

# Value and Impact through Synergy, Interaction and coOperation of Networks of AI Excellence Centres

GRANT AGREEMENT NUMBER: 952070

Deliverable D2.7

Evaluation of the AIOD Ecosystem Services Plan



Project title	Value and Impact through Synergy, Interaction and coOperation of Networks of AI Excellence Centres	
Grant Agreement number	952070	
Funding scheme	H2020-ICT-48: Towards a vibrant European network of AI excellence centres, CSA	
Start date of the project and duration	09/2020 - 08/2024 (48 months)	
Project coordinator name	University of Leiden	
Deliverable number	D2.7	
Title of the deliverable	Evaluation of the AIOD Ecosystem Services Plan	
WP contributing to the deliverable	WP2-Mobilizing the European AI community	
Deliverable type	Report	
Dissemination level	Public	
Due submission date	Feb 2024	
Actual submission date	July 2024	
Partner(s)/Author(s)	Long Pham (UCC), Luis Quesada (UCC), and Barry O'Sullivan (UCC)	
Internal reviewers	Executive Board	
Final approval (Executive Board)	Executive Board	

#### Disclaimer

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 952070. This document has been prepared for the European Commission, however, it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein



History of changes			
When	Who	Comments	
V1	Long Pham, Luis Quesada and Barry O'Sullivan,	First draft for Executive Board to comment/feedback	

Confidentiality		
Does this report contain <b>confidential</b> information?	Yes 🗌 No X	
Is the report <b>restricted</b> to a specific group?	Yes D No X If yes, please precise the list of authorised recipients:	



# **1** Table of Contents

2	Εχέςυ	itive Summary5
3	AloD	Platform Status by July 2024
	3.1	The AloD Key Services
	3.2	AloD and the Networks of Excellence
4	Імрас	t of the Promotional Campaign of the AIoD to the NoEs7
	4.1	The Campaign
	4.2	The three seminars and outcomes
	4.2.1	The Potential of the AloD Platform for Academic & Industry Innovators & Researchers9
	4.2.2	Enabling the EU AI Research Ecosystem: Discoverability of the AloD Platform
	4.2.3	AIDA and AloD Platform Experience
	4.3	The Seminars' Impacts
4.4 FEEDBACK FROM THE SEMINARS' PARTICIPANTS		Feedback from the Seminars' Participants
	4.5	Learnings from the Seminar Series
5	ΑΙοΕ	D Ecosystem Services
	5.1	The EU AI Ecosystem Mapping
	5.2	Educational Resources on AloD
	5.3	Conclusions



#### 2 Executive Summary

This report provides an evaluation of the AloD Ecosystem Services Plan, which outlined the roles of the AloD Platform for ICT48 projects, VISION's efforts in introducing the Platform, its usages and services to the Networks of Excellence (NoEs or ICT48) and the insights on research collaboration among Al researchers across institutions, regions and countries in the EU. This 2.7 Deliverable describes the status of the AloD platform by July 2024 with three key services of MyLibrary; Al Builder; and RAIL built upon a Metadata Catalogue.

The report presents the roles of the platform toward the Networks of Excellence, including the four original ones and the five additional projects in operation by the end of July 2024. The platform is expected to be where key AI assets and outcomes of the NoEs could be accessed by users of the EU AI ecosystem.

The VISION project, in its role as facilitator and supporter, has been instrumental in uniting various networks to explore the potential applications and advantages of the AloD platform. The ultimate objective is to foster a world-class artificial intelligence ecosystem within the European Union.

Through its comprehensive support activities, VISION ensures that Europe maintains its position at the forefront of AI advancements. By reinforcing, interconnecting, and mobilising Europe's AI community, VISION accelerates the progression towards global leadership in the research, development, and deployment of AI technologies. This initiative is crucial in enabling and cultivating a world-class community of researchers.

This report, entitled "Evaluation of the AIOD Ecosystem Services Plan," documents a portion of VISION's support to the Networks of Excellence (NOEs) regarding their engagement with the AIoD. Additionally, it shares insights for the next phase of engagement and collaboration between the newer NOEs and the AIoD, as these networks mature and potentially synchronise more effectively in the coming months and years.

The support provided by VISION encompassed several key elements:

- A series of seminars introducing the AloD to the NOEs
- The data migration and integration of the EU AI ecosystem mapping tool to the AIoD services
- The data migration and presentation of AIDA educational resources

The reports concluded with a few ways forward for the AIoD and other upcoming EU AI initiatives to consider investing time and effort to make the services offered by the AIoD meaningful for its users while fostering collaborative approaches and union in the driving European AI toward human-centric, trustworthy and upholding human rights AI development and applications.

# 3 AloD Platform Status by July 2024

#### 3.1 The AloD Key Services

As described in D2.3, the AI-on-Demand Platform (AIoD) is a community-driven channel designed to empower European research and innovation in Artificial Intelligence (AI), while ensuring the European seal of quality, trustworthiness and explainability.



By the end of June 2024, at its core, the AloD platform has three services: 1. MyLibrary; 2. Al Builder; and 3. RAIL; which were built upon a Metadata Catalogue bringing together resources and assets from all over Europe and beyond.

As one of the largest repositories globally, AloD enables access to over 500,000 resources including datasets, machine learning models, and experiments, among others, via the MyLibrary service that not only enables the users to browse through these contents from across multiple platforms but to also aggregate and create their customised libraries.

Another pillar of the AloD platform is the Al Builder, which is an open-source platform for the development, training, sharing, and deployment of Al models. Currently with ~400 models, the service empowers data scientists to move to an Al-centric process for producing software.

Research and Innovation AI Lab (RAIL) is a tool that allows AI practitioners to explore and use AI assets directly in the platform. It enables the creation of experiments that are reproducible and reusable, and that are executable directly in the AIoD platform supported by its infrastructure.

In addition, the AloD platform can also be used as a dissemination channel to share with the Al community new research results, news updates, and forthcoming events. Since the updated version in December 2023, the AloD platform has a rich community-curated component that supports projects to present their results, share assets, and announce events and activities, amongst other community-building activities.

Open and easily accessible, the AIoD platform facilitates knowledge sharing, research experimentation and the development of state-of-the-art solutions and technologies related to AI for the European AI communities and ecosystem. The community part of the platform is where users can access the news, events, and projects related to European AI. The community part is accessible at https://www.ai4europe.eu/. Users do not have to register to read the majority of the information on the community part. They will have to register and log in if they want to publish content and access to contents that need authentication. A similar approach is available on the services part of the AloD Platform. If users only want to view and have basic information about the datasets, models, and some basic available services on the platform, they may not need to register or log in. They must register and log in when they want to personalise their own content with selected datasets, models The initial services of the Platform and/or services. can be accessed via https://aiod.eu/services/virtual-lab.

#### 3.2 AloD and the Networks of Excellence

Since September 2020, four Networks of Excellence (NoEs), also known as ICT-48 projects, including AI4Media, ELISE, HumanE-AI-Net and TAILOR, have been working on aspects of trustworthy AI funded under H2020-ICT-48-2020 Call. VISION project supports the NOEs as a Coordination and Support Action, aiming to get the NOEs to achieve synergy and a critical mass in European AI activities and to improve their effectiveness, synergies, and cooperation to maximise their impact.

With the designed engagement of the four ICT-48 NoEs, the AloD serves as the backbone of these networks as they aim at strengthening it in enriching its capacity in terms of tools, competencies, and services, to make the AloD the reference and quality label for resource in Al, primarily for the European Al researchers in academics and industries, and beyond. Also from the four original NOEs,



VISION supported the collaboration to set up The International AI Doctoral Academy (AIDA) which offers access to AI knowledge and expertise and attracts PhD talents in Europe and for Europe. Meanwhile, AIOD Platform is positioned as the platform that supports innovation, research and enrichment of AI across Europe, including the NOEs. The AIOD Platform empowers its users to be part of the platform, allowing them to contribute to its growth and evolution by incorporating their needs into new developments. It enables the NOEs to foster an ecosystem of excellence and accelerate the adoption of solutions based on AI. It ensures openness and transparent access to AI, providing tools that ease its understanding and research.

In 2022, ELSA and euROBIN joined as additional NOEs and ELIAS, dAIEDGE, and ENFIELD became the latest NOEs from 2023. All the NoEs are strongly linked to the AI, Data and Robotics Association (ADRA), the private side of a public-private partnership that plays a key role in bringing knowledge from the European research community to industry.

With the expansion of the later joined NOEs, the AloD is planned to function as the platform for the NOEs to leverage their activities including accessing, uploading, developing and utilising datasets, Al models, services and dissemination. The NOEs can use the AloD as a place for their legacy aspects, especially with the original 4 NOEs coming to an end by Aug 2024. The newer NOEs can utilise the platform for their wide range of activities with services and assets that have been added and enriched by the first four NOEs.

As the facilitator and supporter, the VISION project has been bringing these networks together to learn about how they can leverage and use the AloD to their advantage with an end goal of creating a world-class AI ecosystem for the EU.

VISION's support ensures Europe stays at the forefront of AI developments, enabling and building a world-class community of researchers. Through its support activities, VISION reinforces, interconnects and mobilises Europe's AI community, and accelerates Europe's transition to a world-leading position in the research, development and deployment of AI technologies.

This Evaluation of the AIoD Ecosystem Services Plan report captures a part of VISION's support to the NOEs regarding their engagement with the AIoD while sharing some learnings for the next stage of engagement and collaboration among the newer NOEs and the AIoD as they mature and may be able to sync up more effectively in the coming months and years.

The support included: a series of seminars introducing AloD to the NOEs; the data migration of the EU Al ecosystem mapping tool to the AloD services; and the data migration and presentation of AlDA educational resources.



# 4 Impact of the Promotional Campaign of the AloD to the NoEs

#### 4.1 The Campaign

As detailed in D2.3, the AloD platform is a crucial asset for European AI research and innovation. To enhance its influence and promote collaboration, synergy, and interaction, VISION carried out a series of online seminars targeting members of the NoEs.

The series, led by UCC in collaboration with the WP6 leaders, NoEs dissemination and communication partners, and the AloD, started with planning activities in January 2024. By the end of June 2024, three seminars with different topics reached hundreds of AI researchers and enthusiasts.

As described in D2.3, the campaign was initially designed to engage and mobilise NoEs members, subsequently extending its reach to the broader European AI community. Given the constraints on time and resources, the campaign utilised a strong collaboration between VISION, NoEs, AIDA, and the AloD platform to attract the target audiences, identified in Figure 1 below, with aims, objectives, key messages and outreach channels identified in the D2.3.



Figure 1: the target Audiences of the Series of the AloD Seminars to the NOEs



#### 4.2 The three seminars and outcomes

After three months of preparation, from Jan to March 2024, with negotiation and acquiring agreements from speakers who are technical leaders of the AloD, VISION announced "<u>Practical</u> <u>Seminars Introduce Key Services of the AloD Platform to European Al communities</u>" in April 2024.

The series of online seminars brought European (AI) communities up to date with key services of the AIoD platform, a community-driven channel designed to empower European research and innovation in AI while ensuring the European seal of quality, trustworthiness and explainability.

From April to June 2024, two online and one hybrid seminars hosted by VISION, in collaboration with AI4Europe, presented the latest services and functionalities offered by the AIoD Platform to the members of the European networks of excellence and beyond.

The first seminar took place on the 30<sup>th</sup> of April targeting academic and industry innovators, developers and AI enthusiasts. The second seminar occurred on the 30<sup>th</sup> of May for a general audience who are curious and excited about the work in progress of the AIoD and what it can and could enable EU AI Ecosystems. The last seminar happened on June 26 as a part of the ICT-48 <u>Community Workshop and AIDA Symposium: AI Education Beyond Borders</u>.

As planned and set out as the key messages and relevant content in D2.3, the seminars provided NOEs and potential users with an overview of Al4Europe, the AloD Platform of the 2024 early release and the ways forward for the Platform in the coming months.

Through the delivery of the seminars, researchers, innovators, policymakers, industries, scientists, professionals, and AI enthusiasts have had chances to learn about huge collections of data sets, models, and other services that support research activities, AI development, and applications they may want to implement. The Platform also functions as a venue or channel for them to share or promote their research and development outcomes and impacts.

The development experts of the Platform also presented experiments and integration tools to potential users in accessing data sets, machine learning models, and universal adaptors that help create and build AI tools or solutions that are less challenging and more geared toward standardised practices.

These seminars were for NOEs researchers, early-tech adopters and AI enthusiasts who also wish to provide the Platform developers with their insights on demands, practical approaches and wishes for the Platform, which has plans to grow and to be useful to the EU AI ecosystem in the coming years.





Figure 2: The visual introduction to the seminar series designed by VISION communication partners. The visual was used on the VISION and the AI4Europe.eu, AI Alliance websites and social media posts on LinkedIn and X.

# 4.2.1 The Potential of the AloD Platform for Academic & Industry Innovators and Researchers

This was the first online seminar delivered by two speakers on 30 April 2024. Martin Tamajka, a technical lead of the AloD, presented a seminar introducing the AloD Platform and selected services currently being developed on top of it. He discussed the potential, including the metadata catalogue, RAIL, and community service of the platform for researchers, innovators and SMEs, how the platform could contribute to the EU AI ecosystem and what's the status and closest next steps. Loredana Bucseneanu, a key lead in supporting small and medium enterprises, presented the need assessment of SMEs, who may leverage the Platform for their AI development and application.

Martin Tamajka is a researcher and lead research engineer at the Kempelen Institute of Intelligent Technologies. He focuses on the research of new methods of deep learning, which includes current methods of natural language processing, as well as increasing the transparency of neural networks through explainability. He participated in and led industrial collaborations and research projects aimed, among other things, at creating a pan-European platform for AI researchers, analysing historical cultural heritage with the help of artificial intelligence, or increasing the transparency of artificial intelligence models.

Loredana is a Project Manager at the European DIGITAL SME Alliance, focused on the topics of artificial intelligence, digital skills and intellectual property. As part of the Al4Europe consortium, Loredana coordinates the engagement activities with stakeholders in the innovation ecosystem.

The recording of the first seminar is available on the VISION website and can be accessed via the link: <u>https://drive.google.com/file/d/1ndq3o4DLvWW1y9HysncAc-7VKWK2K8xo/view</u>.





Figure 3: The visual introduction to the first seminar designed by Al4Europe communication partners. The visual was used on social media posts on LinkedIn and X using the AloD accounts and reposted by NOEs and other relevant Al accounts





Figure 4: The visual introduced the first seminar's speakers. Designed by Al4Europe communication partners, the visuals were used on social media posts on LinkedIn and X using the AloD accounts and reposted by NOEs other Al accounts





Figure 5: The visual introduced the second seminar designed by Al4Europe communication partners. The visual was used on social media posts of AloD and a few other related NOEs social media accounts including TAILORS and AIDA.

#### 4.2.2 Enabling the EU AI Research Ecosystem: Discoverability of the AloD Platform

This was the second online seminar delivered by two top technical leads of the AloD platform on 30 May 2024, which focused on the latest developments in the AloD platform and brought together experts and innovators to explore crucial advancements in Al resource accessibility and management. The seminar, led by renowned experts Dr Rafael Tolosana-Calasanz and Dr Joaquin Vanschoren, delved into the 2024 updates of the AloD platform, with a particular focus on enhancing Al resource discoverability. This focus proved invaluable for attendees seeking to stay at the forefront of Al innovation and leverage the platform for their research and projects.

Rafael Tolosana-Calasanz is a co-architect of the AloD platform, received his PhD in 2010 from the Universidad de Zaragoza. He is currently an Associate Professor at the Computer Science Department at the Universidad de Zaragoza. His research interests include Resource Management and Fault Tolerance in distributed computing. Rafael regularly serves on the editorial boards and organizing committees of several journals and international conferences and workshops. He is currently associate-editor in chief in IEEE on Parallel and Distributed Systems journal. He has been leading the reproducibility initiatives of the SuperComputing Conference (SC23) and the International Conference on Parallel Processing (ICPP23, ICPP24). He is coordinating the IEEE T Parallel and Distributed Systems journal reproducibility initiative, which is the pilot program of reproducibility for IEEE.

Joaquin Vanschoren is a key technical leader of the AloD and an Associate Professor at the Eindhoven University of Technology. His research focuses on understanding machine learning algorithms and turning insights into progressively more automated and efficient AI systems. He founded and leads OpenML.org, initiated and chaired the NeurIPS Datasets and Benchmarks track, and won the Dutch Data Prize, an Amazon Research Award, and an ECMLPKDD Best Demo award. He gave over 30 invited talks, was a tutorial speaker at NeurIPS 2018 and AAAI 2021, and authored over 150 scientific papers, as well as reference books on Automated Machine Learning and Meta-learning. He is editor-in-chief of DMLR, action editor of JMLR, and moderator for ArXiv. He co-organized the NeurIPS



and ICML workshops on meta-learning and AutoML, as well as the AutoML and SysML conferences. He is a founding member of the European AI networks ELLIS and CLAIRE, as well as the MLCommons working group on AI Safety.



Figure 6: The visual introduced the speakers of the second seminar designed by AI4Europe communication partners. The visual was used in social media posts on LinkedIn and X by the AIoD accounts and relevant EU AI initiative accounts



Figure 7: The visuals introduced profiles of the second seminar's speakers. Designed by AI4Europe communication partners the visuals were used on social media posts by the AIoD accounts on LinkedIn and X, and reposted by NOEs' accounts.

Second seminar's Key Topics and Their Significance:



- System Architecture: The seminar provided an in-depth overview of the AloD platform's advanced design and strategic vision. This insight was crucial for participants to understand how the platform's architecture supports scalability, efficiency, and integration of diverse Al resources. Attendees gained a comprehensive understanding of how this robust foundation enables cutting-edge research and development in Al across Europe.
- *Identity Management*: The introduction of enhanced security measures and user experience improvements was a highlight of the seminar. These advancements are vital for maintaining data integrity and user trust in the AloD platform. Participants learned how these measures not only protect sensitive research data but also streamline collaboration processes, fostering a more integrated European AI research community.
- Metadata Catalogue: The presentation of the comprehensive metadata catalogue, encompassing nearly a half of million AI assets, was met with great interest. This extensive catalogue is a cornerstone of the AIoD platform, enabling researchers to quickly locate and utilise relevant AI resources. The discussion of future expansion plans for this catalogue excited attendees, as it promises to further accelerate AI research and development across various domains.
- *MyLibrary Interface*: The demonstration of the innovative MyLibrary interface for AI asset discovery was a seminar highlight. By comparing its capabilities with other digital libraries, the presenters effectively showcased how this tool sets a new standard in resource navigation and utilisation. Attendees were particularly enthusiastic about how this interface could significantly reduce the time spent searching for relevant AI assets, thereby accelerating their research processes.

*Future Developments*: The seminar concluded with a forward-looking discussion on upcoming enhancements to the AloD platform. This included plans for metadata catalogue expansions and deeper integration into MyLibrary components. These future developments resonated strongly with the audience, as they promise to further streamline AI resource discovery and utilisation, potentially leading to innovations in various AI applications.

Throughout the seminar, attendees had the opportunity to ask the presenters on specific technical questions and get some levels of clarification on the architecture of the platform. The live demonstrations of the latest features provided hands-on insights, allowing participants to envision how these tools could be applied to their specific research areas and projects.

The presenters excited the potential users, many of whom were very interested in the technical, security and the integration of other AI platforms to the AIoD. Participants left with a deeper understanding of the AIoD platform's capabilities and a clearer vision of how it can ease their access to AI resources that would fast-track their AI research.

This seminar marked a significant milestone of the ongoing series, bringing the European AI community closer to the resources available on the platform for them to innovate and join fast-growing AI technologies and their transformative applications in research and some leading industries including healthcare and manufacturing. By providing services and functions available on the platform, it is expected that knowledge exchange and collaboration could take root and those who leverage the platform effectively can become AI experts and leading researchers in advancing the EU's position as a leader in AI research and innovation.

The second seminar recording is available on the VISION's website and can be accessible at the link: <u>https://drive.google.com/file/d/1wX-ZM6CxMN40KrdxYkPuiyrA2Yr7Immw/view</u>





Figure 8: A screenshot of the presentation introducing the AIoD platform and educational resources available on it. The session is the third seminar focusing on educational AI resources and AI datasets and models for education.

#### 4.2.3 AIDA and AIoD Platform Experience

The third seminar was a hybrid event delivered as a session in the plenary of the AIDA Symposium "AI Education Beyond Borders". The Symposium, on 27 June 2024, was a part of the 4th European AI Network of Excellence Community Workshop held in Thessaloniki, Greece. The session was embedded in the Symposium to capture the target audience of scientists, researchers, innovators, academics, educators, policymakers, and enthusiasts of AI. The Community Workshop and the Symposium gathered more than a hundred members from the nine NOEs by June 2024, including those from the four original NOEs, onsite and more than a hundred online participants. The session leveraged the right audience with relevant content that was highly useful for onsite and online participants. It was also the last possible opportunity to capture the attention of the NOEs before the summer break and the end of the four original NOEs in August 2024.

The session focused on AI educational resources for AI PhD researchers, especially those belonging to PhD training activities of the NOEs, postgrad students and professionals who are interested in upskilling and reskilling to AI. The resources presented were for self-education but also linked to AI resources that learners can use in their training processes.

Al resources are key to the training and educating Al expertise for the EU, which wants to leverage Al technologies in driving innovation, improving competitiveness, and addressing grand challenges. The <u>Artificial Intelligence Doctoral Academy</u> (AIDA) and the <u>AloD Platform</u> are in the process of making Al resources including datasets, models and other services, available for the European Al ecosystem.



AIDA focuses on enhancing doctoral training in AI, providing PhD students with access to leading academic researchers, advanced European-based courses, and collaborative networks with some connection with industry partnerships. Meanwhile, AIoD platform is a community-driven comprehensive channel for European AI innovation and research communities, which can access, share and innovate around AI tools, datasets, models, methodologies, and others. The work-in-progress platform is facilitating collaboration and knowledge sharing among AI practitioners and businesses across the EU and beyond.

The session included two parts:

Dr Stefano Berretti, University of Firenze, delivered a presentation about AIDA initiatives and progress up to June 2024 and a walkthrough of the AIDA website with a focus on AI educational resources.

Dr Long Pham, University College Cork, introduced the AloD platform and ran a live demonstration on accessing key educational resources, datasets and models using different functions available on the platform.

Tend Contem		
	Contract Content Contract Contract Contract Contract Contract Contract Contract	Control of the second s
Funded by the European Union VISION Al4medic eff	IS B HUMANE TALOR ES OUR BN LALEDO	en e

Figure 9: As a member of the AIDA committees, the organiser and the moderator of the VISION AIoD Seminar Series, Dr Long Pham ran a live demonstration in the third seminar. The demo offered users' experience with the interface of a few relevant educational resources' services and functions on the AIoD.

The live demonstration offered attendees a firsthand look at its user interface and core functionalities related to AI educational resources and AI resources on the metadata catalogue. 300+ AI-related lessons, tutorials, and short courses can be accessed with log in or without logging in and the resources are of varied levels for learners to choose from.



Participants were guided through the steps of accessing and sharing the resources and creating a collection of relevant resources for their specific topics on the platform. This practical demonstration showcased the platform's presence of educational resources for PhD training while illustrating to the potential users its ability to democratise access to AI resources, which already included more than half a million AI datasets and models.

The presentation concluded by emphasising the transformative potential of these resources for PhD researchers and underlining the importance of continued enrichment of the resources by and for the EU AI community and ongoing support from EU institutions.

The recording of the session is available from minutes: 4:13:00-4:35:00 at: <u>https://www.youtube.com/live/RMoG7STyqDU</u>

#### 4.3 The Seminars' Impacts

The targets set for each of the seminars in D2.3 were:

- 50 registrations, 500 views/engagements via social media channels
- 3 posts/news publications on the channels or social media outlets
- 1 visual designed especially for the topic

The seminar series surpassed all the set goals thanks to a great collaboration in the promotion effort led by VISION and AI4Europe, supported by AIDA, AI4Media, and TAILOR.

*The first seminar on April 30 got 134 registrations, attended by nearly 80 participants*. The positive results came from more than two weeks of intensive promotion by VISION and AI4Europe with some support from TAILOR and AIDA.

The announcement and introduction of the first seminar were published on both VISION and AI4Europe websites. The first seminar was also published as an EU AI Event on the European Commission's AI Alliance portal.

Eight social media posts were published in the two weeks leading to the day of the seminar, providing followers of the AloD, AIDA, TAILOR, InTouchAI and others information about the speakers, and the content to be covered in the first seminar. The posts got over 1600 views on social media.

One visual was designed by VISION and eight visuals were designed by Al4Europe to use on the websites, and social media platforms of LinkedIn and X. The visuals were also used in invitation emails sent out to nearly 2000 accounts by UCC and more than 2000 emails by AIDA.

The summary of the series can be accessed via the VISION website: <u>https://www.vision4ai.eu/aiod-seminar-series/</u>





Figure 10: The screenshot of the Seminar Series on the VISION website. The latest information like links to the post-seminar recording was updated regularly as the series progressed.

Futurium > European Al Al	liance > Events			
AI	opean Al Allia	ance		
Home About Open Lit	orary Forum Trustworthy	Al in Practice Events The Al Alliance Blog Al	Pact	
Practical On the Al-on-De	line Seminars mand (AloD)	s Introduce Key Service Platform to European A	s of I	
communities	5.		-	
Share <				
Long Pham 24 April 2024 - updated 2	Event date Tue, 30/04/2024 - 10	0:30 - Tue, 30/04/2024 - 11:30		
months ago	Registration URL https://www.vision4a	ai.eu/aiod-seminar-series/ [2		

Figure 11: The screenshot of the Event published on the AI Alliance portal introducing the Seminar Series and registration open for the first seminar.





Figure 12: The screenshot of the news published on AI4Europe.eu website introducing the Seminar Series and registration open for the first seminar.

**The second seminar on 30 May got 57 registrations and was attended by 30+ participants**. The second seminar was promoted widely by Al4Europe, AIDA and VISION. The coordination team of VISION sent out invitation emails to all NOEs via the Project Managers' network while much of the online communication was done via social media platforms and emails accessible by partners, including UCC and AIDA.

The AI4Europe communication team published six social media posts which were reposted by other NOEs' social media accounts, during the two weeks leading to the seminar date. The posts carried the key messages, as detailed in D2.3, the seminar content, the focus topics to be discussed and the speakers of the seminar. The posts got 800+ views.

Six visuals were created for the second seminar. The visuals were used in the social media posts and email invitations sent out to EU academic and education communities by UCC and AIDA. TAILOR, VISION and AI4Media also circulated email invitations to their mailing lists. The seminar invitation also reached members of the European AI Office. The invitation was sent to an estimated 5000+ emails via all NOEs and partners' networks.





Figure 13: The screenshot of the email invitation sent by AIDA to subscribed students calling for registration for the first seminar. A similar email was sent to AIDA's lecturers, AIDA management, and registered mailing lists.

The third seminar on 27 June was a hybrid event that attracted 40+ onsite and 40+ online participants. Because the seminar was an embedded session in the AIDA Education Symposium, the promotion effort was a collaborative effort between VISION, AIDA, AI4Media, TAILOR, AI4Europe and their partners. Apart from being widely promoted by news and events on the websites of the original NOEs, the call for registration and information about the third seminar was also published on the AI4Europe website. Leveraging the larger outreach by the members of the NOEs, the event was heavily promoted via email lists and related research networks.

The lead communication activities related to the Community Workshop and the Symposium were driven by the organising team and the onsite hosts in Thessaloniki with very strong support from AI4Media and AIDA. The onsite organising team managed to gather 100+ onsite participants and arranged for the online participants to either join the sessions via Webex with advanced registration or view the live broadcast via the AI4Media YouTube channel.

Among the efforts to promote onsite and online participation, the Al4Europe communication team also ran four posts on social media specifically addressing the embedded session which was also the third seminar. The posts got more than 500 views.

Three visuals were created to use as supporting content for the social media posts.

Some of the impacts can be seen in the selection of the social media posts, below, published during April, May and June 2024 to promote the seminars and call for registration and attendance of the seminars.



Ð



Al-on-Demand Platform 🥝

17:32 · 27/05/2024 From Earth · 165 Views

InTouchAIEU ALEU @InTouchAleu

The @AIonDemand Platform is now open for all EU #AI communities! On Apr 30, the VISION CSA Project

invites you to a series of online seminars to update you on the platform's key services.

Take this opportunity to collaborate with like-minded AI innovators!

vision4ai.eu/aiod-seminar-s...



▲ AI4Media and 9 others 11:26 · 25/04/2024 · 261 Views



UCC Futures AI & Data Analytics @AI\_Data\_UCC

🚀 Did u register 2 learn about the latest with the AloD Platform ? @ Tmr @9:30 CET ✓ JOIN us 2 🤝 & find out how together we can build a useful & functional platform 4 💷 Al innovators, researchers & enthusiasts who want 2 shape landscapes of 🔳 Al Reg: vision4ai.eu/aiod-seminar-s...



LUCC Research and 9 others 12:23 · 29/04/2024 · 216 Views



InTouchAIEU
(InTouchAIEU
(Into

discoverability of Al resources and will be guided by Rafael Tolosana-Calasanz & @joavanschoren. Register below • • us02web.zoom.us/webinar/regist...



AI4Media and 9 others

12:16 · 21/05/2024 · 225 Views

TAILOR EU Network

Stay tuned for the AloD Seminar Series! On May 30, 2024, at 10 AM CET, the European Al on Demand Platform (@AIonDemand) will unveil its 2024 updates. Don't miss insights from experts Rafael Tolosana Calasanz and @joavanschoren. Discover more:



12:13 · 21/05/2024 · 148 Views





"Enabling the EU AI Research Ecosystem: Discovering the AloD Platform" is here tmr 30 May @10AM 😔 Experts bring YOU everything you need to know about 2024 #AlonDemand platform updates! These & much more. Reg NOW 🖆 us02web.zoom.us/webinar/ regist...



LUCC Research and 9 others 13:34 - 29/05/2024 - **286** Views





Join us for the 3rd Seminar of the NoEs+ series!

On this session, integrated on the AIDA Symposium, you can learn more about the AloD Platform and watch a live demo on accessing key educational resources, datasets and models.

Don't miss out vision4ai.eu/aiod-seminar-s...

A or Demand Seminar 3 Seminar 3 July 22222 Halloward CEST Register none www.stat.eu

Last edited 18:15 · 21/06/2024 From Earth · **102** Views

 09:40
 ... 46 ☑

 ← ← Al-on-Demand P...
 ... 📾

 Feed
 Analytics
 Activity ⑧

Al-on-Demand Platform 4,958 followers 3w · •

Last chance to register for the 3rd Seminar on June 27!

Join us for our insigntful joint presentation of the AIDA site and #AloD Platform.

https://lnkd.in/dwKWMa7R



InTouchAl.eu - International outreach for a human-centric a... 2,455 followers 3w • ©

#AlEducation Beyond Borders - follow today's livestream, part of the 4th European Al Network of Excellence Community Workshop. This is an excellent opportunity for

knowledge sharing among #Alresearchers and practitioners on Al education 🏺 🏺

#### https://lnkd.in/dNdm-mAD



Comments





$\leftarrow$	

Al-on-Demand Platform + Follow 4,958 followers 19h · •

Looking back to the amazing success of the 3rd Seminar of the NoEs+ series!

#### AI4Media euROBIN project Humane AI Net TAILOR Network of Excellence Centres on Trustworthy AI





### 4.4 Feedback from the Seminars' Participants

One of the ways to assess the services of the AloD was to get direct feedback from those who attended the seminars. After each of the seminars, UCC sent out a feedback form to ask participants to fill out together with links to the recordings of the seminars, the key topics and related links that the speakers used during the seminars.

From the answers, despite a small collection of only seven respondents, received from the participants, we get the following conclusions:



Figure 14: Location and Gender of the respondents to the feedback

Most of the responses received came from people living in the city and rural areas and most responses came from male participants (see Figure 14).



Figure 16 Field and geographic locations of the respondents



The age group 40-54 was the most active in the survey, followed by the 55-70 group. All the participants were people at work, whereas the majority were AI researchers in academia. All participants are from Europe (see Figure 15 and Figure 16).

Most people found the information provided relevant (see Figure 17) and increased their understanding of the platform (see Figure 18). The demonstrations of the experiments and integration tools were found useful by most people too (see Figure 19) which invites people to use the platform in the future (see Figure 20). After participating in the seminars people seem mostly interested in Datasets & Machine Learning models (My Library), Research & Innovation AI Lab (RAIL) and Research and development sharing (marketing parts of the platform) (see Figures 21 and 22), where AIOD REST API and RAIL are among the most popular services.



Figure 17 How would you rate the relevance of the information provided about the AIoD Platform's key services to your field of work? The Likert scale from 1 to 5 indicated that 5 would be the most relevant while 1 is the least.



Figure 18: To what extent do you feel the seminar(s) and provided links have increased your understanding of the AloD and its capabilities? The Likert scale from 1 to 5 indicated that 5 would be the most true outcome while 1 is the least.





Figure 19: The demonstrations of the experiments and integration tools were useful. The Likert scale from 1 to 5 indicated that 5 would be the most useful while 1 is the least.



Figure 20: Based on the seminar(s) and provided links, how likely are you to use the AloD Platform for your future projects? The Likert scale from 1 to 5 indicated that 5 would be the most likely by the respondents while 1 is the least.



Figure 21: Which services/functions of the AIoD Platform are you most interested in after attending the seminar(s) and exploring the provided links? The Likert scale from 0 to 4 indicated that 4 would be the most interested services/functions while 0 is the least.





*Figure 22: Please indicate the service(s) you most likely use. The Likert scale from 1 to 5 indicated that 5 would be the most likely while 1 is the least.* 

The respondents indicated the following as their key takeaways from the seminars and provided links:

- Knowledge of the platform
- I was particularly interested in the AIoD REST API. I found the integration of RAIL in the platform interesting.
- Good approaches to AI as services
- That AloD has reached a good maturity
- The platform reunites in one place different projects, stakeholders, and will be still deployed in different developments.

The respondents provided the following foreseeable using the AloD Platform in their current role or industry:

- All aspects of research
- I would like to add a new service to the platform using the RAIL case as an example
- I will evaluate over time to check opportunities for usage.
- For advertising the systems we develop in our lab
- Promoting InnDIH, the Valencian Region EDIH

The following features or services the respondents want to see added to the AloD Platform in the future:

- Education: Simple easy step by step tutorials of 10 15 minutes max.
- AloD REST API
- I still have to use more the platform.
- A graphical user interface for the AIoD REST API to add/edit content and search

The respondents suggested the following for the AIoD platform to best support the EU AI ecosystem:



- Promote this platform fully. Education is critical to uptake.
- Through the implementation of more seminars of this type to make people aware of the new features of the platform.
- Making the use of "user-friend" giving the opportunity for non-experts to use AI.
- Provide ways to engage with different communities and help reduce fragmentation

The respondents also provided the following suggestions on how the AIoD Platform could be enhanced to be more interactive and engaging for its users:

- You need simple step-by-step education content. See how Microsoft and Google suck in their audience. Simple education tutorials are vital and also all should be in PDF format so one can download and read off-line.
- How to make the integration of services that work as standalone apps more straightforward.
- Not for now. I still have to use more the platform.

Overall, people have increased their knowledge of the platform and gained appreciation for the services offered. They perceived a degree of maturity in the development. Among the services that people would like to see in the future is the inclusion of tutorials and the implementation of a graphical interface for the AIoD REST API so that users can add/edit content more easily. Regarding the support the platform could provide to the ecosystem, the platform can provide ways to engage with different communities and help reduce fragmentation. Concerning suggestions to enhance the platform to make it more interactive and engaging for its users, people proposed the introduction of step-by-step education content and the possibility of integrating services that work as standalone applications.

#### 4.5 Learnings from the Seminar Series

The timing and open and collaborative approach in organising the series was critical. VISION, inner consortium collaboration, and the original NoEs have been working together on other cross-network activities for a few years. Momentum and the understanding of members were set up and at a certain level of trust among those who share the common goals. The seminar series benefits from such collaboration and extends its reach to AI4Europe for even stronger joint forces.

While the deliverables belong to projects and responsible partners, the professional members of the NOEs played key roles in driving the can-do attitude with timely feedback and contribution while the quality of the work remained high. The speakers from the Al4Europe team were obvious contributors but so were many partners in VISION, TAILOR, Al4Media, and AIDA who helped to bring the information about the seminars, calling their network to join and encouraging their partners to participate. The timing constraint was apparent due to the availability of the speakers, the growing and changing technical aspects of the platform and potential time slots that could attract the most interested participants. However, the efforts of all those involved have yielded some positive outcomes that can be continued by the Al4Europe with the newer NOEs who are in the early stage of their projects.

The VISION AloD Seminar Series has started the outreach to the NoEs users, who will be part of other EU AI networks, officially or non-officially, in the coming months. The current and to-be-developed features and benefits of the AloD may continue to bring access and additional tools to those who



want to leverage the platform to their advantage. But more importantly, those who care for the development of the European AI ecosystem and networks are now aware of the experts of the AIoD that they can seek collaboration.

Some of the content generated from the seminar series, e.g., recordings of the seminars, visual templates used in the seminar, and feedback from participants have been used as input for the regular VISION Newsletter. Also, the relevant content is a good source of materials for insights and providing context to be used and reused by the NoEs and the AloD platform for further communication and dissemination purposes.

After all, it's the people who are involved and passionate about possible EU AI prospects that matter. They must continue to be informed and engaged, in different forms or forums, to jointly innovate and create synergies that benefit themselves and the EU AI communities.

# 5 AloD Ecosystem Services

In D2.3, we outlined a preliminary result describing a service aimed at promoting international collaboration in AI research within the EU, utilising data from the European Conference on Artificial Intelligence (ECAI). The initial implementation analysed publication metadata from ECAI, a leading AI conference in Europe, to identify collaboration patterns and potential opportunities for increased cooperation between countries.

The analysis, based on ECAI publications from 2008 to 2020, reveals significant potential for international collaboration. However, the researchers acknowledge that the metadata was incomplete and plan to expand their dataset to include other major AI conferences.

During the Second Seminar on 30 May, the speakers discussed the potential service of reusability and discoverability of those recommended future improvements including automating the service, allowing users to customise data sources and output formats, and implementing it through the AloD Programming Interface. Since the AloD architecture is evolving, such a service would hopefully be introduced to platform users in the second release later 2024.

#### 5.1 The EU AI Ecosystem Mapping

Another service for the AloD ecosystem was the European Al Research and Innovation Ecosystem Mapping. VISION's partner UCC initiated the discussion on how to integrate the data collected and visualised by the TNO partner in VISION into the AloD metadata catalogue, leading to the potential of having the interactive map available for the platform users and remaining an important service beyond the lifetime of VISION, which the task belongs to. The service became a priority set by the EC and Project Officers with a mandate for detailed discussion in Thessaloniki by the TNO and Al4Europe technical teams.

From the beginning of June 2024, a series of emails and meetings were organised by VISION for the TNO team to meet with the AloD technical teams to understand the pathways for onboarding the Al ecosystem data into the platform. The teams tried to find answers to the questions such as:

\* What format is the data in? Is this in a database or CSV that we could import into our metadata catalogue?

\* What technology was used for the website (interactive map)?





Figure 23: The current interface of the AI Ecosystem Mapping tool is hosted by TNO. It is expected that the tool will be associated with the AIoD when the VISION project comes to an end in Aug 2024.

With a sense of urgency, the teams agreed to act within a week before the face-to-face meeting between TNO and the AloD technical team in Thessaloniki on June 26-27 including:

- TNO sent the AloD the survey forms with T&Cs that AloD can send to the Al4Europe lawyer for clarification regarding GDPR compliance and concerns.
- Once the lawyer's feedback arrives, TNO shared the data sheet (excel, CVS or any format that is collected & available from TNO) with the AI4Europe tech team
- TNO set up a meeting between the software developer of the map prototype hosted on TNO's website and the AI4Europe Tech team led by relevant technical leads and their deployment teams.

The two teams agreed to try a shortcut of having a link of the prototype to the AloD as an EXCEPTIONAL EXPERIMENT.

On the longer term of the mapping and beyond in collaboration with ADRA, the teams can explore (later in the summer) the possibility of having the initial TNO EU AI Ecosystem mapping sustained, expanded, enhanced or maybe in a new format, with stronger engagement and commitment between AI4Europe, DeployAI, ADRA and TNO as the originated partner for this work.

In Thessaloniki, TNO met with the AloD technical leads to discuss the options for integration of the tool on or in some form of association with the AloD. The teams are working on options to create a subdomain and link to the ecosystem mapping. For the summer 2024, the teams agreed on the next steps, namely:





Figure 24: TNO worked out a sustainability plan with the AloD on integrating the Al Ecosystem Mapping tool. The work is progressing however, the summer break is a challenge for much of the work.

Data integration: the teams are working hard to integrate the data, and the TNO lead on the tool tried to support them within capabilities.

Data connection: TNO developers are making changes to our tool to accommodate the AloD API and they are in direct contact with the appropriate AloD technical leads for help.

Frontend integration: TNO makes the tool link to the AloD platform to support the integration, while exploring options such as an AloD subdomain (mapping. aid.eu) needs to be arranged and the mapping is featured content may be on the AloD platform. It is expected that such an arrangement would greatly enhance the integration, e.g. under the Community, or Innovation pages.

Handover tool and further development: The ADRA topic group is kickstarting. For now, TNO can easily maintain the hosting of the tool. As soon as there is funding for further development, TNO can further work on hosting; data integration; graphic design; and new features.

Within June and July, VISION facilitated the relevant teams to focus on the ecosystem mapping service with many activities carried out including resolutions regarding GDPR compliance and manoeuvres for data sharing and integration to take place. The work remained an ongoing effort of the involved team. However, from just hearing about the tool, the AloD technical team became strongly engaged with TNO partners to carry out the necessary steps to make the tool a feasible service associated with the AloD. By the end of July 2024, the service has not been available on the AloD, however, a roadmap is in place for the tool to become an actual service. Names and roles of relevant people from involved teams are exchanged and in conversation, it's a matter of time before the service is available for the European Al ecosystem and communities.

#### 5.2 Educational Resources on AloD

Another important service for the EU AI ecosystem is educational resources available for the NOEs users and potential users of the AIoD platform.



In the capacity of supporting AIDA, VISION has facilitated the AIoD and AIDA in making the AI educational resources available on the AIoD under the metadata catalogue and MyLibrary service. By the end of July, there are 310 educational resources accessible for AIoD users, many of whom do not need to log in to access those resources. The resources include recordings, presentations, notes, datasets and related information from lectures, tutorials, short courses, summer and winter school programmes, and demonstrations of experiments. The resources are also of diverse levels for non-computer science backgrounds to sophisticated techniques for PhD researchers.

The educational resources, shared and contributed by the AIDA web portal team and members, on the AIoD have gone through different stages:

• The presence of the resources on the AloD community portal

https://www.ai4europe.eu/education/education-catalog?category=All&field\_level\_of\_education\_tar get\_id=All&field\_category\_target\_id=All&field\_business\_category\_target\_id=All&field\_pace\_target\_id=All&field\_language\_target\_id=All&field\_country\_value=All&field\_target\_audience\_target\_id=All& keys=

- The AloD 1st release in early 2024 (findable by programmers only)
- <u>https://api.aiod.eu/docs</u>
- The updated synchronisation between AIDA & AIoD => findable by non-registered and registered normal users on the AIoD metadata catalogue
- <u>https://mylibrary.aiod.eu/marketplace</u>
- The way forward => new interface that focuses on UI and then UX (as the platform evolves/improves)
- <u>https://marketplace-pre.aiod.iti.es/marketplace</u>



#### → C (: mylibrary.alod.eu/marketplace \* 010 😤 Login - Register Al on Demand Label Propagation Data Cluster Graph-Based Pattern Decision Surfaces, Support About Recognition Vector Machines This lecture overviews Label Propag This lecture over This lecture overviews Graph-Based This lecture overviews Decision Surf Contact Select platform educational resource aida\_cms educational resource aida\_cms educational resource aida\_cms educational reso AlModel O Dataset Distance-based Human-Centered AI for Introduction to Machine O Experiment Classification Autonomous Vehicles Learning O Service This lecture overviews Distance-bas This lecture overviews human-centri This lecture will cover the basic con-Educational resource Q Search assets educational resource aida\_cms educational resource aida\_cms educational resource aida\_cms Q Items per page: 15 👻 1 - 15 of 310 Alonb

Al-on-demand (AIOD) Platform Ecosystem Services Plan

Figure 25: The current interface of the Educational Resources on the AloD. The collection is open for users to easily access to the educational materials that suit their interests and level of study. Users can register on the platform to create their library to save their materials for learning effort

The Educational Resource service is operational and being promoted by AIDA and associated institutions. The 310 resources are the current numbers, and this is expected to increase when the 2024-25 academic year starts in late August and September in most European educational institutions.

As AIDA is set to continue until 2025 rather than ending in August 2024 like the four original NOEs, the service will be strongly enhanced and utilised, as evidenced by the growing numbers of lecturers with resources joining AIDA and educational institutions interested in joining AIDA.

The processes for educational resources to be included in AloD's catalogue and metadata are available and the AloD technical teams are ready to support the uploading of the resources, the service should be popular among learners and lecturers. It is the time to raise awareness and make the service known among potential users and this effort must be carried out by the AloD teams in collaboration with the newer NOEs and other upcoming EU Al initiatives in the coming months.

# 6 Conclusions

The AloD platform is maturing and providing three key services of 1. MyLibrary; 2. Al Builder; and 3. RAIL; built upon a Metadata Catalogue bringing together Al resources and assets from Europe and other key Al platforms including OpenML, HuggingFace, Zenodo and others.

At the end of July, EU AI communities and ecosystems can access and make use of the services as users but they can also be active contributors to the services and the platform. From the activities



VISION organised for the NOEs in the last months, it is clear that central to the AloD's success is the user journey and the invaluable contributions of its users.

We learned that a user experience begins with exploration and evolves into active engagement. As users navigate the platform, we encourage them to ask themselves:

- Which services align most closely with my current AI projects or research?
- How can I leverage AloD's resources to accelerate my innovations?
- In what ways can I contribute my expertise to enrich the platform's offerings?

From the available feedback, both users and the platform developers understand that the reflections on active engagement with the platform serve as the foundation for meaningful interaction and necessary improvement of the AloD. Al4Europe started a few mechanisms to invite users to try the platform's services, critically evaluating their efficacy and relevance. This hands-on experience generates insights that are crucial for the platform's refinement.

We encourage users to channel their experiences into constructive feedback by considering the following questions:

- How intuitive were the services to use?
- Did you encounter any unexpected challenges or limitations?
- What additional features or resources would enhance your AI development process?

This feedback loop is instrumental in shaping AloD to meet the evolving needs of the EU Al community.

We call for stakeholders to actively participate in Working Groups, which Al4Europe is launching in September 2024, and associated activities. These collaborative environments foster innovation and provide a forum for sharing knowledge and best practices.

The AI community should also articulate and demonstrate how AIoD can support their ideas and innovations. By sharing the vision and requirements, users and potential users directly influence the platform's trajectory, ensuring it remains a dynamic and responsive resource for European AI advancement.

Through this collective effort and continuous dialogue, AIoD could fulfil its objectives to strengthen Europe's position in the global AI landscape, driving meaningful advancements that benefit both the research community and society at large.

VISION completed its committed support to the NOEs in their engagement with the AloD via the seminar series, the ecosystem mapping and the educational resources. However, NOEs comprise individual researchers, scientists, educators, innovators, policymakers and enthusiasts, therefore, more sustainable and meaningful engagements should be organic growth of interest in using the AloD. The organic growth of interest came from the useful and relevant services offered, and a smooth and intuitive user interface to create a great user experience. These could only work if there's a strong focus on both technical and community aspects of the AloD in the next stages of the development and engagement with the EU Al ecosystem.