communities meant to stimulate discussion and possibly lead to the setup of an Adra topic-group.

The concept of the workshop was to stimulate convergence between communities by sharing tools and technology. To this end, a few selected tools that have potential for cross-community usage were presented during the workshop (possibly including demos). Discussion on each presented tool may include adapting a tool for use in other stakeholder communities, improving a tool by integrating technology / expertise from other communities, connecting tools by ensuring compatible APIs, etc.

About EBDVF:

The European Big Data Value Forum (EBDVF) is an annual community event that brings together industry professionals, business developers, researchers and policy-makers from all over Europe and other regions of the world to advance policy actions, and industrial and research activities in the areas of Data and AI. In 2022, the event took place in Prague, Czech Republic on November 21-23, with the central theme “At the Heart of the Ecosystem for Data and AI” (see <https://european-big-data-value-forum.eu/>).

For more details see <https://european-big-data-value-forum.eu/session/adra-e-session-towards-shared-ri-tools-and-platforms-for-automotive-and-mobility/>

Agenda:

9:00 - 9:05 Welcome

9:05 - 9:30 All about Adra and Q&A with Adra directors

- Caj Södergård (Adra) - presenter
- Thomas Hahn (Adra)
- Laure Le Bars (Adra)
- Christophe Leroux (Adra)

9:30 – 10:30 R&I Tools and platforms for Automotive and mobility at the cross-roads of AI, Data and Robotics

Speakers:

- Mario A. Acosta Ramirez (CTAG)
- François Goupil (Scikit-learn)
- Loïc Cantat (confiance.ai)
- Zdenek Hanzalek (CIIRC)

10:30 - 11:00 – Panel discussion on Advancing ADR technology convergence

Results and outcomes

The session attracted about 40 attendees, who participated actively in the two panel discussions, and presentations. A tangible result of the session was the setup of an Adra topic group on automotive and mobility that is led by CTAG and the Technical University of Eindhoven.

The session was recorded and is accessible via the Adra YouTube channel (<https://youtu.be/R9KYkpsAyUA>). Presentations can be downloaded [here](#).



4. Cross-community workshop on Grand Challenges at the Cross-Roads of AI, Data and Robotics at ERF'23 - Odense, March 14th, 2023

An effective European AI, Data and Robotics ecosystem is a necessity to provide a powerful response to many of the challenges Europe and the world are facing, and transform the opportunities it presents into value. Much of this power comes through synergies and collaboration between disciplines and communities. A powerful mechanism to achieve convergence are shared challenges and objectives. Due to the omnipresence of AI, Data and Robotics technologies, and the complexity of the value-chains involved, defining such challenges is easy and difficult at the same time. Easy in the sense that technological advancements in ADR promise new opportunities when applied in nearly all sectors and application domains. Difficult in the sense that prioritization is not obvious. In this workshop we explored 4 (grand) challenges (archetypes) and investigated their potential and what implementing these challenges would require in terms of ecosystem and support.

About ERF

The European Robotics Forum (ERF) covers all aspects and current themes related to the field of robotics. Researchers, engineers, managers, and a growing number of entrepreneurs, business people, and public funding officers from all over Europe come together to discuss technology push and market pull and how innovation in robotics and robotics-related AI can be accelerated.

Agenda (90 minutes)

- Presentation 10-pager + Qs (30 min)
- Break-out groups (45 min - 15 min per question)
- Restitution (15 min - 4 min per group)

Break-out groups (topic / chairs)

Break-out groups were focused around an archetype challenge. They had a chair who minimally prepared the contours of the challenges, and animated the discussion in the break-out group. The break-out groups were populated randomly with participants to the session. The objective of the session was to get a dialogue going between the various stakeholders and their interests (i.e. the challenge in that sense was secondary, but inputs to the challenge at hand were deemed valuable and were taken into account in the development of the SRIDA) . The four challenge topics were the following:

- Socio-economic – zero carbon emissions (Christophe Leroux/Nabil Belbachir)
- Application/sector oriented – to be defined e.g. automotive (David Bisset)
- Infrastructure – AI on Demand platform (Gabriel González)
- Scientific/technological Challenge – to be defined (Fredrik Heintz/Jean-Baptiste Mouret)

Questions

Short introduction by break-out group chair, proposing a challenge (that could be refined with the participants)

Q1: Define primary and secondary objectives

E.g.

- Mission statement
- Goal (success criteria)
- Expected impact
- Timeline

Q2: Cartography (labeled graph) of the principal stakeholders involved (role)

E.g.

- Ecosystem (global, EU, national, regional)
- Initiatives
- Communities
- Events

Q3: 3 Recommendations for EC

E.g.

- Support/Investment
- Policy/Regulation

Results and outcomes



The session was well attended with about 40-50 participants. Likewise for the break-out groups that counted around 8 - 15 per group. Each of the break-out groups managed to have a lively discussion. Results of the session have been integrated in the strategic 10-pager developed by Adra that was used as a stepping stone to the new version of the ADRA SRIDA. A summary can be found in the recommendations section below.

Recommendations

- For the larger ADR community that is not directly involved in Adra, questions on the positioning of Adra compared to existing initiatives, and its relevance remain a preoccupation. Concerns are raised on:
 - The prior investments made by stakeholders to organize and structure a community that may be rendered oblivious with the presence of Adra.
 - “My community is tailored to my needs, and brings me value. I don’t necessarily want to invest in something that is more general, and whose value remains abstract”.
 - “I am working in mechatronics, which doesn’t necessarily have a lot to do with AI or Data. Yet, it is a cornerstone for robotics and therefore important. I don’t see it included in Adra”
 - The synergies that exist between ADR are arguably an opportunity for each of the individual disciplines, yet it is also difficult to get a handle on what these synergies yield concretely, and how they will lead to mutual benefit. Oftentimes perceived benefits come from a concrete requirement from a discipline, or sector (e.g. “AI for Robotics”, “Robotics for farming”).

- The positioning of Adra compared to euRobotics and the other Founding Organizations of Adra (FOs) need to be clarified and understood. Adra is the union of AI, Data, and Robotics (i.e. everyone is included), but has a specific focus on the cross-roads between AI, Data and Robotics (minimally two).
- Adra and euRobotics (and the other FOs) seem to be in competition, which is counter productive. Leverage/promote activities of the FO when it makes sense, but avoid being a postbox and actively leave room and time within Adra for exchange on FO contributions. Technological advancements promise new opportunities when applied to a new sector or application domains. These require knowledge from the new technology at hand, as well as domain knowledge specific to the application. Grand-challenges or shared challenges may facilitate the necessary synergies between communities.

5. Cross-community SRIDA deep-dive workshop - Brussels, July 5th 2023

Venue: Centre Albert Borschette, 36, rue Froissart-1049 Brussels

As a stepping stone towards the update of the Adra Strategic Research, Innovation and Deployment Agenda, Adra produced a document entitled “Strategic orientation towards an AI, Data, Robotics roadmap 2025-2027” (aka Adra 10-pager) to help identify the principal challenges and objectives for the future SRIDA. The 10-pager document was published at the beginning of June 2023 with the intent to solicit feedback of the relevant stakeholder communities active within the AI, Data and Robotics partnership. These include in particular the Adra members, the Horizon Europe partner countries (to allow for coordination with national strategies), but also Adra FOs and the network of AI excellence centers (in particular their joint SRA).

During the month of June, feedback was collected in written form from the Adra members and the HE partner countries. Additionally, a public presentation of the 10-pager was scheduled for June 26th.

Leveraging upon a workshop organized in the context of the joint strategic research agenda developed by the NoEs, which included a discussion on the relation between the SRA and the SRIDA, we proposed to join/extend the NoE workshop with the Adra SRIDA deep-dive. Concretely this meant that the SRIDA workshop directly followed the NoE workshop i.e. the morning of July 5th, at the same EC premises (Albert Borschette). The SRIDA editing and reference committee was invited to join the NoE workshop, and the NoE representatives that worked on the joint SRA were invited to join the SRIDA workshop.

The objective of the Adra deep-dive workshop was to converge upon the table of contents of the future SRIDA and its priorities, as well as to identify persons that would actively contribute to the writing, and the process of moving forward. It was a fairly hands-on meeting making concrete steps towards the authoring of the SRIDA over the summer months. For that reason participation to the meeting was by invitation only, but it was important that the participants of the workshop are representatives for the relevant stakeholder communities (AI, Data and Robotics, as well as Industry and Research).

Invitees to the workshop included:

- Adra editing and reference committees,
- NoE representatives active in the development of the joint SRA
- Representatives of the AI-on-demand platform and Adra-e
- EC representatives A1 and G1

The room had physical space for a maximum of 50 persons, but it was possible to join remotely.

Agenda

8:30 - 9:00 – Registration

9:00 - 9:15 – Welcome and tour de table

9:15 - 9:30 – Synthesis / conclusions joint SRA workshop

9:30 - 10:00 – Presentation 10-pager, and analysis feedback received so far

10:00 - 11:00 – From 10-pager to SRIDA 1/2

- Converging on a Table of Contents

Process moving forward 11:00 - 11:30 – Break

11:30 - 12:30 – From 10-pager to SRIDA 2/2

- Compose editing committee (leads) and reference committee

Planning 12:30 - 13:00 – Conclusion + Wrap-up

Participants

Name	Joined 4th	Joined 5th	Background
Alin Albu-Schäffer	YES	YES	robotics
Barry O'Sullivan	YES	YES	AI
Cristophe Leroux	YES	YES	robotics
Daniel Alonso	NO	YES	data
Emanuel Vincent	YES	NO	AI
Fredrik Heintz	YES	YES	AI
Freek Bomhof	YES	YES	data
Iddo Bante	YES	YES	robotics
Jessica Montgomeri	YES	YES	AI
Joost Geurts	YES	YES	AI, data
Jon Agirre Ibarbia	YES	YES	robotics
Katerina Linden	YES	YES	AI
Marc Schoenauer	NO	YES	AI
Mario Fritz	YES	YES	AI
Nabil Belbachir	YES	YES	robotics
Philipp Slusallek	YES	YES	AI
Rafiqul Haque	YES	YES	data

Rebecca.Schedl-Warpup	YES	YES	robotics
Samuel Kaski	YES	YES	AI
Stefan van Baelen	YES	NO	data
Stefan Leijnen	YES	YES	AI
Yiannis Kompatsiaris	YES	YES	AI
Passant Elagroudy	YES	YES	AI
Marko Grobelnik	YES	YES	AI
Andreas Keilhacker	YES	YES	AI



A short report

This workshop helped to further analyse Adra's document titled "Strategic Orientations towards an AI, Data, Robotics Roadmap 2025-2027" that was published in June and transfer the efforts towards the update of the Adra Strategic Research, Innovation, and Deployment Agenda (SRIDA). Participants engaged in discussions addressing contribution gaps, elaborating on missions and goals, with a particular focus on "Big Tickets" in AI, Data, and Robotics for the years 2025-2027. An initial selection of big-tickets was present in the "Strategic Orientations" document, but they were refined and completed during the meeting resulting in the final selection:

- Ground-breaking technological foundations in ADR
- Effective and Trustworthy General-Purpose AI
- Interoperable and integrated framework for data and model ecosystems
- Next generation smart embodied robotic systems
- Developing ADR technology for the sciences
- Research, innovation and tools for compliance

An editing team of prominent members of the ADR community was tasked to lead a collaborative writing effort to work out the “Big Tickets” in more detail, including socio-economic impact, challenges as well as important use-cases and applications. The results of their work will be publicly presented and discussed at several occasions in the coming months and eventually lead to the release of the SRIDA by end of the year.

The SRIDA workshop followed the Network of Excellence centres Workshop held on July 4th in Brussels, where discussions centered on the Joint Strategic Research Agenda with a particular focus on the main question: what is the long and mid-term vision in AI including robotics, spanning over 10 and 5 years? The second part of the workshop concentrated on Large AI models and Europe's role in the upcoming wave of (generative) AI.

Together, productive dialogues from both workshops contributed to the process of forming and writing the SRIDA, the document that defines the vision, overall goals, key technical and non-technical priorities, investment areas, and the research, innovation, and deployment roadmap for AI, Data, and Robotics in Europe.

6. Cross-community workshop “Visions on European AI, Data and Robotics – shaping the SRIDA” at the European Big Data Value Forum in Valencia, October 25th 2023

The Strategic Research, Innovation and deployment Agenda (SRIDA) is a consensual document that identifies the challenges and priorities for the ADR partnership to focus on in the medium term (1-3 years) within a context of longer term (≥ 3 years) strategic objectives. As such, it provides the principal input for the future Horizon Europe work programmes regarding the Research and Innovation topics within AI, Data and Robotics. The fact that the document is consensual is especially important for the AI, Data and Robotics partnership, as advancements in the individual disciplines are principally to arise from synergies with the others.

The cross-community workshop in Valencia was organized as a session during the European Big Data Value Forum (EBDVF), which gathers industry, research and policy representatives with the intent to advance the European data economy. The session was meant to facilitate convergence between the three communities by developing a shared vision for European AI, Data and Robotics, and to organize ourselves via a shared roadmap that takes into account the requirements of each of the stakeholder communities.

The session included an overview of the activity of Adra and its ongoing work on the development of the SRIDA. The first panel discussion elaborated on the question how to boost European competitiveness for AI, Data and Robotics technology. A second panel solicited further input from the audience on the priorities (“big tickets”) that the ADR partnership is to focus on for the period

2025-2027. The results of the workshop were directly fed into the last stages of development of the SRIDA that was officially published during the AI, Data and Robotics Forum in November 2023

Agenda

Chair: Prof Caj Södergård, Adra and NextAI

09:00: Current developments in AI, Data and Robotics Association – Adra by Prof. Stefan Leijnen, Vice-president of the AI, Data and Robotics Association

09:15: Opening statement from European Commission by Riku Leppänen, Scientific Programmer Officer (DG CONNECT)

09:30: How to boost European competitiveness in ADR. Moderated by Philip Piatkiewicz, Secretary General, Adra

- Stefan Leijnen, Vice-President of Adra
- Freek Bomhof, Senior Consultant, TNO
- Davide Dalle Carbonare, Business Developer, Engineering
- Andrejs Vasiljevs, Executive Chairman, Tilde
- Riku Leppänen, Scientific Programmer Officer, European Commission (DG CONNECT)

10:05: Adra Strategic Research, Innovation and Deployment Agenda by Prof. Fredrik Heintz, Linköping University

10:30: Panel asking for input on the SRIDA Big Tickets 2025-2027: Interactive Q&A with the SRIDA editing team.

- Fredrik Heintz, Prof. Linköping University (chair)
- Edward Curry, Prof. University of Galway
- Nabil Belbachir, Research Director, NORCE

11:00: End of the session followed by coffee break

Results and outcomes

About 50 persons attended the session.

There was general consensus the identified big-tickets were appropriate for the period 2025-2027. In the discussion, **education** in AI, Data and Robotics was highlighted as a topic that requires more attention and investment.

The panel on European competitiveness pointed out as one challenge the fragmentation of R&D, even if **success stories** like Airbus and the European Space agency exist. Also in semiconductors, Europe can show success – the Dutch ASML is doing well and has a good grip on its field through strategical “control points”.

The role of the **public side** in applying ADR in public administration was emphasized with examples from countries like Latvia.

Should Europe develop its strengths or weaknesses in ADR? The panel clearly was in favour of **investing in the strengths** and to go over where the bar is at highest, not lowest.

Regulation was generally seen to be competitive benefit for Europe if applied in a balanced and swift way preserving the first mover advantage. Good analogies are the seat belts in cars and the food safety protection that ensures that we don't have to worry for the food we buy from shops and enjoy in restaurants.



7. Conclusion

Half way into the Adra-e project, a total of five Cross-community workshops have been held with stakeholders from the AI, Robotics and Data communities. The initial objective of the workshops, to strengthen relations and communication between the stakeholder communities, was successfully achieved. The workshops were well attended and the participants were appropriately balanced from the three communities; in part this was facilitated by the choice to co-organize the workshops with conferences such as the ERF or the EBDVF.

Tangible outcomes from the cross-community workshops include the definition of shared topics of interest for the SRIDA, as well as the launch of a mobility topic group following the 2022 EBDVF workshop.

During the second half of the project, Cross-community workshops will continue to take place in a similar fashion. Adra will establish a task force to ensure sustainability and continued strengthening of the relationships between the stakeholder communities. A final report, D1.4 “Cross-community WS synthesis 2” will detail the final workshops as well as plans for the future sustainability, and will be submitted at the end of the project (M36).