



AI-PROFICIENT

**Artificial intelligence
for improved production efficiency,
quality and maintenance**

Deliverable 7.3.

D7.3: AI-PROFICIENT clustering and networking

WP 7: Dissemination, exploitation and standardization

T7.3: Clustering, best practice exchange and methodology workshops

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Executive Summary

The Deliverable D7.3 is a public document of AI-PROFICIENT project delivered in the context of WP7, Task 7.3: Clustering, best practice exchange and methodology workshops, with regard to the connections established among AI-PROFICIENT and counterparts within projects financed under the same topic and other relevant H2020 (such as AI4EU) and national initiatives, in order to establish a core cluster and discuss cross-fertilization and the implementation of joint activities.

1 Introduction

This document is presenting the activity of AI-PROFICIENT consortium partners, in terms of Task 7.3, which aims to boost results of the project and ensure greater accessibility among relevant communities, such as other projects belonging to the same cluster of projects under H2020 framework, other initiatives of the AI communities, of the European industrial world, and also more National and International initiatives. The task scope is augmented by dedicated workshops targeting very specific audiences (operators in similar factories of the same industry), multipliers' activity, (i.e., dissemination in large groups capable to further spread the news among wider communities), and with participation of all partners in relevant exhibitions, scientific conferences, workshops, or industrial events. This activity, as reported in the context of Task 7.1 (dedicated to communication/dissemination), reached its peak with the main outreach event which took place in the last year of the project targeting dissemination of project results to potential end-users.

In this context, project partners undertook as a primary goal the action to establish contacts with their appropriate peers within other projects related to AI utilization in the manufacturing field, financed under the same topic, i.e., "*ICT-38-2020 – Artificial intelligence for manufacturing*". At the same time, in order to also target the software community of Artificial Intelligence, partner activities within the current task were aimed to combine the results of the current projects with collaborative platforms originating from other relevant H2020 projects, such as AI-on demand platform of AI4EU project. Cooperation with other national and international initiatives was also pursued to maximize the impact of project outcomes, the scope being to establish a core cluster and discuss cross-fertilization and the implementation of joint activities.

Thus, the current Deliverable is focused on consortium actions regarding ICT-38 cluster, activity combined with AI4EU project and with other National and International initiatives. Networking actions to formulate a wide community are described, as well as dissemination activities in cooperation with the above stakeholders.

2 Establishment of the clustering community

Early enough into the project, activity related to the creation of the clustering community started taking place. Specifically, even though the associated task was originally scheduled to start at M7 of the project, already within M2 the project coordinator and the leader of associated Work Package (WP7 – “Dissemination, exploitation and standardization”) were engaged to relevant communications to detect areas of cooperation for clustering and to formulate relevant communities.

To this end, all existing connections of people engaged in AI-PROFICIENT with other software associations and initiatives were examined, as well as potential sharing of knowledge with important stakeholders within the industry. The aim was to build a wider community extended not only to industrial users and factories engaged in state-of-the-art ICT tools, but also to the software community related to Artificial Intelligence.

In addition to generic assessment of potential links to other associations, explicit actions focused to specific communities took place, as described in the following sub-sections.

2.1 The ICT-38 Cluster

One of the basic scopes of current task (*Task 7.3 – “Clustering, best practice and methodology workshops”*) of the project is to establish connections with the peer stakeholders of projects financed under the same topic of H2020 framework programme, which are engaged in activities related to industrial sector and how Artificial Intelligence contributes to relevant needs.

Since the other sister projects had had their project Kick-off earlier than AI-PROFICIENT, those other projects had initiated project actions in all domains, including clustering, earlier than our project. Therefore, the initiative to initially convene the cluster was undertaken by another project, namely by the XMANAI project, via its coordinator, Michele Sesana. Already by the end of M2 of project lifetime, AI-PROFICIENT’s project coordinator was contacted by the coordinator of XMANAI, who had already been in contact with participants of the rest of sister projects pursuing the clustering activity, with the target to engage in collaboration, and to explore other options such as organize shared events and technology transfer among projects.

This action initiated in December 2020 and considering that all projects in the cluster initiated with a few months’ deviation from each other, it was foreseen that the cluster would have a common path ranging from two and a half up to three years, approximately until the end of 2023. The aforementioned communications among project coordinators and the communication/dissemination leaders of all projects, quickly evolved to formulating the ICT-38 Cluster, creating a mode of operation among projects and also setting the targets for the upcoming months.

2.1.1 Cluster mode of operation

Following the initial discussions among project coordinators, a wider team has been formulated with representatives from each project to agree on the steps to be pursued. In this context, the ICT-38 cluster convened to an initial organization-related call, with the scope to decide upon its mode of operation and a schedule of actions for the upcoming years.

Thus, it was decided that the cluster would proceed with the following steps:

1. **Planning Telco:** A Planning Telco occurring every 3-4 months, so that the cluster can organize the activities of the upcoming period and gather information on what was realized in the previous months. During the Planning Telco all members of the cluster are also able to give their insights about future events and other dissemination activities, which could be of interest to all cluster members.
2. **Synergies identification:** An extended brainstorming session took place at the first Planning Telco, so as to identify possible synergies such as technical synergies, common communication channels, shared dissemination activities and potential opportunities for collaboration with

important EU initiatives. This activity was upkept in an offline manner using the “Central info-collection point” (see next paragraph) where partners could contribute with suggested future synergies, via email communication among cluster members and in all Planning Telcos that took place in the following years.

3. **Central info-collection point:** it was decided that a central point at a pre-defined online repository, hosted by one of the cluster partners, would be maintained and frequently updated by all members, so as to quickly and efficiently share among all partners all types of incoming information on new dissemination and collaboration opportunities.
4. **Cluster-initiated workshops:** as suggested by a multitude of partners, dissemination should be also initiated from within the cluster, by workshops organized by each project, in order to share its achievements both with other projects as well as with other stakeholders which are not members of the cluster. This activity was accepted by all partners and a schedule of workshops was created and followed in the years that followed.

As a combined activity, all cluster members could identify potential synergies and insert these as suggestions in the Central info-collection point for all other cluster members to evaluate each opportunity. Then via email exchange the partners had the opportunity to converge to some actions which were further discussed and validated in the next Planning Telco. Finally, the outcome of the Planning Telco was concluding to future common dissemination activities and also to Cluster-initiated workshops for the upcoming months.

2.1.2 Collaboration areas

As part of its internal setup and mode of operation the ICT-38 Cluster proceeded to identify all possible manners of collaboration and collect these to a central point, accessible and constantly updated by all partners. During this step to structure future activity, the participants attempted to identify the full range of potential synergies regarding dissemination activities, such as using common communication/dissemination channels and establishing connections with EU initiatives by exploiting the network and connections of all partners. Also, taking into account the technical aspect of the projects, an effort was made to identify potential cooperation fields under the prism of technical synergies, meaning to identify scientific/technological areas of common interest, perform actions to implement technology transfer and also conduct briefings of multipliers among projects.

In this effort, relevant information was collected, and the ways of operation were defined, as explained in the following paragraphs.

2.1.2.1 Projects – cluster members

The ICT-38 Cluster is comprised of Research and Development Projects, funded under the same topic of Horizon 2020 framework, which is “*ICT-38-2020 – Artificial intelligence for manufacturing*”. The following projects, alphabetically ordered, formulate the cluster:

1. AI-PROFICIENT
2. ASSISTANT
3. COALA
4. Knowledge
5. MAS4AI
6. STAR
7. Teaming.AI
8. XMANAI
9. EU-Japan.AI

One person from each project was assigned to serve as the central contact point for communication with the rest of the cluster and also to convey cluster information and scheduled activities internally to the project he/she is representing. On behalf of AI-PROFICIENT the unique contact point for communication was the leader of “*WP7 – Dissemination, exploitation and standardization*”, (at the same time also leader of *Task 7.3-“Clustering, best practice exchange and methodology workshops*”, which

is directly associated with the cluster activities). Namely this person was George Triantafyllou from Athens Technology Center (ATC) and all communication related to cluster activities, as well as responses of AI-PROFICIENT to cluster requests and schedule of future steps, was performed via him.

2.1.2.2 Areas of collaboration

As a result of discussion among partners during the Planning Telco and relevant decisions about fields of collaboration, an effort was made to identify common areas of collaboration for all projects participating in the cluster. The following areas have been detected as being of common interest to all projects:

1. Explainable AI in Manufacturing
2. Human Robot Collaboration
3. Use Cases of AI in Manufacturing
4. Human Factors & AI in Manufacturing
5. Training of Human Workers on AI & Operator 4.0 Training
6. Ethical & Legal Aspects of AI in Manufacturing/Industry
7. AI Interoperability and Multi-Agent Systems
8. Open-source platform for AI pipelines in manufacturing/recommendation systems/human-AI collaboration

These topics have also been validated by at least one person responsible for the scientific approach in each project before proceeding to the next step, which included using them by the cluster as the basis to build future activities such as workshops, webinars, trainings and more technology transfer actions.

2.1.2.3 Dissemination opportunities

In the context of mutually allocating future steps and opportunities, the representatives of each project have contributed to a common list of future dissemination activities which was made available to all contributors to provide feedback with their intention to participate. This started as a short list of only five (initially) identified opportunities, which was initially contained: i) a session on AI for Manufacturing on “The Data Week”, ii) a session of EU projects’ results on “INCOM21”, iii) a Special Track on Human Centered AI in Smart manufacturing for the Operator 4.0 in “ARMS 2021”, iv) a session on AI System Engineering on “DEXA 2021” and v) a presentation of cluster projects on “Joint Conferences on AI”.

This initial allocation of activities was fully utilized within the year 2021 and subsequently extended to a broad list with many activities in the course of years, most of which were fully utilized by many partners and projects finally participated in several of the actions, sometimes in a manner of joint activity.

2.1.2.4 Workshops planning

Going further into the action of allocating potential collaboration areas, the cluster members benefiting from their list of common identified technical interests to plan a list of online workshops for the projects’ lifetime. The following list of workshops was initially accumulated by participants and was put into perspective for online workshops and webinars to take place every four to six months for the years 2021 until 2023:

1. Explainable AI in Manufacturing
2. Human Robot Collaboration
3. Use Cases of AI in Manufacturing
4. Human Factors & AI in Manufacturing
5. Training of Human Workers on AI & Operator 4.0 Training
6. Ethical & Legal Aspects of AI in Manufacturing/Industry

This activity was particularly successful mostly seen in the context of the COVID-19 pandemic, which restricted all partners from traveling during 2020, 2021 (and in some cases during early 2022) to face-to-face meetings, and from attending in-person industrial events, exhibitions, and fairs. Instead, attendance of such webinars and online workshops, sustained opinion exchange, knowledge sharing and technology transfer for this long period of restrictions.

2.1.2.5 Standardization opportunities

Carefully examining the workplans of all projects in the cluster, it was identified that all projects have at least one task related to standardization, which required either to profit from existing standards, either to bring forward the project results and contribute to a standard. Therefore, to the direction of further collaboration, the cluster tried to identify common project requirements in the field of standardization and align actions of the projects to a (potentially) wider means of profiting/contributing to standards. An initial list of three (3) activities was created by cluster members to work upon.

This activity was not successful at cluster level since projects had a widely different allocation of effort to standardization effort and were dealing with very broad list of issues as seen from the list of technical areas in paragraph 2.1.2.2 – “*Areas of collaboration*”. Thus, getting common standardization actions was not possible during the cluster actions.

2.1.2.6 Joint publications

Delving one step further into the potential common actions, the cluster made an effort to conclude to a list of joint publications, envisaging Open Access Books and White papers to concentrate the project outcomes and create a “handbook” of how to apply Artificial Intelligence in all sectors of manufacturing. An initial list of actions was allocated including two possible ways to organize an Open Access Book and two possible ways to organize a collaborative whitepaper, either a collection of whitepapers at a later stage to include Best practices for Artificial Intelligence in manufacturing processes.

Finally, one of these plans came to realization during 2023 when an Open Access Book was finally created concentrating the contributions of most projects, i.e., from whichever projects it was possible to contribute with a chapter on scientific topic, or with a chapter on presenting project outcomes.

Unfortunately, AI-PROFICIENT was not able to contribute to this Open Access Book, due to our different workplan timing compared to the other cluster projects. Since software development was still ongoing at the time of publication, partners from AI-PROFICIENT could not contribute to the Open Access Book, because results were not made final in our software components. Therefore, it was not possible to describe neither our algorithms in a final manner, neither the operational status of our software modules in an accurate manner, as requested when creating an Open Access Book to be reviewed by the scientific community and/or other stakeholders in the industrial community.

2.2 Other Initiatives

According to the initial description of activity for the current task, AI-PROFICIENT should seek to organize collaborations not only with its ICT-38 counterparts but also with: i) other Research and Development outcomes originating from relevant H2020 framework, ii) other contributors to software communities focused in algorithms, modules and other Artificial Intelligence related development, iii) important stakeholders from the industrial community, iv) any potential National/International initiatives related to our scope of work.

In the following paragraphs, the interconnection of AI-PROFICIENT with such communities is presented and the way we performed liaison to them is analyzed.

2.2.1 AI4EU

One of the communities we tried to reach is the one created by AI4EU project, which is one of the projects financed by H2020 framework programme belonging to the ICT26-2019 Cluster. Under its leadership was developed the first iteration of the “*AI-on-Demand platform*”, which is integrated with the EU-login SSO mechanism and later evolved to be one of fundamental EU repositories being constantly enriched by EU funded Research and Development programs with their results.

Therefore, the AI-on-Demand (AloD) platform focuses on functionalities, capabilities and services offered to the users in order to achieve the objective of a one-stop shop hosting AI related applications. The AloD Platform is designed as a community-driven channel to empower research and innovation performed in the field of Artificial Intelligence (AI), by European initiatives, while ensuring the level of quality, trustworthiness and explainability required by European Union.

Our project established links with the AloD platform both in terms of ICT-38 cluster liaison and also via one more task in our workplan (*Task 5.4 – “Integration with AI4EU’s AI on-demand platform”*) dedicated to integration of our software outcomes to the platform. In this context, our project pursued connection and succeeded in being in continuous contact with the AI-related software community and also to attend the associated meetings organized by AI4EU to introduce all interested parties to the integration platform.

Specific activity in the context of this topic is presented later in this deliverable in the *Section “3.2 - AI4EU activities”*.

2.2.2 European Factories of the Future Research Association – EFFRA

The European Factories of the Future Research Association (EFFRA) is a non-for-profit, industry-driven association promoting the development of new and innovative production technologies. EFFRA has been representing the private side of the manufacturing partnership with the EU Commission. Named under Horizon 2020, Factories of the Future to become Made in Europe nowadays under Horizon Europe. The key objective of EFFRA is to promote pre-competitive research on production technologies within the European Research Area by engaging the European Commission through partnerships.

Therefore, all activity related to research and development in the context of H2020 in the previous years and also activity foreseen for Horizon Europe 2021 – 2027 framework in the upcoming years, is directed through in the EFFRA association. This has a direct result in concentrating all important stakeholders of the industrial European world, including all industries with the largest and broadest scope, in this single point of contact.

Our project, being a member of the Factories of the Future PPP, had an obvious connection with EFFRA, thus has been in continuous contact with the association throughout the years of our activity. The project established and maintained this connection via University of Lorraine (UL), which is a member of EFFRA, and specifically via our project coordinator Benoit lung and his previously existing connection with the association in terms of past H2020 projects. In addition to this existing connection, the leader of “*WP7 – Dissemination, exploitation and standardization*”, (and leader of Task 7.3 - “*Clustering, best practice exchange and methodology workshops*”, in charge of performing the cluster activities), George Triantafyllou from Athens Technology Center (ATC) came in contact with appropriate personnel from EFFRA to create an important connection between AI-PROFICIENT and EFFRA for the whole project duration. This resulted in frequent notification of the project about scheduled joint activities, online workshops, and in-person meetings and multipliers’ events to share and multiply the results of the project.

Specific activity in the context of this topic is presented later in this deliverable in the *Section “3.3 - EFFRA activities”*.

2.2.3 Other National and International initiatives

As already mentioned, it was within the scope of the project to perform liaison activities with even more communities including National and International initiatives, active in similar domains. To this direction, our project pursued since the very beginning liaising with other groups such as the EFFRA DMP Cluster, AIOTI WG11, and more, and explored potential synergies with these.

As a first step, AI-PROFICIENT was invited and participated in the Connected Factories DMP cluster, organized by EFFRA on February 22nd, 2021 (i.e., M4 of AI-PROFICIENT lifetime), to signal its initial involvement in meetings organized by the association. Later on, as the DMP Cluster was focused on different scientific topics of the industry, but also profiting from the fact that the ICT-38 Cluster was successfully formulated, the project focused its activities on ICT-38 Cluster.

One more step was performed in the field of National initiatives, in March 2023. A meeting was organized together with the French organization of National Institute of Research and Security (namely, “*Institut National de Recherche et de Sécurité*” – INRS), which is engaged in actions to spread a culture of occupational risk prevention in businesses and offer tools adapted to the diversity of occupational risks. The INRS initiative was brought in contact with our project thanks to networking actions of our coordinator Benoit lung (UL), who is also member of the scientific committee of INRS, due to its relevance to AI-PROFICIENT’s activities on the Connected Worker topic in one of the Use Cases. The purpose of this joint operation was to explore any opportunities to align actions on standardization extensions on the subject of risk prevention in industrial shopfloor workplaces.

Due to the nature of operations treated by INRS and the inconsistency with the way operators in AI-PROFICIENT’s Use Cases are interacting with the system within the shopfloor, the coalition among our project and INRS did not bring any outcome in the field of the project’s standardization activities. However, despite the lack of outcome on this topic, the interaction with INRS provided an extra opportunity to AI-PROFICIENT to i) familiarize its members with the way a National association treats industrial operations and ii) to provide information to stakeholders outside of our consortium about our work and achievements, thus augment the project’s dissemination activity.

3 Joint activities and Cross-fertilization

For all allocated points of collaboration, several activities took place in the lifetime of the project. These have been activities jointly performed among collaborating projects, regarding mutual interests and similar technical project goals, so as to maximize impact, profit the most out of common dissemination and with the target of cross-fertilization of results in all software domains identified to be of interest for all stakeholders.

The following paragraphs present the activities that took place in each of the groups of collaboration.

3.1 ICT-38 Cluster activities

In this Section the activities undertaken in the context of ICT-38 Cluster are presented in an extensive manner.

3.1.1 Identifying common activities

As described in section 2.1.1 – “*Cluster mode of operation*”, a combined mechanism was put in place among cluster members to identify possible synergies and conclude to the ones to be followed. As a result of this mechanism, the activities to follow were identified on a periodic basis and the related schedule was announced to all members so that early dissemination was possible in each member’s networks.

In the same way, cluster-initiated workshops were scheduled in time and performed with the participation of all cluster members.

3.1.2 Participation in actions

AI-PROFICIENT participated in all activities organized by the ICT-38 Cluster and also actively contributed to enforcing the Cluster operations both regarding in-person meetings and online workshops organized. These included online workshops of the cluster, online events of AI4EU, online workshops by Connected Factories in conjunction with EFFRA, and in-person meetings in cooperation with EFFRA.

Also, in coalition with other members-projects we enforced the presence of the Cluster in social media, by retweeting or reposting any Tweets or blog posts respectively.

3.1.2.1 Workshops

One of the important activities held by ICT-38 Cluster on a periodic basis was online workshops organized to cover multiple issues and scientific areas originating from the activities of projects’ objectives. To this end, the following online workshops have been organized during the three years of AI-PROFICIENT’s lifetime:

Number	Date	Workshop Title	Topic	Main speaker (project name)
1	7/5/2021	ICT-38 Projects Cluster’s (Ai-Man) Workshop	The first of a series of ICT-38 Projects Cluster (AI-MAN) workshops	ALL PROJECTS, presenting activities

2	11/10/2021	Explainable Artificial Intelligence In Manufacturing	Explainable AI	ASSISTANT, KnowlEdge, XMANAI, STAR
3	25/11/2021	Ethical/Legal Issues Workshop	Ethics by Design, Legal aspects of AI in manufacturing	AI-PROFICIENT, EU-Japan.AI, MAS4AI, STAR, COALA
4	14/3/2022	Human-centered manufacturing in the industry 5.0 era	Human-centered manufacturing	KnowlEdge, ASSISTANT, Teaming.AI, STAR
5	17/11/2022	Data & Models Interoperability for AI Systems In Manufacturing	Data/Models interoperability	ASSISTANT, Teaming.AI, XMANAI, MAAS4AI

AI-PROFICIENT participated in all above workshops, with representation from multiple project partners, interested to check the latest development in the other projects members of the cluster and also to get to know the evolution in relevant scientific issues treated by the cluster.

In particular, related to workshop No3 of the list above, i.e., the “Ethical/Legal issues workshop”, AI-PROFICIENT was a key partner in organizing the workshop and presenting latest developments in this topic. Marc Anderson (Post-Doctoral researcher) and Karen Fort (Associated Professor), both from University of Lorraine, made a significant presentation on the issue “*Human Where? A New Scale Defining Human Involvement in Technology Communities from an Ethical Standpoint*”, to discuss and highlight all important issues of how the operator in the manufacturing workplace can be positioned in-the-loop, on-the-loop, or in-command.

3.2 AI4EU activities

Activities organized by ICT-38 Cluster involved all fields of possible collaboration with initiatives described in the workplans of all projects-members of the cluster. Specifically, as part of the operation of ICT-38 Cluster and the continuous action for Synergies Identification, the integration of the cluster with AIoD platform of AI4EU was scheduled to enforce opportunities to the obligation of most projects to be integrated with the platform.

The first action pursued by the cluster was to organize a meeting to support synergy with AI4EU, already within 2022 with the scope to familiarize all members of the cluster with the way of operation on the AIoD platform.

The scope of the meeting, as defined by organizers was:

1. To understand the difference from contributing to the (General) Marketplace vs. to the Thematic Experiments Section on Manufacturing.
2. To understand how to contribute assets developed from project-members, including technical prerequisites (e.g., containerization, expected TRL level)
3. To present some examples of already developed assets (e.g., 1-2 per project) that could be contributed to the AI4Europe platform.

On the side of AI-PROFICIENT the project participated in this workshop finally held on 17th of May 2022, related to AI4EU platform, hosted by AI4EU H2020 project responsible partners. The workshop consisted of a demonstration of the AI4EU platform and the existing sections, i.e., Portal AI Asset Catalogue presentation, AI4EU Experiments and the related Marketplace. This opportunity greatly assisted us to gather valuable information on AI4EU platform interoperability issues, on the Architecture implemented in the Experiments area, specifications that need to be followed for software containers and initial Intellectual property concerns arising for partners collaborating on the platform.

As an additional step the ICT-38 Cluster coordinated among its members for a combined upload of modules from all project-members, in terms of ICT-38 Cluster activities. Under this perspective AI-PROFICIENT provided a list of modules developed within the project which were integrated in AI4EU platform. In this action, the project contributed to creating a strong presence in the AIoD platform, and also enriched the cluster's participation to the platform and to AI4EU actions.

3.3 EFFRA activities

As already mentioned in *Section 2.2.2 – “European Factories of the Future Research Association – EFFRA”*, AI-PROFICIENT was in close contact with EFFRA. This resulted in frequent notification of the project about scheduled joint activities, online workshops, and in-person meetings and multipliers' events to share and multiply the results of the project.

In this context AI-PROFICIENT participated in all activities organized by the EFFRA Association during the project lifetime and also actively offered important contributions not only to enrich the dissemination activities but also to bring the project outcomes in contact with important stakeholders of the industry. To this end, the following online workshops have been organized during the three years of AI-PROFICIENT's lifetime:

Number	Date	Title	Event type	Participation type	Attendees
1	18/2/2022	Use Cases and Demonstrators of Digitalization of Manufacturing	Online	Attendance only	ALL partners, online
2	13/6/2022	European Workshop on the AI Pathway	In-person, Brussels BluePoint Building	Attendance, participation in collaborative discussion / opinion exchange	George Triantafyllou (ATC),
3	19/10/2022	ConnectedFactories - Foresight & Recommendations Workshop	Online	Presentation of AI-PROFICIENT	ALL partners, online
4	26/9/2023	The Manufacturing Partnership Day	In-person, Brussels BluePoint Building	Presentation of AI-PROFICIENT	Benoit Iung (UL), George Triantafyllou (ATC), Alexander Vasylychenko (TF), Aitor Arnaiz (TEK)

AI-PROFICIENT participated in all events mentioned above, with representation from multiple project partners on the online events and focused representation in the ones that took place in Brussels. Specific persons per partner that attended each of the meetings are specified in the last column of the table above. In particular, related to events No 2 and No 4 of the above list, the consortium was represented in-person to exchange opinions on the key discussion points and to present outcomes.

Particularly focusing on the event No 4 of the previous list, AI-PROFICIENT participated at “The Manufacturing Partnership Day”, which took place on the 26th of September 2023 in Brussels, Belgium. The specific event, was co-organized by the European Factories of the Future Research Association (EFFRA) and Factories of the Future and Made in Europe projects, brought together the Factories of the Future and Made in Europe community and showcased ongoing work of 47 projects.

The event also included an extended full-day session of presentations for all projects. In this context through a 15-minute presentation by the project Exploitation and Innovation Manager, George Triantafyllou (ATC) and leader of *WP7 – “Dissemination, exploitation and standardization”*, participants had the chance to learn more about our objectives and progress in the past three years, the project’s unique innovation points and how it moves European innovative manufacturing forward, as well as plans for the future. Visitors had also the possibility to exchange views with the Project Coordinator, Professor Benoit lung (UL), the project Exploitation and Innovation Manager, George Triantafyllou (ATC), as well as the project Technical Leaders, Aitor Arnaiz (TEK) and Alexander Vasylchenko (TF) and learn more about the latest achievements of the project.

4 Conclusion

This deliverable presents the activities performed by AI-PROFICIENT in the context of project Task 7.3 – “*Clustering, best practice exchange and methodology workshops*”. All actions to enhance the collaboration between AI-PROFICIENT members and all other stakeholders such as ICT-38 Cluster, EU organizations, networks and relevant industry stakeholders have been presented, to make obvious that impact maximization has been achieved by bringing in close collaboration our project with the ICT-38 Cluster and the other communities we have been in contact with.

AI-PROFICIENT via actions of the coordinator and the communication/dissemination leader has been in close contact with their counterparts in other projects funded under the same topic, i.e., “*ICT-38-2020 – Artificial intelligence for manufacturing*”, in order to create the related cluster, and identify possible synergies in the dissemination field and also under the perspective of technical synergies in scientific/technological areas of common interest. Finally, all involved parties have profited by allocating collaboration opportunities with other EU initiatives and performing contacts with National and/or International initiatives.

As presented in the sections above, the project stakeholders in liaison with other members of ICT-38 Cluster had an extensive and mostly successful course of actions during the projects’ lifetime. An extensive series of actions took place as the cluster had two Internal Cluster meetings each year (2021 until 2023), four Joint Cluster Workshops have been performed, one Joint Cluster Activity (a workshop on platform integration with AI4EU) occurred in coalition with AI4EU and four actions were realized in partnership with EFFRA, as reported in detail in *Section 3 – “Joint activities and Cross-fertilization”* of the current Deliverable.

Finally, collaborative actions in terms of ICT-38 Cluster and the other initiatives, were particularly important in the course of the current project to counterbalance for the effects of the COVID-19 pandemic. Since AI-PROFICIENT and all other projects formulating the ICT-38 Cluster initiated their activities in the peak of the COVID-19 pandemic, it was evident that no attendance in-person was possible for any of the traditional dissemination activities. Therefore, during this situation, where consortium members of our project could not attend in-person neither industrial events, exhibitions, and fairs, neither scientific events such as conferences to present scientific results, the only opportunities of knowledge sharing and technology transfer were offered by the ICT-38 Cluster’s activities. Thus, organized online workshops and scheduled webinars were the only means to sustain dissemination activities and ensure the regular distribution of project outcomes, adding a special value to cluster actions and further intensifying the successful outcome of this task.

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