AI·PROFICIENT

Artificial *i*ntelligence
for improved *pro*duction ef*fici*ency,
quality and mai*nte*nance

Deliverable

D7.1: Roadmap for dissemination and communication first release

WP 7: Dissemination, exploitation and standardization

T7.1: Roadmap for dissemination and communication

Version: 2.0

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Executive Summary

The Deliverable D7.1 is a public document of AI-PROFICIENT project delivered in the context of WP7, Task 7.1: Roadmap for dissemination and communication. This document sets out the dissemination and communication strategy as well as the plan to raise awareness, share knowledge, attract potential stakeholders in the context of the AI-PROFICIENT project, through various means, including the AI-PROFICIENT website, the use of Social Media, the distribution of communication material, publications in scientific and industrial journals, participation in events and organization of dedicated workshops with potential end-users and main outreach events. The report provides a comprehensive framework for actions that will support outreach efforts necessary to disseminate and communicate the achievements and benefits of the AI-PROFICIENT project. It provides a focused dissemination & communication approach towards the key target audiences and the best approaches to engage and inform stakeholders to maximize knowledge of AI-PROFICIENT activities.

1 Introduction

1.1 Purpose and Scope

This dissemination & communication roadmap provides a comprehensive framework for actions that will support outreach efforts necessary to disseminate and communicate the achievements and benefits of the AI-PROFICIENT project. It provides a focused dissemination & communication approach towards the key target audiences and the corresponding channels to reach them most effectively, the means for collaboration and clustering with related projects and standardization bodies as well as the timing of these activities and the partners responsible for their implementation. The EU distinguishes between dissemination and communication. We support this distinction and thus we provide a detailed definition of the key target audiences and the best approaches to engage and inform stakeholders to maximize knowledge of AI-PROFICIENT activities with respect to the dissemination of results & the communication activities in AI-PROFICIENT. This plan is a living document involving all the partners, with regular updates along with the project's periodic and final reports. The updated plans will list the dissemination and communication activities implemented and planned.

1.2 Structure of the Deliverable

This document is structured as follows for the remaining sections.

- Section 2, the roadmap for dissemination & communication is presented. More specifically, the dissemination and communication objectives of the project are mentioned as well as the dissemination and communication phases to reach the target audience and achieve the roadmap's objectives are defined.
- Section 3, a short overview of how AI-PROFICIENT project defines the audience is provided.
- Section 4, provides a detailed description of the dissemination of results i.e. the target stakeholders and audiences are analysed, the appropriate channels for approaching the target groups are addressed, the individual stakeholders to be reached are described, and the specific channels and activities are also described.
- Section 5, provides a detailed description of the communication activities i.e. the target stakeholders and audiences are analysed, the appropriate channels for approaching the target groups are addressed, the individual stakeholders to be reached are described, and the specific tools and channels are also described.
- Section 6 provides a qualitative and quantitative evaluation of the communication and dissemination activities with relevant facts and figures while describing and estimating its impact. An analysis of risks and potential issues related to the dissemination and communication side of the project is also presented.
- Section 7, outlines the dissemination and communication time plan of the project.
- Section 8, describes the roles and responsibilities of all partners engaged in the dissemination and communication activities.
- Finally, Section 9 concludes this deliverable.

2 AI-PROFICIENT Roadmap for Dissemination & Communication

2.1 Objectives

AI-PROFICIENT aims to facilitate the human-machine collaboration within the European manufacturing and process industry as an evolvement from hierarchical and reactive decision making for plant automation, by:

- Integrating self-learning and self-prognostic AI services with production processes with the manufacturing systems and processes in an IIoT environment.
- Embedding the deep learning techniques and complex event processing capabilities for the early detection of process anomalies and provision of fault diagnostics.
- Providing AI-based decision support for proactive maintenance at component and system level
- Delivering a joint human-machine approach to improved production planning and execution.

Toward this end, AI-PROFICIENT central dissemination & communication objectives are to:

- Establish a strong project visual identity and produce self-explanatory printed and digital materials;
- Generate maximum awareness of the project outcomes among industrial stakeholders, investors, governmental bodies, standardization bodies in addition to academics and research organizations;
- Reach a broad audience and contribute to a greater acceptance of AI technology in manufacturing, with a focus on synergies with similar EU or national projects and key multipliers.
- Inform about and promote the project and its results, conveying research in a non-technical way in order to raise awareness among a broader audience about the challenges AI-PROFICIENT addresses and the possible related benefits and solutions it provides to the EU first but also beyond.

Dissemination and communication are keys to maximise the project's impact as they allow a better exploitation of the project results by:

- Enhancing user involvement and thus ensuring more rapid market uptake of the AI-PROFICIENT solution,
- Boosting opportunities for better collaboration between European industry stakeholders,
- Boosting opportunities for new markets in the short and medium term,
- Improving technology transfer on integration of AI technology in production plants,
- Ensuring the accessibility and reusability of data produced in the course of the project and thus wide-spreading adoption of AI analytics in manufacturing and process industry.

While the dissemination activities mainly focus on transferring AI-PROFICIENT knowledge and ensuring the availability and use of AI-PROFICIENT results in research and industry, the communication activities aim at informing about and promoting both the project and the implementation of AI-PROFICIENT design approaches and maintenance technologies as beneficial for society at large. The related figure shows the preliminary plan for both activities.

The AI-PROFICIENT dissemination and communication roadmap aims to publicize the outcomes of the project, in its different phases, to the right audiences in the right time to demonstrate the ways in which research and innovation carried out is contributing to a European 'Innovation Union'. Dissemination and communication activities will show our multidisciplinary European consortium achievements in scientific excellence and contribution to competitiveness and how are solving societal challenges.

2.2 Dissemination & Communication Phases for the Project

The communication activities and dissemination of AI-PROFICIENT results will differ in intensity based on the evolution of the project. The dissemination and communication activities will be carried out in three main phases, spanning throughout the project's duration and extend beyond it, with increasing level of intensity, starting from the creation of general awareness and concluding with attracting through workshops potential stakeholders and users of the project results. The three phases are presented as follows.

Table 1 Dissemination & Communication Phases

PHASE	OBJECTIVES	TYPE OF INFORMATION	DISSEMINATION & COMMUNICATION CHANNELS/ACTIVITIES
Phase I	**Inform & Connect:** Create awareness about the project.	Approach-oriented content; project presentation; objectives; expected results.	Use traditional & online communication channels (project website, press releases, social media, postings, newsletters, factsheets etc.); Use existing events to gain insights from and better links to manufacturing and business communities. Organization and participation in Clustering activities in order to establish a core cluster, discuss cross-fertilisation and the implementation of joint activities. This will lead to create common dissemination channels and schedule related activities. Creation of a Digital info-pack for stakeholders
Phase II	**Demonstrate & Contribute:** Promote the novel services & show cases; Engage target users & early adopters in the project activities.	Result-oriented content; project intermediate results.	Project website & Social Media Press releases, newsletters, factsheets Publications, participation in Events Dedicated workshops with potential end-users Further and continuous action will be taken in Clustering activities exploiting synergies between the projects and increasing their impact. Common areas of collaboration will be agreed and actions will be taken in identified areas which address similar technology needs.
Phase III	**Share & Convince:** Leverage the exploitation of the outcomes.	Result-oriented content; project final results and lessons learnt.	Project website & Social Media Press releases, newsletters, factsheets Focused Publications, participation in Events

	Dedicated workshops with potential end-users
	Meetings on Standardization with Technical Committees and Working groups
	Multipliers briefings

The timing of the phases has been adjusted based on the ongoing work in the project relating to what has already been accomplished and what is yet to come. This means that phases are overlapping and partially parallel.
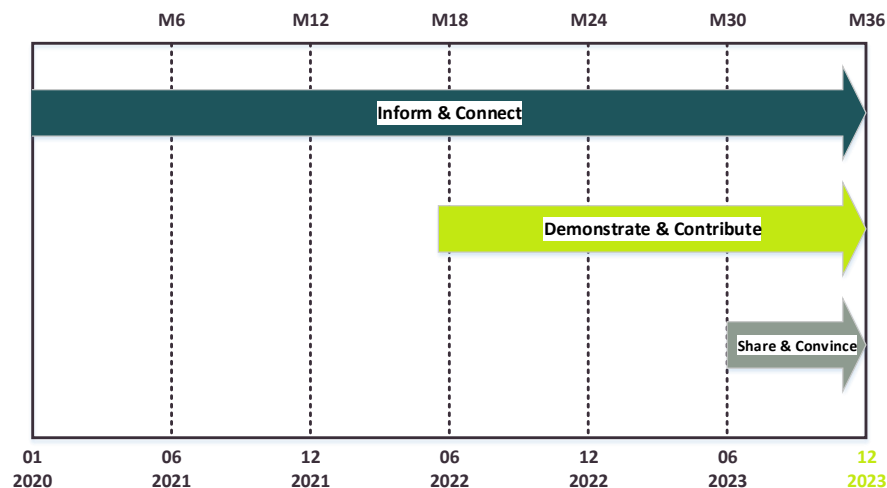
Figure 1 Dissemination and Communication Phases within the Project Time plan

2.2.1   Phase I: Inform & Connect (M1-M36)

In this early phase of the project there are two main goals for the communication and dissemination activities. One is to concentrate on making the project known among its different target audiences. The other is to connect audiences around the world for input and collaboration.

Making the project known among the target audiences is key to create awareness for the project, getting people on board and interest them in the work. Communicating the project objectives, concepts, specifications as well as research findings will be key tasks to achieve this.

This can best be done through channels like the project website, press releases, newsletters and events participation. But also, through the use of multiple social networks like Twitter and LinkedIn, which will we be able to spread information about the project and connect to experts and interested individuals and groups.

The "Inform & Connect" phase extends over the whole project's lifetime. Creating a network of high influencers in the areas of the project will be a main goal of this phase, but also raising general awareness of the project, proclamation of project goals, concepts and research findings among researchers and target users.

2.2.2   Phase II: Demonstrate & Contribute (M18-M36)

The second communication and dissemination phase is all about demonstrating progress of the project and getting people to contribute to the work. This involves future users of the **AI-PROFICIENT** system & services, plant engineering solution and plant management system providers as well as scientific

experts from other (EU / research) projects for collaboration. Building on a successful first phase of communication, this can best be achieved by using the established connections and networks.

Presenting early achievements of the project will work as calls-to-action, asking the audiences for feedback and ideas, but also showing them how the project progresses. It is very important to have first components or examples to share with the audiences. These should be accompanied by explanations from technical partners describing the current state of technical developments and future steps.

To successfully implement this phase, it is necessary to have adequate feedback channels in place, through which users can reply. Social media channels are a great way for this, as well as a contact form on the website and a project-email should be established for this.

First steps of the "Demonstrate & Contribute" phase will be taken already during the first year (e.g. awareness of the project to other projects) since its concepts do overlap with the "Inform & Connect" phase. The first real activity however won't start until the first results are available and the technical direction of the project is clear. These activities will continue until the end of the project. The dissemination efforts will be focused on providing use case results, samples and feedback channels.

2.2.3   Phase III: Share & Convince (M30-M36)

The third phase of the dissemination and communication roadmap will coincide more or less within the third year of the project. The focus in this phase will be on sharing achieved results and on convincing end users to test and start using the **AI-PROFICIENT** system and services. The main communication activity in this phase will have two main focuses.

● **User focus**: Showcasing the **AI-PROFICIENT** solution and engaging with early users to get feedback on the outcomes of the **AI-PROFICIENT** project.

● **Technical focus**: Sharing project results and testing the technical **AI-PROFICIENT** solution, showcasing different modules and cutting-edge technologies developed, etc.

These activities take place at various events like exhibitions, scientific fares, conferences or workshops. They are also provided through marketing material on the website and through the different established social media channels (where applicable).

The success of these dissemination efforts depends on stable results of the project.

2.2.4   Final integration towards end of project and beyond

Before completely wrapping up the project, it will be crucial to evaluate the connections made during the project's duration in order to get beyond the mere project status. With a successful **AI-PROFICIENT** solution at hand, gaining further collaborators and even a continuation of the development of the **AI-PROFICIENT** solution is a lot easier. Communication will at this point aim at presenting the successful results of the consortium's work as well as at winning stakeholders who see potential in the projects results.

Of course, in order to share a convincing message, it is absolutely crucial to have a working prototype/ integration of the **AI-PROFICIENT** solution that can be presented to possible collaborators and interest groups. Using the established channels, the progress and success of the project will be communicated, aiming at a broad audience for one, and at particular interest groups as well. One central part of this will be the website and the connected social media channels. Another one should be direct contacts through conferences, multipliers briefings and dedicated workshops with potential end-users including presentations of the results.

All these activities are already part of phase 3, only gaining a special focus once the official project end and the final evaluation is near. Ideally the communication of the project and its results continues beyond the official end, which depends very much on the results and their tangibility and usability.

3 Defining the audience for AI-PROFICIENT

Effective dissemination & communication is essential to keep stakeholders well informed, motivated and keen to participate. In order to ensure that there is the maximum impact of dissemination & communication, it is worth considering:

- Who is the key audience?
- What are the specific messages to be conveyed and the desired outcome?
- Are the means of communication appropriate?
- How can the effectiveness of dissemination and communication be evaluated?

Consideration of these points will support the development of a clear dissemination and communication roadmap, maximizing impact and ensuring the appropriate stakeholders are engaged.

Thus, all stakeholders must be identified and categorized, from people with the greatest involvement, through to more peripheral individuals or groups. The more important the stakeholder is to the success of the project, the more time and resources will be needed to devote to maintain their involvement and commitment.

3 Defining the audience for AI-PROFICIENT

4 Dissemination of Results

4.1 Target Audiences

All partners will use synergies in their own networks and target further relevant stakeholders at regional, national, EU and international levels, in particular main multipliers – i.e. stakeholders capable of highly multiplying the partners' efforts – and Horizon 2020 projects that could be integrated into the clustering activities. The partners will primarily focus on the communities which are the closest to the project scope and expected results, e.g. automotive, chemicals, steel, engineering, cement, etc. A preliminary list of relevant stakeholders has been identified:

- Plant operators, end-users/customers buying smart components or entire solutions providing the AI services for improved production planning and execution;
- Scientific community and industrial research, such as researchers, students, developers, suppliers or manufacturers willing to e.g. do further research in the fields, apply AI technologies within their processes or integrate smart components within their products;
- Plant engineering solution providers, plant management system providers and technology providers (e.g. IIoT equipment, automation systems and edge components, such as MEMS and PLCs);
- Next generation of employees of the industrial sectors, current employees willing to upskill their knowledge and competences in the field of AI for manufacturing, as well as universities and vocational training providers;
- Investors (private or public) interested in enabling the replication of AI tools and services for improved production efficiency and product quality;
- Horizon 2020 projects to be integrated with in clustering activities;
- Technology or industrial clusters, associations and platforms;
- Policy-makers;
- Standardisation bodies/initiatives.

In order to target these different audiences and stakeholders in an efficient way, it is best to address each audience through its appropriate channels. For example, the best way to connect to a scientific audience is probably within a conference. Keeping that in mind the AI-PROFICIENT project suggests the following locations in relation to the different types of audience defined beforehand.

Table 2 Dissemination of Results - Approaching Target Groups

TARGET GROUP	LOCATION	MAIN DIRECTIONS FOR MESSAGES
Plant operators, end-users/customers	Project website Events Dedicated workshops Main Outreach Event Multipliers briefings	How the outcomes of the project will help them to identify solutions for day to day operations. What breakthroughs should their company benefit from; Which transformation steps are required within their plant.
Scientific community and industrial research	Publications - Open Access Peer reviewed Publications - Industrial Journals Main Outreach Event Clustering Activities	What are the research, technological and industrial breakthroughs of the project; What is the innovation of the project; How these can be used and further exploited; Open research questions and steps ahead;

TARGET GROUP	LOCATION	MAIN DIRECTIONS FOR MESSAGES
Plant engineering solution providers, plant management system providers and technology providers	Events Dedicated workshops Publications - Industrial Journals	What is the innovation of the project; How this can be used and further exploited. Open access of project results.
Next generation of employees of the industrial sectors, current employees of the industrial sectors, universities and vocational training providers	Project website Social Media Events Dedicated workshops Main Outreach Event Multipliers briefings	How the outcomes of the project will help them decide how to educate themselves, which knowledge to achieve, what level of technology awareness is required in their everyday operations. What is the innovation of the project.
Investors (private or public)	Events Dedicated workshops Main Outreach Event Project website Publications - Industrial Journals	What company orientation to set, which technology path to take. What type of investment is required to make the company path to future industry. Which type of public investment is required, which emerging technologies should be adopted
Horizon 2020 projects	Clustering Activities Project website Social Media Events Dedicated workshops Main Outreach Event Multipliers briefings Publications - Open Access Peer reviewed	What is the innovation of the project; How this can be used and further exploited; Which fields of common interest exist in sister projects How is a technology area evolving and addressed by community tendancies Open access of project results;
Technology or industrial clusters, associations and platforms	Clustering Activities Publications - Industrial Journals Events Dedicated workshops Main Outreach Event Multipliers briefings	What is the innovation of the project; How this can be used and further exploited. Open access of project results; Increase the use of AI technologies in industrial environments.
Policy-makers	Events Main Outreach Event Multipliers briefings	How should policy-making embed recent technology achievements; Which type of public investment is required,

TARGET GROUP	LOCATION	MAIN DIRECTIONS FOR MESSAGES
		which emerging technologies should be adopted
Standardization bodies/initiatives	Events Main Outreach Event Multipliers briefings	What is the innovation of the project; How this can be used and further exploited; How should standardization include emerging technologies and new operation methods.

4.2 Reaching Target Audiences

The following table provides an initial list of key stakeholders. This list will be expanded during the project period.

Table 3 Dissemination of Results - Indicative Target Audiences

NAME	SHORT DESCRIPTION	TYPE	WEBSITE
BDI group from University of the Basque Country	University Research Group (Semantic Technologies, Interoperability)	Scientific community and industrial research	https://bdigroup.web.app/
OEG group from Polytechnic University of Madrid	University Research Group (Semantic Technologies, Interoperability)	Scientific community and industrial research	http://mayor2.dia.fi.upm.es/oeg-upm
AITOI WG03	Semantic Interoperability Expert Group	Technology or industrial clusters, associations and platforms	https://aioti.eu/role-of-aioti-wg03-in-iot-standardisation/
GAIA	Applied Knowledge and Technologies Association for Industry	Technology or industrial clusters, associations and platforms	https://gaia.es/
FCAI	Finnish Center for Artificial Intelligence	Scientific community and industrial research	https://fcai.fi/
Working Group H2M (Health Management and Maintenance)	French Working Group of SAGIP association addressing Predictive	Scientific community and industrial research	https://www.sagip.org/fr/gt/h2m

NAME	SHORT DESCRIPTION	TYPE	WEBSITE
	Maintenance considerations		
IFAC TC5.1.	International Technical Committee on Manufacturing Plant Control	Scientific community and industrial research	https://tc.ifac-control.org/5/1
IFAC TC5.2.	International Technical Committee on Management and Control in Manufacturing and Logistics	Scientific community and industrial research	https://tc.ifac-control.org/5/2
IFAC CC5	International Cluster Committee on Cyber-Physical Manufacturing Enterprises	Scientific community and industrial research	https://tc.ifac-control.org/5
CIRP STC O	International Scientific Committee on Production Systems and Organisation	Scientific community and industrial research	https://www.cirp.net/scientific-groups/stc-scientific-technical-commitees/stc-o-production-systems-and-organizations.html
CIRP CWG Artificial Intelligence in Manufacturing	Collaborative Working Group "Artificial Intelligence in Manufacturing"	Scientific community and industrial research	https://www.cirp.net/scientific-groups/other-groups-and-commitees-col-180/cwg-collaborative-working-groups.html
PHM Society	International Society on Prognostics and Health Management	Scientific community and industrial research	https://phmsociety.org/
ESRA Association	European Safety and Reliability Association	Scientific community and industrial research	http://www.esrahomepage.eu/

NAME	SHORT DESCRIPTION	TYPE	WEBSITE
IFAC TC 6.4	International Technical Committee on Fault Detection, Supervision &Safety of Technical Processes	Scientific community and industrial research	https://tc.ifac-control.org/6/4
IEEE PHM	IEEE Technical Committee on Prognostics and Health management	Scientific community and industrial research	https://rs.ieee.org/technical-activities/technical-committees/prognostics-and-health-management-phm.html
IFIP APMS	IFIP Working Group 5.7, Advances in Production Management Systems (APMS)	Scientific community and industrial research	https://www.ifipwg57.org/
AI4EU	European AI On-Demand Platform and Ecosystem under the H2020 programme	Scientific community and industrial research	https://www.ai4eu.eu/

4.3 Dissemination channels and activities

The AI-PROFICIENT consortium makes use of a variety of dissemination channels and activities. The table below outlines the dissemination channels and activities that are deployed by the AI-PROFICIENT consortium and show how these help increase the impact of the project.

Table 4 Dissemination Channels & Activities

CHANNEL/ACTIVITY	DESCRIPTION	BENEFIT OF THE CHANNEL/ACTIVITY
Open access scientific publications in international peer-reviewed journals	Create Scientific publications in journals with Impact Factor in gold access or in self-archiving green access with repositories listed in http://www.opendoar.org/ or used by the consortium members	Regular publishing of project scientific achievements and development of new models and state of the art methods into the scientific community helps in validating the work accomplished and increase's visibility
Publications in printed/online industrial journals	Create Publications in printed/online industrial journals	Regular publishing of project progress and results, new technology achievements and

CHANNEL/ACTIVITY	DESCRIPTION	BENEFIT OF THE CHANNEL/ACTIVITY
		techniques into the industrial community helps in validating the work accomplished and increase's visibility
Participation in exhibitions, scientific conferences, workshops or industrial events	Attend events related to manufacturing and process industry; Present papers in scientific conferences; Distribute brochures and engage in direct communication; Set project stands to disseminate project results and try to collect feedback and stimulate debate	Attending conferences (as participants or speakers) is essential for dissemination and interim validation of project results; Conferences serve as a dissemination tool and a method to engage new users; Create a dialogue between Technical Committees, Working Groups, sister projects, policy makers, practitioners and researchers attending the events
AI-PROFICIENT dedicated workshops with potential end-users	Run technology transfer workshops with potential end-users	Workshops will be instrumental for the dissemination and exploitation of the project's results; Workshops will provide a first class opportunity to have a hands on experience with the system and collect valuable feedback
AI-PROFICIENT main outreach events	Organize main outreach events to Industry and Research companies dedicated to presenting the project's results	The main outreach events will be instrumental for the dissemination and exploitation of the project's results; The main outreach events will provide a first class opportunity to have a hands on experience with the system and collect valuable feedback. Also they will bring together potential clients and technology providers to incorporate results in their development
Clustering with related H2020 and national projects as well as initiatives	Connect with projects financed under the same topic and other relevant H2020 and national initiatives, in order to establish a core cluster and discuss cross-fertilisation and the implementation of joint activities	The cooperation aims at exploiting synergies between the projects and increasing their impact. Common areas of collaboration will be agreed and similar technology needs will be identified. Also, common dissemination channels and activities will be scheduled.

CHANNEL/ACTIVITY	DESCRIPTION	BENEFIT OF THE CHANNEL/ACTIVITY
Multipliers briefings	Conduct briefings of multipliers, i.e. main stakeholders, able to multiply the partners' dissemination efforts by spreading the results within their existing wider communities, such as EFFRA or the European Commission.	Multipliers briefings will ensure greater accessibility to AI-PROFICIENT knowledge and results. Dissemination of results will be multiplied and possible stakeholders will be engaged. More target audiences with similar interests in slightly different areas, will be targeted.
Dialogue on standardization with Technical Committees (TC) and Working Groups (WG) members	Active cooperation (liaisons, meetings and/or collaboration with TC/WG) will be performed to align the project's activities with contemporary standardization efforts	Promote standardisation in domain of application of AI for manufacturing, human–machine interaction and system interoperability. Additionally, standardization can be expanded in similar domains of slightly different areas.

The rest of this chapter describes in more detail each dissemination channel and activity.

4.3.1 Open access scientific publications in international peer-reviewed journals

Objective	To create scientific publications that highlight the results of AI-PROFICIENT and publish them in various high-profile, high-impact international peer-reviewed journals
Content and Messages	Contain scientific results, conclusions and recommendations from the project
Target Audience	Scientific community and industrial research, Horizon 2020 projects
Information Required	Results and evaluation content from the project activities
Information Provider	All partners
Communication Methods	AI-PROFICIENT website, Social Media
Activities	Write and submit publications, post them on the AI-PROFICIENT website and Social Media
Schedule	Ad-hoc when publishing opportunities, calls for papers arise
Monitoring	ATC
Responsible Partner	Academic partners, Research partners

A preliminary list of scientific journals that will be targeted to maximize the impact of the scientific work to the target communities is presented below.

Table 5 Indicative Scientific Journals

INTERNATIONAL SCIENTIFIC PEER-REVIEWED JOURNALS	LINK (PUBLISHER)	FIELD	PARTNER(S) INVOLVED
Reliability Engineering and System Safety	https://www.journals.elsevier.com/reliability-engineering-and-system-safety	Predictive Maintenance, Prognostics, Maintenance Decision-Making	UL
IEEE Transactions on Reliability	https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=24	Predictive Maintenance, Prognostics, Maintenance Decision-Making	UL
CIRP Annals of Manufacturing Technology	https://www.cirp.net/mainmenu-publications/cirp-annals-col-200/cirp-annals-presentation.html	Intelligent Manufacturing, Quality Improvement, CPPS, Production Optimization	UL
Semantic Web Journal	http://www.semantic-web-journal.net/	Semantic Technologies	TEK
Applied Ontology	https://www.iospress.nl/journal/applied-ontology/	Semantic Technologies	TEK
Journal of Intelligent Manufacturing	https://www.springer.com/journal/10845	Engineering, manufacturing	IMP, VTT, UL
Engineering Applications of Artificial Intelligence	https://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence	AI - Engineering - Advanced Algorithm	UL
Computers in Industry	https://www.journals.elsevier.com/computers-in-industry	New Technologies in Manufacturing, CPPS	UL
Annual Reviews in Control	https://www.journals.elsevier.com/annual-reviews-in-control	New concepts in Manufacturing	UL
Future Generation Computer Systems	https://www.sciencedirect.com/journal/future-generation-computer-systems	New systems in Manufacturing	UL
Computers and Industrial Engineering	https://www.journals.elsevier.com/computers-and-industrial-engineering	AI for Manufacturing	UL
IEEE Internet of Things Journal	https://ieee-iotj.org/	IoT in Manufacturing	UL
International Journal of Production Research	https://www.tandfonline.com/toc/tprs20/current	Production Research	UL

4.3.2 Publications in printed/online industrial journals

Objective	To create publications that highlight the results of AI-PROFICIENT and publish them in various printed/online industrial journals
Content and Messages	Contain results, conclusions and recommendations from the project
Target Audience	Scientific community and industrial research, Plant engineering solution providers, plant management system providers and technology providers, Investors (private or public), Technology or industrial clusters, associations and platforms
Information Required	Results and evaluation content from the project activities
Information Provider	All partners
Communication Methods	AI-PROFICIENT website, Social Media
Activities	Write and submit publications, post them on the AI-PROFICIENT website and Social Media
Schedule	Ad-hoc when publishing opportunities, calls for papers arise
Monitoring	ATC
Responsible Partner	Research and Industrial partners

A preliminary list of industrial journals that will be targeted to maximize the impact of the AI-PROFICIENT results to the target communities is presented below.

Table 6 Indicative Industrial Journals

PRINTED/ONLINE INDUSTRIAL JOURNALS-MAGAZINES	LINK (PUBLISHER)	FIELD	PARTNER(S) INVOLVED
Semantics	https://2021-eu.semantics.cc/	Semantic Technologies	TEK
NLDB	http://nldb2021.sb.dfki.de/	NLP	TEK
Insight on System Engineering	https://onlinelibrary.wiley.com/journal/21564868	System Engineering in Manufacturing	UL

4.3.3 Participation in exhibitions, scientific conferences, workshops or industrial events

Objective	To increase the project's visibility by participating in relevant exhibitions, scientific conferences, workshops or industrial events, to attract stakeholders to AI-PROFICIENT.
Content and Messages	AI-PROFICIENT challenges, vision, results and outcomes
Target Audience	Plant operators, end-users/customers, Scientific community and industrial research, Plant engineering solution providers, plant management system providers and technology providers, Next generation of employees of the industrial sectors, current employees of the industrial sectors, universities and vocational training providers, Investors (private or public), Horizon 2020 projects, Technology or industrial clusters, associations and platforms, Policy-makers, Standardization bodies/initiatives
Information Required	Function of the specific event
Information Provider	Partner(s) attending the event
Communication Methods	Speech presentation, distribution of project material
Activities	Preparation of the dissemination material according to the specific event
Schedule	See below
Monitoring	All Partners attending the conferences/events will report to ATC the main results of the related activities.
Responsible Partner	All partners

The table below summarizes the main international events and conferences dealing with topics that are relevant to the AI-PROFICIENT project. The events list will be continuously updated by the partners and each event will be analysed for impact potential before deciding whether AI-PROFICIENT should be represented.

Table 7 Indicative Dissemination events

EVENT NAME	DATE	CITY, COUNTRY	TARGET AUDIENCE	PARTNER(S) INVOLVED
CIGI - QUALITA 2021	5-7 May 2021	Grenoble, France	Research and industry in the field of Production and Quality	UL
INCOM-Information and Control in Manufacturing (IFAC)	7-9 June 2021	Budapest, Hungary	Industry 4.0	TEK, UL

EVENT NAME	DATE	CITY, COUNTRY	TARGET AUDIENCE	PARTNER(S) INVOLVED
International Fair of Technics and Technical Achievements	8-11 June 2021	Belgrade, Serbia	AI researchers, practitioners, scientists, and engineers in affiliated disciplines	IMP
Prognostics and Health management (PHM)	28 June - 2 July 2021	Turin, Italy	Academia, government, and industry	TEK, UL
CIRP General Assembly	22-29 August 2021	Munich, Germany	Research and Industry in Manufacturing field	UL
CIRP DET 2021 - International Conference on Digital Enterprise Technology	11-13 October 2021	Budapest, Hungary	Industry 4.0, New technologies for Manufacturing	UL
IN4PL: International Conference on Innovative Intelligent Industrial Production and Logistics	25-27 October 2021	Online Streaming	Industry 4.0, New technologies for Manufacturing	UL
ISM 2021: International Conference on Industry 4.0 and Smart Manufacturing	17-19 November 2021	Linz, Austria	Academics and Computer Scientists	UL (Ethics)
International Conference on Information Society and Technology	7-10 March 2022	Kopaonik, Serbia	Case studies and demonstrations of novel ICT technologies and approaches in industry and society; areas of information systems, model-based software engineering, e-government, big data, biomedical engineering, semantic web research and	IMP

EVENT NAME	DATE	CITY, COUNTRY	TARGET AUDIENCE	PARTNER(S) INVOLVED
			since recently, Internet of Things	
IMS (Intelligent Manufacturing System) 2022	28-30 March 2022	Tel Aviv, Israel	Research and industry in the field of Intelligent Manufacturing	UL
31st BIEMH	30 May - 3 June 2022	Bilbao, Spain	Automotive, aerospace, aeronautics, ancillary, capital goods, metal construction, energy generation, domestic appliance, household goods, railway, cutting & plate-work subcontracting, mould & die or gas & oil industry	TEK
IFAC workshop on advanced maintenance technologies (AMEST)	22-29 July 2022	Bogota Colombia	Research and Industry in Predictive Maintenance field	UL
10th IFAC Conference on Manufacturing Modelling, Management and Control, IFAC MIM 2022	2022	Nantes, France	Research and Industry in the field of Production optimisation, manufacturing logistics	UL
Fluidization XVII	May 2023	Edinburgh, UK	Research and industry	VTT
22nd IFAC World Congress	9-14 July 2023	Yokohama, Japan	Manufacturing Control	UL

4.3.4 AI-PROFICIENT dedicated workshops with potential end-users

Objective	To increase the project's visibility by organizing dedicated workshops with potential end-users
Content and Messages	AI-PROFICIENT challenges, solution, results and outcomes

Target Audience	Plant operators, end-users/customers, Plant engineering solution providers, plant management system providers and technology providers, Next generation of employees of the industrial sectors, current employees of the industrial sectors, universities and vocational training providers, Investors (private or public), Horizon 2020 projects, Technology or industrial clusters, associations and platforms
Information Required	Function of the specific workshop
Information Provider	Partners organizing the workshop
Communication Methods	Presentation, distribution of project material
Activities	Preparation of the dissemination material according to the specific workshop
Schedule	3 dedicated workshops with potential end-users are envisioned during the lifetime of the project with at least 20 participants each
Monitoring	All Partners organising the workshops will report to ATC the main results of the related activities
Responsible Partner	All partners involved in this task

4.3.5   AI-PROFICIENT main outreach events

4.3.5.1   TF main outreach event

Objective	To disseminate and demonstrate the results of AI-PROFICIENT
Content and Messages	Different presentations of results achieved at AI-PROFICIENT. Demonstration of application of TF platform for factory floor processes optimization. Demonstrate and receive feedback from various industry partners regarding to role-specific human-machine interfaces. Disseminate AI-PROFICIENT approaches in digital twins integration.
Target Audience	Industry and Research companies based in the EU as well as similar international attendees, Plant operators, end-users/customers, Scientific community and industrial research
Information Required	Belgian COVID restriction monitoring, Consortium partners results
Information Provider	All consortium partners
Communication Methods	All organizational announcements are made via all the AI-PROFICIENT communication channels. All the consortium partners cooperate on the enhanced communication via their networks.
Activities	An event hosted in Belgium for about 50 industrial partners.

Schedule	Expected on the second half of 2022
Monitoring	TF
Responsible Partner	TF

4.3.5.2 TEK main outreach event

Objective	To disseminate the main results of AI-proficient.
Content and Messages	Content. Different presentations of results achieved at AI-PROFICIENT. Likely to include additional partners from industry or academia with complementary offerings and results (e.g., from other similar projects).
	To take a specific advantage/focus and present MOM (Manufacturing Operations Management) initiative: A joint R&D initiative of Tekniker and Ibermatica to demonstrate Industry 4.0 solutions.
Target Audience	Industry and Research companies, especially from Spain, but also open to International attendees, Scientific community and industrial research, Plant operators, end-users/customers
Information Required	Consortium partners results
Information Provider	All consortium partners
Communication Methods	Announcement will be published in advance through habitual AI-PROFICIENT partners media resources
Activities	6-10 presentations of results (15-20 min.), 3-4 demonstrations
Schedule	Tekniker Auditorium, Eibar. Spain. (capacity for +120 pax)
	Expected Mid 2023
Monitoring	TEK
Responsible Partner	TEK

4.3.6 Clustering with related H2020 and national projects as well as initiatives

Objective	In order to ensure complementarities and in the interest of maximizing benefits, synergies will be established between existing projects and initiatives. This will also ensure that information will be exchanged between the projects on workshops and other networking events that will be organized by them.
Content and Messages	Project's background, progress and news, value of networks for capacity building

Target Audience	Scientific community and industrial research, Horizon 2020 projects, Technology or industrial clusters, associations and platforms
Information Required	Main project documentation and material, deliverables, results updates
Information Provider	All partners
Communication Methods	Internet, email, phone
Activities	Contacting other projects, discuss results, look for and attend shared dissemination activities
Schedule	At least 1 meeting per year & 1 joint activity
Monitoring	ATC
Responsible Partner	All partners

The following list presents an initial list of the H2020 and national projects as well as initiatives that AI-PROFICIENT will try to establish communication with or collaboration is envisioned.

Table 8 H2020 and national projects as well as initiatives related to AI-PROFICIENT

Projects/initiatives identified for collaboration	Expected areas of collaboration	Partner(s) Involved
3KIA (funded by Basque Government)	AI Trustworthiness	TEK
EKIN (funded by Basque Government)	Human-Machine Interaction	TEK
SmartFlex (funded by Business Finland and Finnish companies)	Application of hybrid modelling	VTT
SERENA (H2020 project)	Machine learning	VTT
SMART-DPM (ITEA/EUREKA project)	Self-developing diagnostics	VTT
Project COFECUB – CAPES Ph 950/19 (2019-2022) - project between France and Brazil	Predictive Maintenance and PHM	UL
Projet DIH4CPS - H2020 – ICT 01-2019	Technologies Interoperability within CPPS	UL
XMANAI - Explainable Manufacturing Artificial Intelligence (H2020, ICT-38-2020)	AI for manufacturing	All partners

Projects/initiatives identified for collaboration	Expected areas of collaboration	Partner(s) Involved
ASSISTANT-leArning and robuSt deciSIon SupporT systems for agile mANufacTuring environments (H2020, ICT-38-2020)	AI for manufacturing	All partners
COALA - COgnitive Assisted agile manufacturing for a LAbor force supported by trustworthy Artificial Intelligence (H2020, ICT-38-2020)	AI for manufacturing	All partners
TEAMING.AI - Human-AI Teaming Platform for Maintaining and Evolving AI Systems in Manufacturing (H2020, ICT-38-2020)	AI for manufacturing	All partners
STAR - Safe and Trusted Human Centric Artificial Intelligence in Future Manufacturing Lines (H2020, ICT-38-2020)	AI for manufacturing	All partners
knowlEdge - Towards AI powered manufacturing services, processes, and products in an edge-to-cloud-knowlEdge continuum for humans [in-the-loop] (H2020, ICT-38-2020)	AI for manufacturing	All partners
MAS4AI - Multi-Agent Systems for Pervasive Artificial Intelligence for assisting Humans in Modular Production Environments (H2020, ICT-38-2020)	AI for manufacturing	All partners
EU-Japan.AI - Advancing Collaboration and Exchange of Knowledge Between the EU and Japan for AI-Driven Innovation in Manufacturing (H2020, ICT-38-2020)	AI for manufacturing	All partners

4.3.7 Multipliers briefings

Objective	To ensure greater accessibility to AI-PROFICIENT knowledge and results by conducting briefings of multipliers, i.e. main stakeholders able to multiply the partners' dissemination efforts within their existing wider communities
Content and Messages	Project updates, challenges and developments in AI for manufacturing
Target Audience	Plant operators, end-users/customers, Next generation of employees of the industrial sectors, current employees of the industrial sectors, universities and vocational training providers, Horizon 2020 projects, Technology or industrial clusters, associations and platforms, Policy-makers, Standardization bodies/initiatives
Information Required	Main project documentation and material
Information Provider	All partners
Communication Methods	Internet, face-to-face at other events
Activities	Organising and managing the multipliers briefings
Schedule	At least 3 meetings or presentations are envisioned during the lifetime of the project
Monitoring	All Partners organising the Multipliers briefings will report to ATC the main results of the related activities
Responsible Partner	All partners involved in this task

4.3.8 Dialogue on standardization with Technical Committees (TC) and Working Groups (WG) members (INOS with support by TEK and UL)

Objective	Coordinate with appropriate standards bodies. Track existing and emerging standards, evaluate applicability to AI-PROFICIENT technologies and objectives and select and integrate in project code base. Identify technical developments in the project that would be advantageous for the consortium and the EU to be included in formal standards and promote them to the appropriate standards working groups.
Content and Messages	For existing and emerging standards being implemented, ensure that the AI-PROFICIENT dissemination material explicitly refers to the supported standards. This applies to reports, scientific publications, brochures, web page and promotional events. For contributions to standards on representations, protocols interfaces), processes, models and safety and ethics requirements and guidelines, approach the targeted standards bodies by addressing the working group chairs and on a case by case basis direct contribution.
Target Audience	Standards development groups focusing on AI in general (e.g. CEN/CENELEC Focus Group on Artificial Intelligence, all the standards developed by ISO/IEC JTC 1/SC 42 Artificial intelligence), Safety (e.g. ISO/IEC AWI TR 5469) and

	Ethical (e.g. ISO/IEC TR 24028:2020, ISO/IEC AWI TR 24368) AI, Industrial Maintenance and Prognostics (e.g. CEN 16646), Quality Control Systems, Plant Management Systems (e.g. Open O&M), Human To Machine and Machine To Human Interfaces, Product Life Cycle (e.g. RAMI 4.0) Industrial Internet of Things (e.g. MQTT, OPC-UA), explainable AI (e.g. ISO/IEC AWI TS 6254)
Information Required	For alignment to standards tracking of applicable standards and integration to project architecture to the extent needed, feasible and economically interesting. For contribution to standards, identification of internally developed representations, processes, protocols, requirements and guidelines, and formalization to an extent appropriate for promoting them to the standards bodies.
Information Provider	All partners. All identified applicable standards group web pages and publications.
Communication Methods	E-mail as a consortium and personal, project web site, scientific and industrial conferences. Personal contacts.
Activities	Develop and periodically update a table of targeted standards (and standards bodies). Develop and update a table of internal developments that are/can be affected by the targeted standards. Map the contents of the above tables and identify integration opportunities and opportunities for contributing to the standards that bring benefits to the project consortium and the EU. Based on the identified opportunities proceed with appropriate internal interventions (standards integration) and external interventions (propose contributions). Keep track of activities in a fourth table.
Schedule	Starting M10 (T7.5 Kick-off), identify applicable standards and working groups as sell as internal developments that are/could be standards related and create the mapping described above. Identify standard body process milestones and schedules and create a schedule of interventions (communications) to affect/guide the standards development. Periodically update the tables as new information becomes available (publication of a new draft standard, development of an internal corpus of specifications that can be promoted) at a minimum in M12 (initial), M18 (middle of project), M26 (interim) and M34 (start of D7.5 preparation).
Monitoring	Refer to standardization activities in periodic project reports. Activity tracking table. INOS, ATC, Project Coordinator (UL)
Responsible Partner	INOS, ATC, All

5 Communication Activities

5.1 Target Audiences

Besides helping to reach out to the project's potential end users and further target audiences for dissemination and exploitation described before, the communication activities will also target audiences beyond the project's own community (both AI and manufacturing), who could be interested in knowing more about the AI-PROFICIENT benefits for everyday life and the AI-PROFICIENT proposed solutions to fundamental societal challenges, such as improved production efficiency, waste reduction, reusability, sustainability in the industry or saving/creating jobs via scientific/industrial excellence. A list of relevant stakeholders has been identified:

- NGOs, associations and other interest groups willing to showcase AI-PROFICIENT as best practices;
- Trainers and teachers wishing to sensibilise future generations;
- Public services wishing to sensibilise their communities;
- Citizens principally from the EU, with attention paid to children and young adults as they will influence future policies;
- Potential future customers for the AI-PROFICIENT products;
- Local/regional authorities from the EU and not specifically linked to the project topics, such as city mayors or economic development agencies;
- General printed/online media representatives (non-scientific, non-industrial), both at regional/national and EU/international level, thus in English but also in the languages of the consortium countries.

In order to target these different audiences and stakeholders in an efficient way, it is best to address each audience through its appropriate channels. Keeping that in mind the AI-PROFICIENT project suggests the following locations in relation to the different types of audience defined beforehand.

Table 9 Communications Activities - Approaching Target Groups

TARGET GROUP	LOCATION	MAIN DIRECTIONS FOR MESSAGES
NGOs, associations and other interest groups	Project identity kit Project brochure Press releases Factsheets Newsletters Project video Digital info-pack Public website Social media accounts	Actions taken in terms of AI-PROFICIENT, will lead to co-create value and transform Industry sector, via bottom-up technology changes. That way, it will be possible to design specific strategic guidelines on how to integrate the new technology achievements of value in industry sector, providing a sustainable impact on production line modernization.
Trainers and teachers	Project identity kit Project brochure Press releases Factsheets Newsletters Project video Digital info-pack	The outcomes of this project will provide trainers and teachers with solid research results and specific technology suggestions and techniques to create modern technology-oriented mentality to trainees.

TARGET GROUP	LOCATION	MAIN DIRECTIONS FOR MESSAGES
	Public website Social media accounts	
Public services	Project identity kit Project brochure Press releases Factsheets Newsletters Project video Digital info-pack Public website Social media accounts	The outcomes of this project will provide public service authorities with solid research results and specific policy suggestions to standardize activities and on transforming industry sector and employment parameters. That way, public services will be able to design specific strategic guidelines on security, safety, maintenance, aiming to efficiency, providing a sustainable impact on plant level production activities. In addition, it will be possible to set the standards on evaluating recommended policies and transformative innovations
EU Citizens	Project identity kit Project brochure Press releases Factsheets Newsletters Project video Digital info-pack Public website Social media accounts	During the project, EU Citizens will have the chance to deal with new research fields, concerning the ways that next generation employees, third sector organizations could be engaged in using new technologies and profit from relevant transformation in plant level services and processes.
Potential future customers	Project identity kit Project brochure Press releases Factsheets Newsletters Project video Digital info-pack Public website Social media accounts	Potential future customers, will be able to get acquainted with the innovation of the project and emerging technologies; also, they will be able to define how this can be used and further exploited in terms of receiving a better product; Having open access to project results, future customers can understand the technology available and expect the final product to satisfy a certain level of Quality of service.
Local/regional authorities from the EU	Project identity kit Project brochure	The outcomes of this project will provide authorities with solid research results and specific policy suggestions on

TARGET GROUP	LOCATION	MAIN DIRECTIONS FOR MESSAGES
	Press releases Factsheets Newsletters Project video Digital info-pack Public website Social media accounts	transforming European Industry sector. That way, it will be possible to design specific strategic guidelines on how to integrate the state of the art technologies in production processes of all types of industries, providing a sustainable impact on modernization of traditional production plants.
General printed/online media representatives both at regional/national and EU/international level	Project identity kit Project brochure Press releases Factsheets Newsletters Project video Digital info-pack Public website Social media accounts	The project's results provide a complete framework and suggestions authorities can exploit and promote through all types of activities and propose specific tasks, either in national or local level

5.2 Reaching Target Audiences

The following table provides an initial list of key stakeholders. This list will be expanded during the project period.

Table 10 Communication Activities - Indicative Target Audiences

Name	Short description	Type	Website
Sechpho	Innovation cluster with 150+ companies	Potential future customers	https://www.secpho.org/
MATERALIA	Competitiveness Cluster	Potential future customers	https://www.materalia.fr/fr/
Boussias	A leading b2b trade publishing, conferences and awards organizing company in Greece, committed to quality and innovation	General printed/online media representatives both at regional/national and EU/international level	https://www.boussias.com/

Name	Short description	Type	Website
Direction	The Company's media monitor and report the ever-changing developments, trends and prospects in business sectors, both in the international and Greek business environment, in Marketing, Communication and the Media, Retail and FMCG, Industry, Corporate Responsibility and Sustainability, New Technologies and Telecommunications, Transportation and Cars, etc.	General printed/online media representatives both at regional/national and EU/international level	https://direction.gr/?lang=en
Alter Ego	Greek media company which plays a dominant role in Greek publishing and Greek politics, especially through its flagship newspapers, 'To Vima' and 'Ta Nea'. The group also owns the news portal 'In.gr'.	General printed/online media representatives both at regional/national and EU/international level	https://www.tovima.gr/ https://www.tanea.gr/ https://www.in.gr/
Naftemporiki	Financial newspaper in Greece	General printed/online media representatives both at regional/national and EU/international level	http://www.naftemporiki.gr/
Kathimerini	A daily, political and financial morning newspaper published in Athens, Greece.	General printed/online media representatives both at regional/national and EU/international level	https://www.kathimerini.gr/

5.3 Communication tools and channels

The AI-PROFICIENT consortium makes use of a variety of communication tools and channels. The table below outlines the communication tools and channels that are deployed by the AI-PROFICIENT consortium and show how these help increase the impact of the project.

Table 11 Communication tools and channels

TOOL/CHANNEL	DESCRIPTION	BENEFIT OF THE TOOL/CHANNEL
Project identity kit	Design project identity kit includes designing a common branding strategy including project logo, project templates for presentation and reports, assets for project representation in social media channels etc.	Use of project identity kit ensures coherence and absolute brand recognition among stakeholders.
Project brochure	Create brochures with key project public information.	Project brochures distributed at various events, conferences, etc. gain the project visibility with the general public.
Online/printed press releases in English at European/international level	Publish Press releases on a regular basis to highlight project results in English and replicated in languages of the consortium countries at regional/national level, in order to leverage project coverage by reaching out to non-English speaking audiences.	Press releases can target specific stakeholders depending on the channel where press release is published and can communicate in a regular basis the newest achievements of the project and keep the audiences up to date.
Public factsheets and electronic newsletters	Produce factsheets and newsletters about the project and its scope and for major results and milestones to directly reach the relevant audiences.	Both factsheets and newsletters show the progress of the project to all stakeholders and keep their interest high.
Project video	A project video showcasing the project challenges and objectives in a non-technical and self-explicative way as possible in order to reach the widest audience.	A project video on AI-PROFICIENT challenges and objectives educates new and current prospects online and reduces the workload of the communication department. Also it helps make the results more obvious, thus appeal to a more generic non-technical audience. Thus, CEOs and other executives, forming the decision makers group in the industries can benefit from such a presentation, which will guide to wide adaptation of new technologies.

TOOL/CHANNEL	DESCRIPTION	BENEFIT OF THE TOOL/CHANNEL
Digital info-pack	A digital info-pack for stakeholders wishing to inform themselves and their communities about the challenges and benefits of AI technology in production plants, and AIPROFICIENT proposed solution.	Promotion of AI-PROFICIENT findings about e.g. the positive economic, environmental and social impacts of its proposed solution to local/regional authorities and public services.
Public website	Establish online presence – a website where the interested parties can read about the project progress and findings; Create an online repository on the website for anyone to download project findings and public deliverables.	The project website is a key instrument for enhancing the visibility of the project; Project website clearly refers visitors to the AI-PROFICIENT vision and educates them about the project concept; All project findings are published on the website to allow anyone interested in the subject to follow the progress of the project.
Social media accounts	Create a Twitter account and a LinkedIn Page for sharing project news, events, resources, collaborations, demonstrations, publications and reach people that are interested in the outcomes of the project; Use consortium social networking contacts (Twitter, LinkedIn) to reach out to a wide range of communities.	Social media are fast, low cost channels of reaching interested groups and communities that are normally not present at any events, conferences. They also create an interaction on a regular basis with audiences, appealing to the modern way of communication used by next generation of employees who are about to enter the work field.

5.3.1 Project identity kit

Objective	Creation of full Identity Kit, containing all elements required for communication will help you understand the essential elements of the AI-PROFICIENT identity.
Content and Messages	It explains how to use the identity and serves as a source of inspiration for you to continue building a strong brand people love to be a part of.
Target Audience	All Stakeholders
Information Required	Project's concept, objectives, approach and impact, project partners' web pages and branding material
Information Provider	TF with contribution by all partners
Communication Methods	AI-PROFICIENT website, Social Media channels, partners' contacts and network

Activities	Creating the overall design concept; designing project primary and secondary logo, selection of identity color schemes and font types; creating the project templates for presentation and reports; developing the web page wireframes; mocking-up the final web page design, web page front-end and back-end development; designing identity assets for project representation in social media channels, printing materials, as well as delivering the project promo video.
Schedule	Project Identity concept presentation and preparation at month four together with the delivery of the project templates. WEB presence at M6 (initial version), continuous maintenance of the web page throughout the whole duration of the project. Creating related social media accounts at M7. Administration of issuing of electronic newsletters about the project progress, events, and achievements every six months. A project video will be released in M12
Monitoring	TF, ATC
Responsible Partner	TF

5.3.2   Project brochure

Objective	Create a concise downloadable and printable communication document about the project.
Content and Messages	Generate maximum awareness of the project objectives and planned outcomes among industrial stakeholders, investors, governmental bodies, standardisation bodies in addition to academics and research organisations.
Target Audience	All stakeholders
Information Required	Inputs from all consortium partners, regarding overall objectives, targeted scientific / industrial outcomes, and current / next period achievements.
Information Provider	TF and All partners provide content
Communication Methods	WEB page, social media channels, email lists and hard copies distribution
Activities	TF is responsible to define the infographics and its main message, creating visual narrative, incorporate brand design standards, choose the brochure type, develop the message, evaluate design, defining the target audience, marking the metrics for success
Schedule	The brochure will be published in M6 and updated in the second half of the project.
Monitoring	TF
Responsible Partner	TF

5.3.3 Online/printed press releases in English at European/international level

Objective	To raise awareness within the widest audience about the project
Content and Messages	Brief summary of the project, the challenges it addresses, its main objectives and partners involved
Target Audience	All Stakeholders
Information Required	Project's concept, objectives, approach and impact, as well as all project partners' names
Information Provider	ATC to be revised by all partners
Communication Methods	Internet, AI-PROFICIENT website, partners' contacts and network
Activities	Writing content, designing, editing the press releases in English language. Replication of press releases in languages of the consortium countries at regional/national level, in order to leverage project coverage by reaching out to non-English speaking audiences. Publishing of the press releases on AI-PROFICIENT website. Promoting/emailing press releases on partners' networks.
Schedule	Four times during the project period: shortly after project start to raise awareness within the widest audience about the project, the challenges it addresses, its main objectives and partners involved; at project midterm to inform on first achievements and tangible benefits; before the project main outreach event; and at project end or shortly after it to promote project results as providing solutions to fundamental challenges.
Monitoring	ATC
Responsible Partner	ATC

5.3.4 Public factsheets and electronic newsletters

Objective	To inform the audience of the latest news or updates about AI-PROFICIENT achievements, to inform the stakeholders on project's scope
Content and Messages	Key project's objectives, project's main results, dissemination activities, events. The content adheres to the AI-PROFICIENT branding
Target Audience	All Stakeholders
Information Required	Project's concept, objective, approach and impact, Project' main outcomes, dissemination events and conferences attended or organized by AI-PROFICIENT, highlighted relevant news/events/conferences etc.
Information Provider	All partners

Communication Methods	Projects digital channels
Activities	Writing content, designing, editing and publishing the factsheets and newsletters on AI-PROFICIENT website, promoting the factsheets and newsletters on social media
Schedule	Three factsheets and five newsletters will be published during the project's duration
Monitoring	ATC
Responsible Partner	TF is responsible for visuals and design mock-ups, ATC is responsible for content creation based on partners' contribution

5.3.5 Project video

Objective	To showcase the project challenges and objectives
Content and Messages	A brief explainer video on AI-PROFICIENT challenges and objectives educates new and current prospects online and reduces the workload of your communication department.
Target Audience	All
Information Required	From the consortium. The videos should remain as non-technical and self-explicative as possible to reach the widest audience
Information Provider	Possibility of a joint video with its sister projects financed under the same topic
Communication Methods	Consortium digital channels
Activities	Writing script, editing and production, publishing the video on the website and promoting the video on social media
Schedule	M12
Monitoring	TF
Responsible Partner	All partners as content providers, TF is responsible for final scripting and rendering

5.3.6 Digital info-pack

Objective	To be a one-stop-shop for the project information about benefits of the AI technology

Content and Messages	Mainly based on infographics promoting AI-PROFICIENT findings about the positive economic, environmental and social impacts of its proposed solution
Target Audience	A broader audience and in particular local/regional authorities and public services
Information Required	From the stakeholders wishing to inform themselves and their communities about the challenges and benefits of AI technology in production plants, and AI-PROFICIENT proposed solutions
Information Provider	All consortium partners
Communication Methods	Project digital channels
Activities	Writing content, designing, editing and publishing the info-pack on the website, promoting the info-pack on social media
Schedule	Release between M12 and M18
Monitoring	TF
Responsible Partner	TF, ATC

5.3.7   Public website

Objective	The web page is showcasing the projects carried out by the consortium
Content and Messages	All the essential content on AI-PROFICIENT, objective, achievements, partnership, and activities.
Target Audience	All Stakeholders
Information Required	Descriptions about but not restricted to: about the project, news, events, Resources, Collaborations, Demonstrations, Publications, Privacy policy
Information Provider	ATC and all partners
Communication Methods	Internet
Activities	Updates synchronized with the new content inputs, editing and regularly publishing content and news on the website
Schedule	Continuous (news and events updated on an ad-hoc basis)
Monitoring	TF, ATC are responsible for monitoring volume of traffic on the site and providing statistics
Responsible Partner	TF is responsible for building, hosting and maintaining the project website and ATC and all partners are responsible for updating content

5.3.8 Social media accounts

5.3.8.1 Twitter page

Objective	Building an engaged following to increase project awareness. Increasing traffic to the project and the partners' websites
Content and Messages	Project, news, events, resources, collaborations, demonstrations, publications as well as reposting the relevant social media messages
Target Audience	A broader audience
Information Required	All actual information promoting AI-PROFICIENT findings and related information
Information Provider	All partners
Communication Methods	Internet
Activities	Channel posting and reposting, encouraging new users to join
Schedule	Continuous
Monitoring	ATC is monitoring the page as a minimum twice a week. Each partner is responsible to send news to be added on twitter
Responsible Partner	TF is responsible for creating the page while ATC is responsible for operating the twitter account

5.3.8.2 LinkedIn page

Objective	Building an engaged following to increase project awareness. Increasing traffic to the project and the partners' websites
Content and Messages	Project, news, events, resources, collaborations, demonstrations, publications as well as reposting the relevant social media messages
Target Audience	A broader audience
Information Required	All actual information promoting AI-PROFICIENT findings and related information
Information Provider	All partners
Communication Methods	Internet
Activities	Channel posting and reposting
Schedule	Continuous

Monitoring	ATC is monitoring the page as a minimum twice a week. Each partner is responsible to send news to be added on LinkedIn
Responsible Partner	TF is responsible for creating the page while ATC is responsible for operating the LinkedIn page

6 Monitoring and Evaluation

6.1 Quantitative & Qualitative Evaluation of AI-PROFICIENT Dissemination and Communication

In accordance with the evaluation criteria and indicators for measurement of the level of success of dissemination and communication activities, the qualitative and quantitative aspects of evaluation will be examined in detail in the following paragraphs.

In order to capture the effectiveness of dissemination and communication, a combination of criteria or feedback mechanisms is being used to measure the effectiveness of each dissemination and communication activity. The project has developed an online monitoring template, which all partners are using in order to register and monitor their activities. Information to be contained in this template is as following:

For events

Partner(s) attending	The responsible partner(s)
Type of event	Organisation of a Conference, Organisation of a Workshop, Exhibition, Participation to a Conference, Participation to a Workshop, Participation to an Event other than a Conference or a Workshop, Brokerage Event, Pitch Event, Trade Fair, Participation in activities organized jointly with other H2020 projects, Training
Name of event	Which event
Date	Date of the event
Physical/Virtual	If it is a Physical/Virtual event
City, Country	Where the event took place
Website	Link to the event's website
Summary	A short description of what will happen/happened at the event? What will/did your org. do?
Is this activity publishable on the website?	If the activity is publishable on the website
Text to be added in the site (title, description, image etc.)	Provision of the text to be added on the website for this activity with links and photographs from the event or other related material (where available)
Audiences reached	Type of Audience reached [Scientific Community (Higher Education, Research), Industry, Civil Society, General Public, Policy Makers, Media, Investors, Customers, Other] and No. of persons reached

For Publications

Partner(s)	The responsible partner(s)
Type of publication	Article in Journal, Publication in Conference proceedings/Workshop, Book/Monograph, Chapter in a Book, Thesis/Dissertation, Printed/online industrial journal, Other
DOI	DOI name
Title	Title of the publication
Author(s)	Name(s) of the author(s) of the publication

Title of the Journal, Proceedings, Books series, Book (for book chapters)	Title of the Journal/Proceedings/Books series/Book (for book chapters)
Number, date or frequency of the Journal, Proceedings, Book	Number, date or frequency of the Journal/Proceedings/Book
Publisher	Who is the publisher of the publication
Place of publication	Where the publication took place
Year of publication	When the publication took place
Relevant pages	Relevant pages of the publication
ISBN	ISBN number
Is this publication available in Open-Access, or will it be made available?	Yes - Green Open Access, Yes - Gold Open Access, No
In case of Green Open Access, length of embargo in months if any	Length of the Embargo, if any months
Is this a peer-reviewed publication?	Yes, No
Is this a joint public/ private publication?	Yes, No

For Communication Activities

Partner(s)	The responsible partner(s)
Type of communication activity	Press release, Non-scientific and non-peer-reviewed publication (popularised publication), Flyer, Social Media, Website, Communication Campaign (e.g. Radio, TV), Video/Film, Interview, Other
Website/URL (if applicable)	Indication of (links to) the communication activity
Description of activity	A short description of the communication activity
Date	Date of the communication activity
Audiences reached	Type of Audience reached [Scientific Community (Higher Education, Research), Industry, Civil Society, General Public, Policy Makers, Media, Investors, Customers, Other] and No. of persons reached

The template may also act as a planning document, partially filled-in before each dissemination and communication activity.

For every publication in AI-PROFICIENT web site, the needed information to be filled in is as following:

Title	Title of the news item
Description	The main text of the news item
Resources	Indication of (links to) presentations, photographs, or other relative

For measuring effectiveness of the on-line communication the following metrics must be compiled on a quarterly basis, by the responsible partner:

Website	Reporting and analytics tools like Google Analytics can be integrated into the web page to collect generic analytics information such as users-visitors, sessions, average session duration, page views, new visitors, returning visitors.
Social Media	Number of followers, number of tweets/posts, impressions/reach, link clicks

The following table presents a list of target values for quantitative indicators based on which the dissemination and communication impact of the project will be evaluated.

Table 12 AI-PROFICIENT Dissemination and Communication quantitative indicators

Publications - Open Access Peer reviewed	At least 6 publications in green or gold access
Publications - Industrial Journals	At least 3 publications
Events	Participation in at least 15 events
Dedicated workshops	At least 3 workshops with at least 20 participants each
Main Outreach Events	At least 2 events with 50 participants each event
Clustering with H2020 or national or initiatives	At least 1 meeting per year & 1 joint activity
Multipliers briefings	At least 3 meetings or presentations
Dialogue on standardisation TC or WG	At least 3 meetings with TC or WG members
Project identity kit	1 project identity kit
Project brochure	>2.000 copies distributed
Press releases	At least 4 press releases in English, replicated in languages of the consortium countries
Public factsheets and electronic newsletters	3 factsheets & 5 newsletters with >50 subscribers
Project video	At least one video having hundreds of viewers
Digital info-pack	1 general info-pack produced between M12-M18
Public website	More than 100 visits per month; at least 1 interactive quiz
Social media accounts	Social media with >500 followers/contacts each

The qualitative aspects of dissemination and communication are closely related to the main project objectives that are to be attained and how these dissemination and communication activities will be successful in supporting them. This deliverable contains an account of:

- What will be produced and presented from the point of dissemination and communication?
- How, when and where will it be presented and distributed?
- To whom will the results be disseminated?
- Who will participate?

6.2 Expected Impact

The outcomes of AI-PROFICIENT dissemination activities should ensure a positive impact in the domain of AI and manufacturing. Moreover, AI-PROFICIENT is expected to be extremely beneficial for various target groups that are defined not only by their direct interest in the project results as potential users (for example plant operators, plant engineering solution and plant management system providers, employees of the industrial sectors, industrial associations) but also by their institutional, scientific and educational status (i.e. universities and vocational training providers and scientific community).

The impact of dissemination and communication will be analyzed based on several aspects that need to be taken into account such as:

INPUTS	The resources to be used for reaching the objectives
ACTIVITIES	The dissemination and communication activities to be performed
OUTPUTS	The direct results of activities - a set of quantitative and qualitative indicators to measure outputs
OUTCOMES	Longer term effects on the people, communities, or domains
IMPACT	The impact may be estimated after a deeper investigation and longer term assessment, and based on the evaluation of all previous components

6.3 Impact in Relation to Objectives

The following table summarizes the original dissemination & communication objectives and how the project aims to deliver impact.

ORIGINAL DISSEMINATION & COMMUNICATION OBJECTIVES	HOW AI-PROFICIENT DELIVERS IMPACT
Establish a strong project visual identity and produce self-explanatory printed and digital materials.	• Composition of a project identity kit that is appealing to target audiences • Publication of communication material (brochures, video etc.)
Generate maximum awareness of the project outcomes among industrial stakeholders, investors, governmental bodies, standardization bodies in addition to academics and research organizations.	• Uses customized messages and channels to engage key audience groups • Uses online channels to reach experts and non-experts alike • Publications (in journals and magazines), participation to relative events (conferences, workshops, etc.) • Organization of workshops, multipliers briefings and outreach events • Participation in committees and communities, in order to embed project achievements in standardization bodies.
Reach a broad audience and contribute to a greater acceptance of AI technology in manufacturing, with a focus on synergies	• Identifies R&D projects at national and EU-levels for collaboration • Conduct briefings of multipliers

with similar EU or national projects and key multipliers.	• Clustering activities to exploit synergies between projects and increase their impact. Common areas of collaboration will be agreed, similar technology needs will be identified and common dissemination channels and activities will be scheduled.
Inform about and promote the project and its results, conveying research in a non-technical way in order to raise awareness among a broader audience about the challenges AI-PROFICIENT addresses and the possible related benefits and solutions it provides to the EU first but also beyond.	• Provides regular updates on AI-PROFICIENT through website, social media, press- releases and newsletters etc. • Create a digital info pack and a project video, which conveys messages in a self-explicative way, in order to promote the project outcomes to non-technical audiences.

6.4 Risks & Issues related to Dissemination and Communication

The main risks related to the communication and dissemination side of the project is presented in the following table. The detailed Risk Management Plan is part of the "D8.1 Quality assurance plan". This risks, as well as any other identified risk or potential issue related to dissemination and communication, will be monitored and mitigated by the Coordinator. However, the WP7 Leader will also examine these risks on a regular basis and report any changes to the Project Coordinator.

RISK STATEMENT	LEVEL OF IMPACT	MITIGATING MEASURES
Low visibility of the project	Medium	Early specification of dissemination plan will ensure high and continuous visibility (D7.1). Partners are integrated in extensive networks at national and international level to support it.
Low level of participation in project events.	Medium	Dissemination and communication partners have a wide experience in engaging target groups for events, while adequate measures will be adopted to ensure high participation.

7 Dissemination & Communication Time-plan

As shown in previous chapters of this document, the communication strategy of AI-PROFICIENT is based on three phases:

- Phase I: Inform & Connect
- Phase II: Demonstrate & Contribute
- Phase III: Share & Convince

Within these three phases there are different aspects to address. The following figure is a short overview of important deadlines and actions that will play a big role in the dissemination and communication of AI-PROFICIENT.
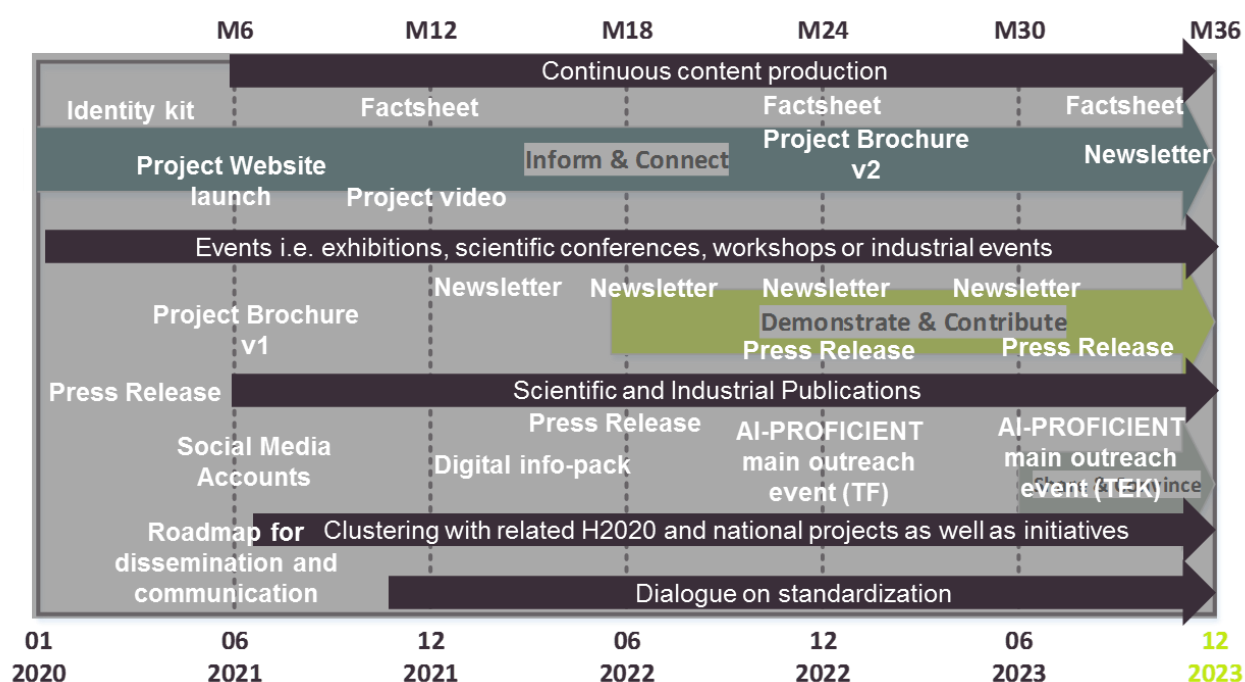

Figure 2 Dissemination and Communication Timeplan

While the content production for the website, publications, participation in events as well as clustering activities and dialogue on standardization are ongoing tasks, there are a few deadlines to keep.

The following table outlines the plans for key activities foreseen at the first year of the project.

Table 13 Communication & Dissemination Timeplan for Year 1

DELIVERY DATE	ACTIVITY	REMARK	STATUS	LEAD/ CONTRIBUTORS
M2	Press Release compilation	First Issue	Executed	ATC
M3	Dissemination and Communication Monitoring spreadsheet	Creation	Executed	ATC

M4	Project Identity kit	Creation of logo, ppt, deliverables templates etc.	Executed	TF
M5	Clustering activities	Clustering with related H2020 and national projects as well as initiatives has been identified	Executed	ALL partners
M6	Website	Creation and maintenance	Executed	TF/ATC with contribution from partners
M6	Roadmap for dissemination and communication first release (D7.1)	Compilation and submission	Executed	ATC with contribution from partners
M6	Project Identity Kit and communication material (D7.2)	Compilation and submission	Executed	TF with contribution from partners
M6	Publication planning	Scientific and industrial journals for publications have been identified	Executed	ALL partners
M6	Events planning	Participation in relevant events has been identified	Executed	ALL partners
M7	Twitter page	Creation and maintenance	Planned	TF/ATC
M7	LinkedIn page	Creation and maintenance	Planned	TF/ATC
M7	Brochure v1	Creation	Planned	TF/ATC with contribution from partners
M12	Factsheet	First Issue	Planned	TF/ATC with contribution from partners
M12	Project video	Online	Planned	TF with contribution from partners

8 Partners' Roles & Responsibilities

To ensure that all project partners have a clear understanding of their communication and dissemination responsibilities, this section will outline the key roles for dissemination and communication. Each partner is responsible for undertaking dissemination activities within their networks and for communicating the project at all relevant events, which they attend. The individual dissemination and communication activities per partner are presented as follows.

UL: Coordinate the project. Disseminate research results at international conferences and in scientific journals. Promote the project and its results at different levels: University, Great East Region, France, Europe (e.g., EFFRA channel) and International (e.g., IFAC and CIRP channels). Present the project results to the manufacturing industrialists it is working with (e.g., RENAULT, ARCELORMITTAL, SEW USOCOME, PSA, EDF). Support standardization activities.

CONTINENTAL FR: Provide industrial scale pilot installation and usecases to develop problem solving solutions. Continental will also lead the WP1 to define and standardize information collected from both industrial partners (Continental and INEOS). Those collected and historized information will be the base from the project. All objectives and KPI will have to be available at the end of this activity lead by Continental

TEKNIKER: Organise a main outreach event. Support the definition of the overall dissemination and communication strategy. Support standardization related activities.

INEOS SERV BEL: Provide two industrial scale pilot installations in two different EU countries, and provide three Use Cases to develop and demonstrate problem solving solutions. Assist Continental is their task as leader for WP1. Support the collection of user feedback from within the industry shop-floor with surveys in the late stages of the project, collecting opinions on the final product, meaning results, enhancements, methods developed and solutions provided from actual users of the plant installation.

TF: Deliver Project Identity Kit, Is responsible for organization of AI-PROFICIENT main outreach event, Opens and provide support in maintaining social media channels as per the project branding standards, develop project's web portal. Support the definition of the overall dissemination and communication strategy.

VTT: Disseminate research results at international conferences and in scientific journals. Present project results in VTT's modelling workshop arranged for industries.

INOS HELLAS: INOS will work along with the partnership contributing to the vision related part joint project publications. INOS also participates in joint events with its parent Grenzebach group which we are also targeting as a dissemination channel of AI-PROFICIENT results. The Grenzebach group is also preparing a permanent exhibition for its customers where INOS has a presence (display station). As AI-PROFICIENT components become integrated into the INOS solution we plan to include AI-PROFICIENT promotional material (poster or brochures) as part of that display.

IBERMATICA: will disseminate the results of the project in industrial fairs such as the BIEMH in which it will participate in the coming years. It is also considering the diffusion linked to events organized exclusively or with members of the consortium as Tekniker with whom it shares different lines of collaboration.

In addition, the non-presential diffusion will be carried out through the company's telematic media, website, social networks, including press releases to reach the general public, as well as the presentation of a scientific paper alone or with members of the consortium

IMP: Disseminate research results on the international conferences and in the respectable journals.

ATC: As WP7 "Dissemination, exploitation and standardization" Leader, will oversee the planning, execution, monitoring, and reporting of project communication and dissemination activities. ATC will be responsible for definition of the overall dissemination and communication strategy, with a support from the rest of the consortium. ATC will be responsible to provide content for preparation of the project

related communication material and social media presence. ATC will also coordinate the project clustering activities, organization of methodology workshops and best practice exchange. Additionally, ATC will actively communicate project objectives and results through its network of partners and established distribution channels towards its customer base.

9 Conclusion

This deliverable is part of WP7 "Dissemination, exploitation and standardization" and provides information regarding the dissemination and communication strategy as well as the plan to raise awareness, share knowledge, attract potential stakeholders. This document presents an overview of the targeted audiences and identifies the channels, tools and activities to be used in order to disseminate and communicate the project's results.

Moreover, relevant dissemination events and scientific and industrial journals that are found suitable for presenting the project and promoting its goals, as well as other H2020 and national projects as well as initiatives related to AI-PROFICIENT are listed. All these aspects are important and essential for the impact of project results and to ensure that the whole consortium will try to do as most as possible to make third parties aware of the project outcomes. The candidate dissemination and communication activities will be continuously monitored and accordingly updated, so this deliverable provided an overview of what is known and planned at the timing of the document preparation.

10 Acknowledgements