Open-Digital-Industrial and Networking pilot lines using modular components for scalable production

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Summary:

The purpose of this document is to provide the detailed ODIN strategy for networking, dissemination and communication. This report will highlight the strategy adopted but also the results obtained during the lifecycle of ODIN project.

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Co-funded by the European Union

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EXECUTIVE SUMMARY

This document reports on the ODIN networking, dissemination, communication and standardization activities performed during the entire project duration. In the present deliverable, we provide a detailed report on the establishment of a tailored-made strategy for networking, communication, and dissemination activities as well as the progress towards the implementation of this strategy. The deliverable D6.5 constitutes the final iteration of the report on communication and dissemination activities.

The major communication means (e.g. channels and procedures used within ODIN), have been thoroughly defined and include both the "conventional" approaches, such as participation in events, publications and distribution of promotional material as well as digital related activities. The communication material has been produced in alignment with the project's objectives and specific needs. ODIN extensive use of online communication channels (website, social media) is also summarized here below as well as the data analytics gathered for the respective period. A detailed list of events, scientific journals, and promotional content prepared to constantly inform the ODIN community about our latest developments and results.

LEGAL DISCLAIMER

The ODIN project is co-funded by the European Union's Horizon 2020 research and innovation programme under the Grant Agreement No 101017141. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

1. INTRODUCTION

This document constitutes a public deliverable, led by INTRA (T6.2 Leader) and co-lead by TAU (T6.1 Leader) and PILZ (T6.4 Leader). The Task 6.1 "Networking with EU initiatives and Integration in the DIH Networks", and Task 6.2 "Dissemination and Communication – Pilots open to the world", started at M1 and finished at M48 while the Task 6.4 "Roadmap to standardization" started at M13 and finished at M48. These three (3) Tasks are designed to share specific information about the ODIN project to various target groups with different interests. As a result, the overall strategy and action plan have been developed based on tailored-made Networking activities with relevant EU initiatives, General Communication, Industrial Promotion, and Scientific Dissemination.

The Networking, Dissemination & Communication Activities Report aims to:

- Identify the activities used to reach the different target groups.
- Report the dissemination and communication activities until M48.
- Locate ODIN's dissemination and communication in the Key Performance Indicators (KPIs).

The document is divided into the following sections:

- Section 2 provides an overview of the communication strategy to reach the different target groups and the actual activities carried out until M48.
- Section 3 provides a summary of all the communication activities carried out until M48.
- Section 4 provides a summary of all the dissemination activities carried out until M48.
- Section 5 presents a resume of the key performance indicators of the dissemination and communication activities.
- Section 6 provides an overview of the standardization activities carried out until M48.
- Section 7 provides a summary and conclusions of the Networking, Dissemination and Communication Activities – Initial Report.

2. COMMUNICATION STRATEGY

2.1. Impact

The success of ODIN and maximum impact of its results depends on the definition of well-coordinated dissemination and exploitation activities. The coordinated activities in WP6 ensured that different target groups are addressed in an appropriate manner emphasizing on white goods, aeronautics and automotive sectors.

The main message to convey within the ODIN project was the evolution of modern European manufacturing sector using state-of-the-art smart manufacturing tools in line with the concept of Industry 5.0.

The ODIN project directly contributes to the impact of the enounced concept of Industry 5.0 as described by the European Union:

> *"Industry 5.0 provides a vision of industry that aims beyond efficiency and productivity as the sole goals, and reinforces the role and the contribution of industry to society." and "It places the wellbeing of the worker at the centre of the production process and uses new technologies to provide prosperity beyond jobs and growth while respecting the production limits of the planet." It complements the Industry 4.0 approach by "specifically putting research and innovation at the service of the transition to a sustainable, human-centric and resilient European industry"*

To maximize the project impact, ODIN covers five distinct categories: 1) Networking and twinning activities; 2) Communication activities; 3) Dissemination activities; 4) Exploitation planning activities; 5) Standardization activities.

In this report we will focus on the impact generated by the above-mentioned categories, except the exploitation-related activities, covered by the following project Tasks:

- Task 6.1 "Networking with EU initiatives and Integration in the DIH Networks" aims to connect and interact with Digital Innovation Hub network and other relevant EU initiatives. The development of bilateral discussions and twinning activities is enabling ODIN to reach a wider audience and increase the dissemination of its results to a targeted group of industrial actors.
- Task T6.2 "Dissemination and Communication – Pilots open to the world" proposes the design and implementation of communication, promotion and dissemination activities dealing mainly with the diffusion of scientific and technological knowledge generated within the context of the project, aiming to address the full range of potential stakeholders as well as the general public.
- Task 6.4 "Roadmap to standardization" aims to perform a final evaluation of the level of safety achieved in the project developments and the integrated pilot scenarios, considering the main applicable standards which are being drafted by the technical committees during the project, thus comparing the result of the project with the status and trends of the standards.

2.2. Project Phases

The Promotion and Dissemination activities have been orchestrated following the ODIN work plan and main deliverables/results. The project defined three (3) main Phases during the project implementation while also considering the post project Phase where a structured dissemination plan is crucial to ensure the adoption of the project results by the end-users.

Phase 1 started at the beginning of the project (January 2021) and ended when the first prototypes were made available (June 2022). This phase was entirely dedicated to advertising the project existence, concepts and objectives on order to attract the attention of interested industries.

Phase 2 ran until M36 and focused on the communication of our tangible results obtained and especially the three (3) pilot cases in the automotive, aeronautics and white goods industries. From a scientific

point of view, the ODIN project increased the number of related publications and papers. ODIN also started organizing its series of industrial workshops aiming to communicate and discuss practical utilization of our technologies with local stakeholders, end-users and factory operators.

Phase 3 ran from M36 to M48. In this phase, all the project demonstrators have been deployed at the facilities of the end-users and the dissemination activities have reached their peak. A set of activities, ranging from onsite demonstrators, public videos, discussions with stakeholders and operators, have been used to communicate the efficiency of the proposed solutions. Participation in industrial fairs and exhibitions with demos replicating the production scenarios and the organization of factory tours have been organized. The whole consortium has been mobilized to present and promote the project findings to their respective networks.

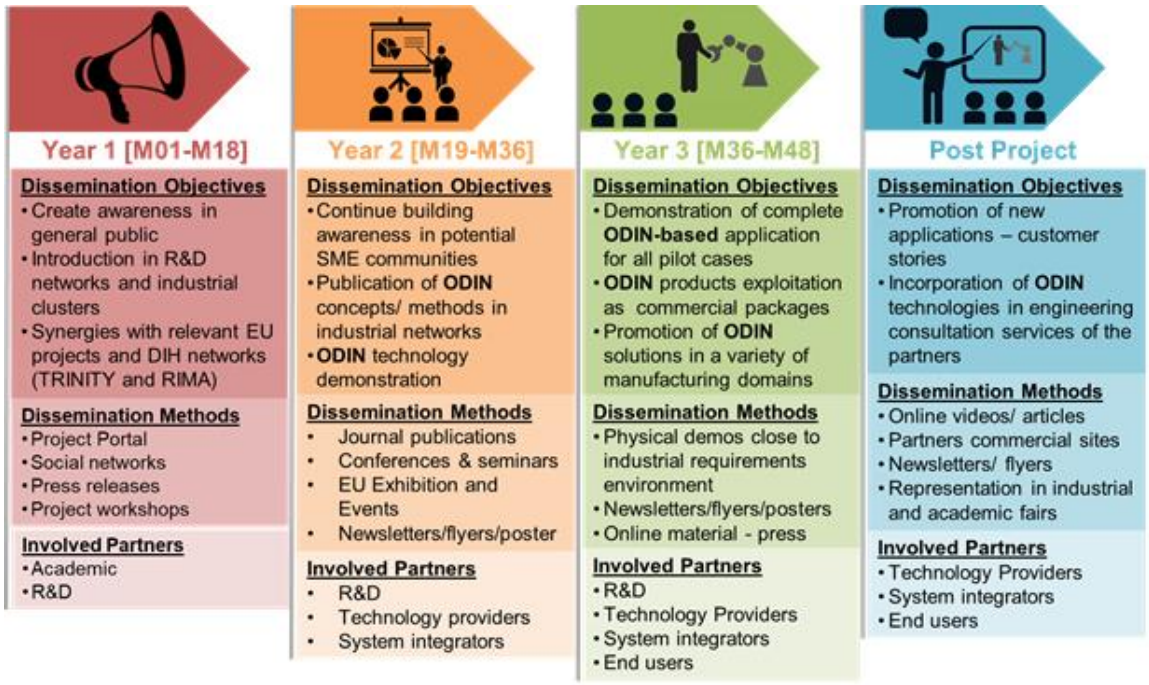


Figure 1: Promotion and Dissemination Phases

2.3. List of Targeted Activities

The following table presents the major dissemination and communication activities scheduled for the project course (this plan will be updated if needed during the project).

Table 1: ODIN Communication & Dissemination Activities Plan

Type	Description	Time	Responsibility	Status
ODIN logo	The ODIN logo was designed and will be used in all documents and publications of the project	M1	LMS / INTRA	Completed
ODIN social media guide PowerPoint	Best practices regarding the social media used by the project and the media content.	M1	INTRA	Completed
ODIN PowerPoint templates	Template to be used for the project presentations at various events	M6	INTRA	Completed
ODIN website	The online presence of ODIN	M3	INTRA	Completed - link

Type	Description	Time	Responsibility	Status
Twitter account	Twitter Account for disseminating project news and developments	M4	INTRA	Completed - link
LinkedIn page	LinkedIn page for engaging various stakeholders and disseminating projects news and developments to professional public	M4	INTRA	Completed - link
Facebook page	Facebook page for disseminating project news and developments	M4	INTRA	Completed - link
Project brochure	Designing of a brochure for promoting the project in various local and EU/International events	M6	INTRA	Completed
Project poster/roll-up	Designing of a poster for promoting the project in various events. A poster template can also serve as a basis for creation of new posters with updated content depending on the needs of an event	M6	INTRA	Completed
Newsletter	Diffusing project news, achievements and events, in the form of a Newsletter	M1-M48	INTRA	Completed
Articles	Articles reporting the results of ODIN published in magazines, newspapers, etc.	M1-M48	All partners	Completed
Blog posts	Articles authored by the consortium related to the project, its results and the domain in general.	M1-M48	All partners	Completed
Press Releases	Creation of press releases during important moments (milestones) of the project focusing on the project outcomes	M1-M48	INTRA	Completed
Publications	A significant number of publications are expected both in conferences and in journals	M1-M48	All partners	Completed
Participation in third party events	Participation in events (i.e. conferences, workshops, local events) in order to raise awareness about ODIN and disseminate the project's results	M1-M48	All partners	Completed
Videos	Production of videos describing the project concept, objectives, as well as the expected outcomes and innovations	M1-M48	INTRA / All partners	Completed
Pilot use cases workshops	Organization of 3 pilot use cases workshops (at least 1 per national case-study Involvement of local pilot stakeholders'), in order to involve the local pilot stakeholders.	M18 - M48	Pilot partners	Completed
Liaise with other projects / initiatives	Collaboration for mutual dissemination and knowledge exchange with other relevant projects & initiatives	M1-M48	TAU	Completed

3. REPORT ON COMMUNICATION ACTIVITIES

The communication plan has been carried out through the ODIN partners' collaboration: individually through each partner's entity activities; and collectively through the partner's contribution to the global strategy.

This chapter presents the communication material generated for the internal and external activities, which includes the project identity, communication materials and the respective main results (when applied) of these communication activities.

3.1. Project Logo and Graphic Charter

A complete description of the ODIN branding and promotional templates created have been made within the deliverable D6.2 "Networking, Dissemination & communication activities - Initial Report".

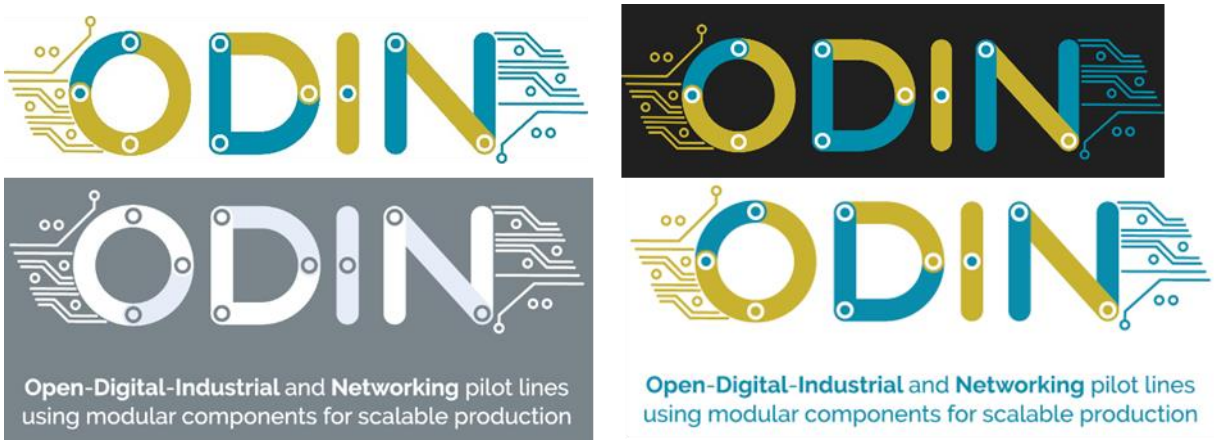


Figure 2: ODIN logo variants

The following documents and templates have been created in Period 1, using the ODIN branding:

- Deliverable template
- PowerPoint template for presentations
- All Promotional materials
- Video Intro and Outro

Figure 3: Examples of the use of ODIN graphic charter

3.2. Digital channels

3.2.1. Project Website

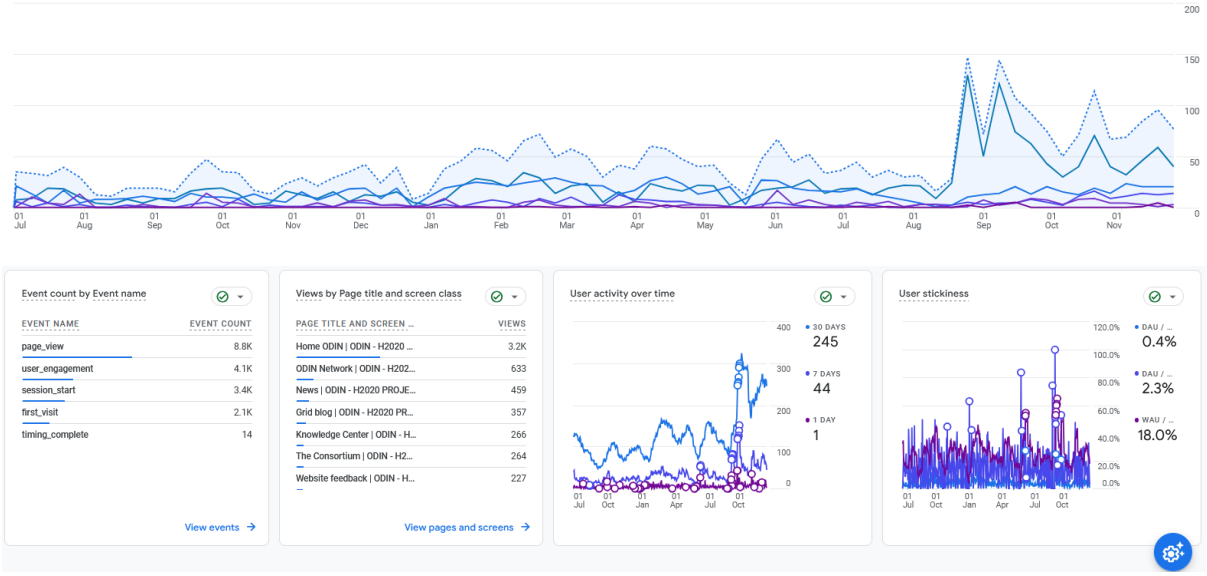
The ODIN website (www.odin-h2020.eu) has been implemented in March 2021 and frequently updated and populated with new content until the end of the project. Further News articles will be published on the website after the end of the project, and we will keep the website active for at least 2 years after the end of the project. All the information regarding the website can be found in the deliverable D6.1 "ODIN web portal".

3.2.2. Google Analytics

The Google Analytics tool has been deployed to track the statistics of the website and the following data have been received covering the period from M1 (01 January 2021) to M47 (30 November 2024).

Note 1: The website has been deployed at M3 (March 2021) and because this deliverable D6.5 is due at M48 (31 December 2024) it has been decided to present the statistics up to M47 (instead of M48).

Note 2: The Standard Universal Analytics properties stopped processing data as of July 1, 2023. Therefore, the graphics will only represent the data of the new GA 4 interface.



Google Analytics			
	03/2021 - 06/2023	07/2023 - Now	Total
Users	✓ 6,322	✓ 2,143	✓ 8,465
Sessions	✓ 9,362	✓ 3,355	✓ 12,717
Page views	✓ 32,142	✓ 8,780	✓ 40,922

Figure 4: ODIN website analytics

3.2.3. Social Media

Social media play an important role in the effective promotion of the project and the consortium's effort to access and engage a wide range of audience. Constant posts and updates of status on the project's developments and achievements increase the engagement of the target audience and help the project

achieve a good interaction with the users. Social media serve as a valuable tool in our effort to engage the target audience and the general public due to their popularity, ease of access and quick information flow.

Therefore, social media profiles of the ODIN project have been opened and maintained on Facebook, Twitter and LinkedIn and the links to these accounts were integrated into the project website and included in all types of communication materials of the project.

3.2.3.1. LinkedIn

LinkedIn provides the opportunity to showcase the progress and results of the project to a professional audience. Since the launch of the account, we have attracted a total of 335 connections consisting of experts and various stakeholders in the area who reacted to our 192 posts. Since the start of the project, the ODIN LinkedIn page received the following attention from its audience:

- Total number of Likes: **3,906**
- Total number of Reposts/Shares: **159**
- Total number of Impressions: **167,526**

Figure 5: ODIN LinkedIn account

3.2.3.2. Twitter/X

ODIN has an active Twitter/X account which is used to further enhance its digital presence by sharing news/updates related to the project and tagging/mentioning other users with similar interests to increase the visibility of its messages.

Since the account launch, ODIN generated a total number of 229 tweets and re-tweets, 579 followers and it follows 265 accounts. Many of the project's tweets have been shared and reached by large audiences. The following additional information on our ODIN X/Twitter account have been extracted from the platform:

- Number of Tweets: **177**
- Tweet impressions: **43,488**
- Profile visits: **34,048** (e.g. data collected until December 2023)
- Mention: **99** (e.g. data collected until December 2023)

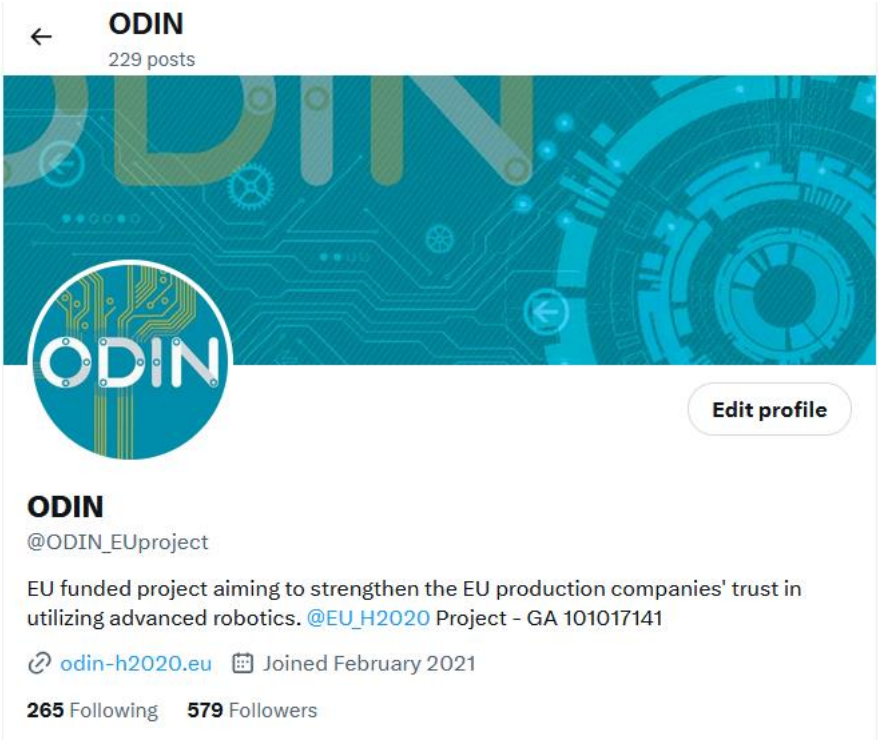


Figure 6: ODIN X/Twitter account

3.2.3.3. Facebook

The last social media we implemented is the ODIN Facebook account which targets the general public. Since the account launch, ODIN generated a total number of 98 posts and a total of 61 followers and 58 Likes on the project page. In additional, the following statistics have been extracted for the Period running from M1 to M23:

- Likes and reactions: **363**
- Click on links: **86**
- Impressions: **3,396**
- Shares: **5**

Figure 7: ODIN Facebook account

3.2.4. Newsletters

The ODIN Newsletters aim at informing the stakeholders about the project's progress, events, publications, results, major achievements, and cooperation opportunities. The newsletters are circulated periodically based on the project activities, news and important milestones and shared via the social media accounts of both the project and the partners' networks. All project partners contribute by providing information and ensuring that the content is accurate.

Links to the project website and the social media channels are provided (all clickable leading directly to the requested page) in order to make it easier for the reader to look for more information on the website and to follow the project's social media accounts. Eight (8) issues of the ODIN newsletter have been published on the project website as originally planned in the DoA.

Figure 8: Webpage on the ODIN website dedicated to the Newsletters

3.2.5. YouTube channel

A YouTube channel has been created to promote the videos related to the implementation of the project. By the end of the project, a total of nine (9) videos have been produced, uploaded on our YouTube channel, and shared via the ODIN social media accounts.

During the Period 1 we published four (4) videos consisting in one (1) presentation video and three (3) simulation videos covering the project's application sectors, namely Automotive, Aeronautics and White Goods. For the Period 2 of the project, the partners decided to further use the Youtube channel which attracted a large number of viewers and published the following videos:

- ***Automotive Pilot – Quality Inspection of assembled parts (operation 3)***, published the 08 December 2023 (link)

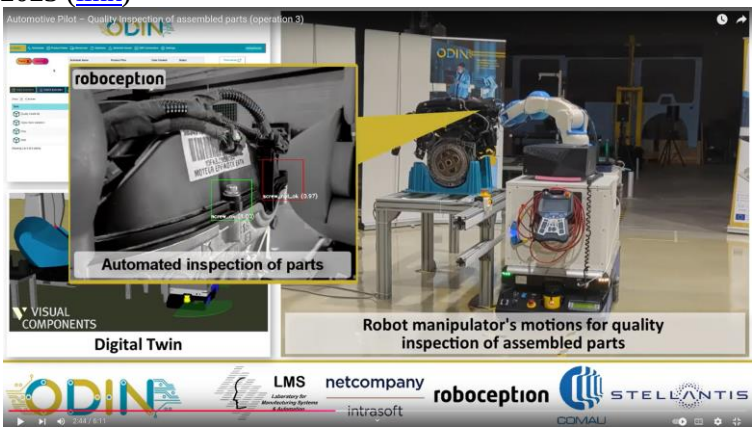


Figure 9: Automotive pilot – operation 3 video

- ***Automotive pilot– Screwing while moving (operation 2)***; 16 January 2024 (link)

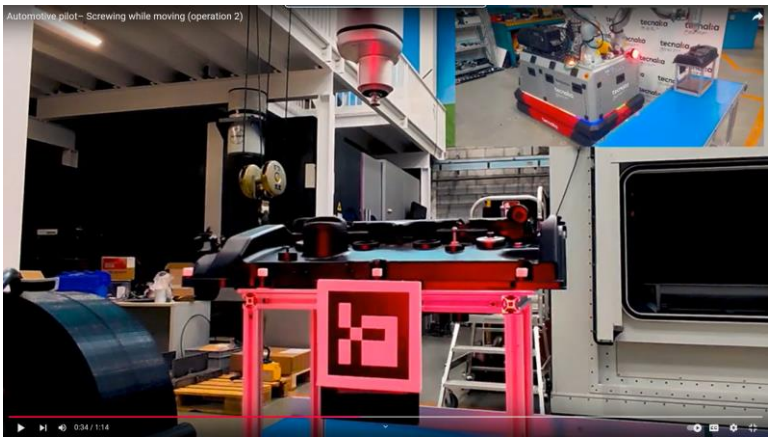


Figure 10: Automotive pilot – operation 2 video

- ***Automotive Pilot - Assembly of motor and gearbox parts (operation 1)***; 15 May 2024 (link)

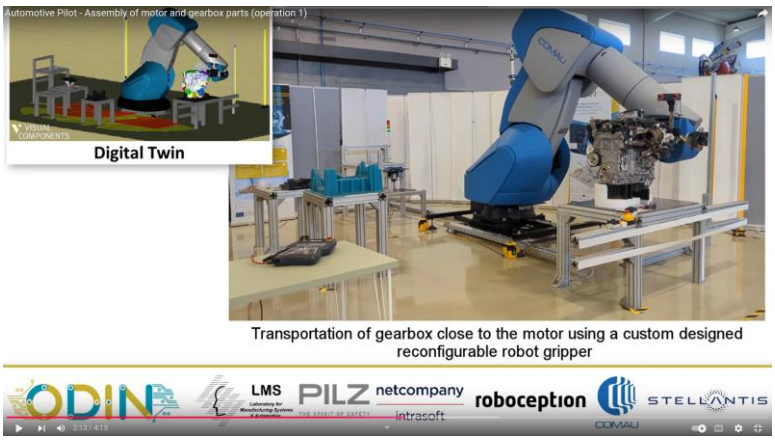


Figure 11: Automotive pilot – operation 1 video

- ***ODIN - Automotive Demonstrator***; 19 November 2024 (link)

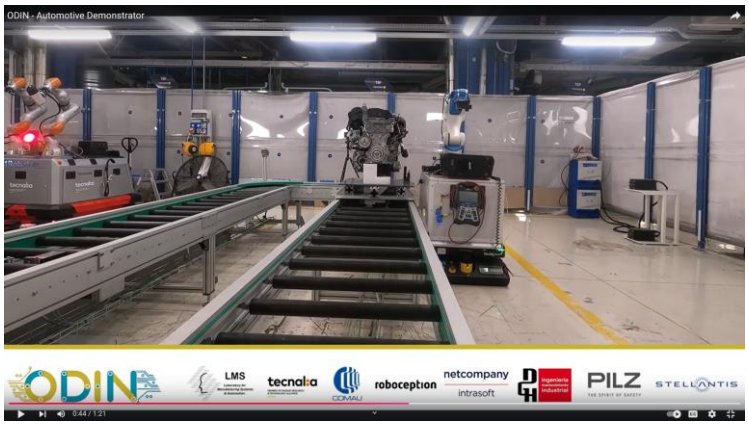


Figure 12: Automotive Demonstrator video

- ***The Screw While Moving operation***; 17 December 2024 (link)

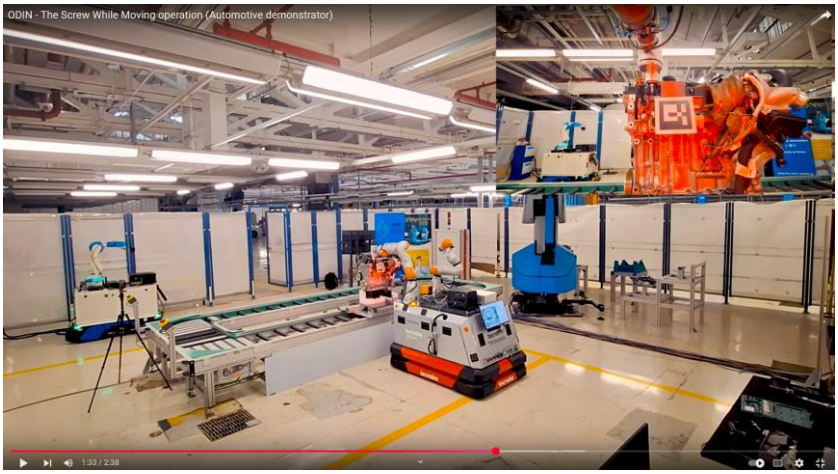


Figure 13: Video of the demonstrator at Stellantis

3.2.6. Blog Posts

The implementation of a blog was not originally foreseen in the Grant Agreement, but after a few discussions within the consortium, the partners agreed to develop a Blog section on the project website.

The blog aims to update the followers by publishing current news that are relevant to the development of the project itself (News section on the website). Both sections are complementary and allow a continuous flow of information to promote and disseminate to the ODIN audience. These blogposts use a reader-friendly language, aiming at all audiences so that the interested parties can keep up to date of all ODIN's developments

We published in total 31 blog posts, and they can be consulted at the following link: www.odin-h2020.eu/grid-blog?page=0..

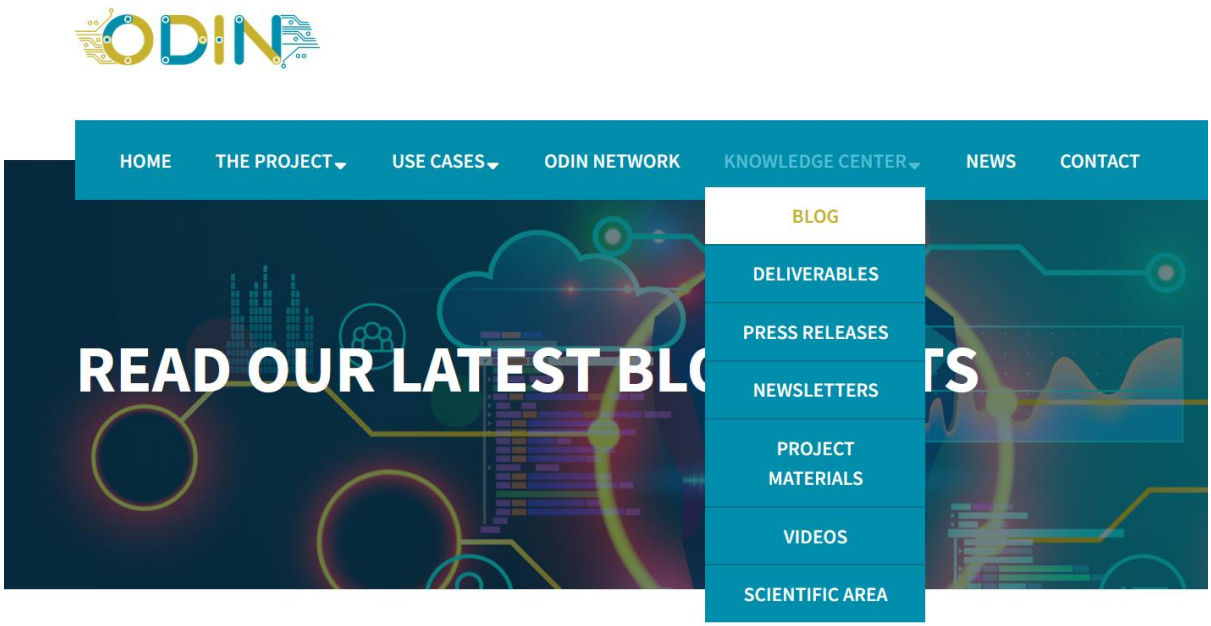


Figure 14: ODIN Blog section on the project website

3.3. Press Releases

During the course of the project, we prepared and distributed three (3) press releases describing the concept and scope of the project to the press/relevant stakeholders. They have been promoted via the digital channels of the project and the media contacts of the consortium and they have been uploaded in the respective section of the website.

The consortium is currently working on the fourth and final press release and the initial text and structure have been drafted and we are collecting relevant images to illustrate the final press release. Our plan is to upload the final document on the project website and promote it on social media after the end of the project in January 2025.

Figure 15: ODIN 1st Press release (link)

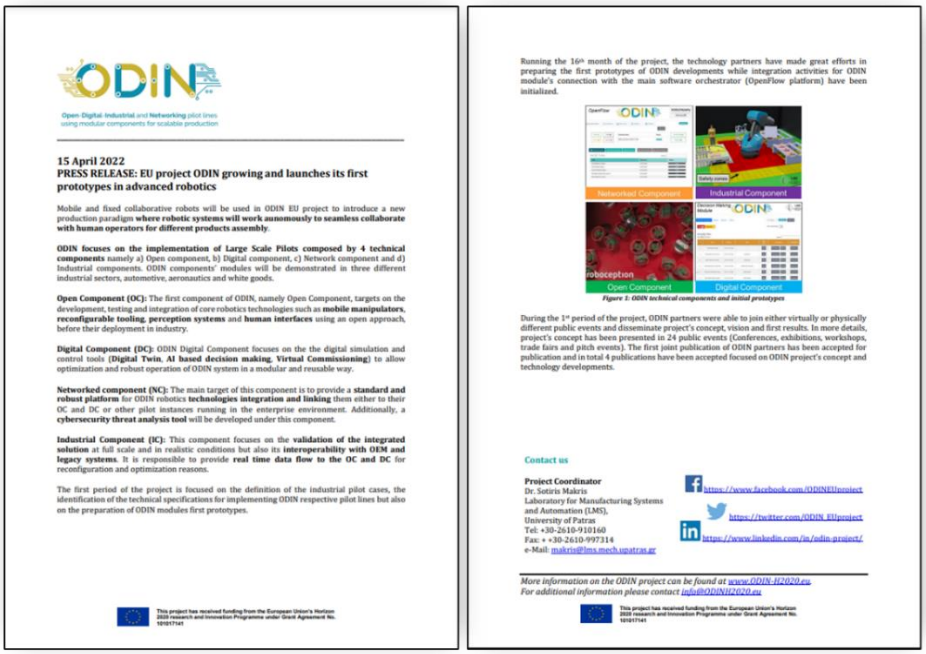


Figure 16: ODIN 2nd Press release (link)

Open-Digital Industrial and networking pilot lines using modular components for scalable production

12 December 2022
PRESS RELEASE: ODIN launches its preliminary industrial pilot setups

Big news for ODIN towards the **initial validation of developed modules**. Following the identification of the requirements and specifications but also the development of the prototype modules during the first phase of the project, ODIN continues by focusing on modules' deployment and validation within the three use cases of the project. ODIN use cases come from three different industrial sectors namely the **Automotive**, the **Aeronautics** and the **White Goods** including different robot resources in terms of mobility and payload strength. Each use case targets a specific industrial pilot line with its own set of performance requirements, needs and assembly operations.

Automotive Pilot Line

The implementation of the automotive pilot line is focusing on a flexible and fenceless robotic system that promotes reconfigurability and collaboration with human operators under **the assembly process of a vehicle car engine**. The first ODIN technologies that are currently tested include:

- **Mobile manipulators for screwing in motion**: The introduction of autonomous mobile manipulators that can operate in an **autonomous and collaborative way** brings new opportunities in the automotive industry. Operations that are currently being handled manually such as screwing are now executed in motion through the ODIN mobile manipulators taking advantage of **visual servoing** techniques, including **PID control** and **custom controllers.**

Screwing while moving

- **Robotic perception for AI-based quality inspection**: Utilization of robust **Deep Learning Models** already took place in order to facilitate operations requiring **perception of the process**. Inspection of the automotive parts can now be successfully achieved through visual sensors and **vision systems** automatically and robustly, **keeping operator in the loop** for added-value tasks.

Quality inspection of engine parts

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 101017141

Aeronautics Pilot Line

The Aeronautics pilot line focuses on the automation of the tasks related to the **assembly of Aeronautics Fan-cowls**. The initial validation of ODIN technologies has taken place with some quite interesting results:

- **Autonomous transportation of large aerospace parts**: Currently, in aeronautics industry, the operation of transportation/handling of aerospace fan cowls is being done manually by operators. The introduction of ODIN **autonomous mobile manipulators** and **3D navigation techniques** already shows promising results in automating this challenging operation.

Transportation of large aerospace parts

- **Onsite Interactive Skill Programming:** First results demonstrated that the operator can easily manage robotic applications in the aeronautics industry based on **different robot skills.** Complex operations such as precise movements, agile pose recording, big parts manipulation can easily be configured by the operator via **interactive user interface.**

Onsite Interactive Skill Programming

White Goods Pilot Line

Through this pilot, ODIN focuses on making customization easier and improving the existing robot solution by managing the **assembly of oven and cooktop burners**. We are thrilled to present the first quite interesting results under the initial LMS installation:

- **Reconfigurable Robot Tooling**: Introduction of different tools that can easily be configured are already proven of high benefit since different white good parts can be manipulated under the same workstation. The use of **magnetic and flexible and vacuum grippers** that can **change on the fly** through tool exchange **ROS-based techniques** has been evaluated with success.

Manipulation of white goods parts

- **Augmented Reality for operator support**: Interactive AR interfaces have been already deployed in order to support the operator. Different functionalities have been already tested such as the **provision of assembly information**, **visualization of robot trajectory, easy robot programming.**

AR operator support application

Contact us

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More information on the ODIN project can be found at www.odin-h2020.eu.
For additional questions please contact info@odinh2020.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 101017141

Figure 17: ODIN 3rd Press release (link)

3.4. Liaisons with relevant initiatives

This section presents activities that were active during the entire length of ODIN project to engage ODIN with the wider Digital Innovation Hub network throughout Europe. These involved three core actions, as presented in their individual subsection below, namely:

1. Liaisons with DIH TRINITY, one of the core digital innovation hubs on Agile Production,
2. Liaisons with other digital innovation hubs, industry, or research organizations and projects,
3. Active collaboration with liaison projects, relevant to the core topics of ODIN, either part of the H2020 programme or part of other initiatives.

The three (3) main networking activities are described in more details in the following subsections.

3.4.1. Liaisons with TRINITY DIH

Engagement with DIH TRINITY lasted during the whole ODIN project period and involved the following activities:

- Regular engagement with TRINITY by attending meetings, which provided good insights on the activities of TRINITY, and how they could benefit ODIN. Reports and plans, developed by TRINITY, were considered, giving insight in different topics related to Agile Production.
- ODIN results and news were actively disseminated to the TRINITY network, by emails to TRINITY network email lists, posts to TRINITY social media channels, discussions at euRobotics community portal and by co-organizing of joint workshops in the field of robotics and agile production.
- Different workshops have served to raise awareness of ODIN and/or to disseminate the results of ODIN, either co-organized by TRINITY and ODIN, or participated by ODIN. Some examples include:
    - ERF 2021 (virtual, 13-15 April 2021) – four workshops.
    - IEEE International Conference on Automation Science and Engineering (CASE, virtual, 23 August 2021) – one workshop.
    - ERF 2022 (Rotterdam, NL, 28-30 June 2022) – three workshops.

- Development of training material, tutorials, and software tools for the organized workshops.

  Materials developed are to be made openly available through, e.g., the TRINITY digital access point (DAP). ODIN contributed their developments onto the platform, as open use cases. Moreover, collaboration principles, obligations and rules of engagement, as well as the legal framework for collaboration were discussed. TRINITY, as a H2020 project, ended in June of 2023, however the DAP will be maintained for at least two more years allowing the content from ODIN to be further hosted on the platform during its lifetime.
- Active stakeholder engagement through TRINITY to best disseminate and exploit the outcomes of the ODIN project, specifically aimed at the participation in local (country-specific) organized fairs and tradeshows.

  ODIN has utilized the network of TRINITY to disseminate the project and its results in various manners. These included direct contacts via mailings and mailing lists, participation in local workshops and trade fairs, posts on social media and other outreach activities. A complete list of activities is presented in Section 4.

As the workshops with TRINITY network during M1-M24 were well received, the collaboration continued in the second half of the project following the best practices developed. The following workshops were co-organized:

- ERF 2023 (Odense, Denmark, 14-16 March 2023) "FEASIBILITY OF AGILE MANUFACTURING, WHAT REALLY MOVES SMES?"
- ERF 2024 (Rimini, Italy, 13-15 March 2024) TRINITY Innovation Network- steps forward

Reports on both workshops can be found from the TRINITY Innovation Network webpages https://trinityrobotics.eu/news/

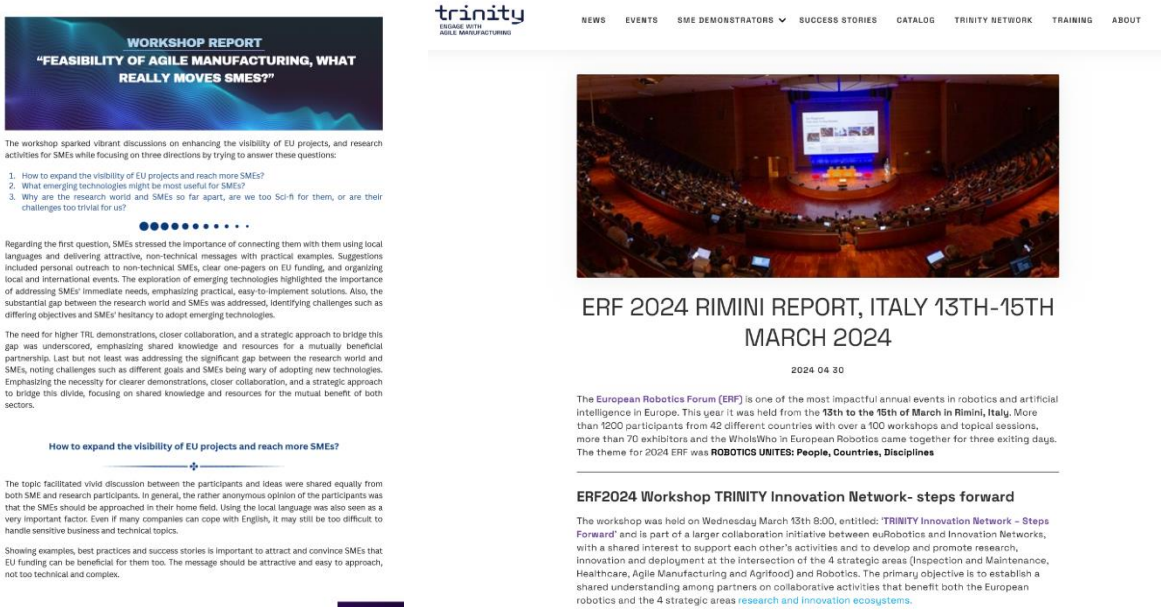

Figure 18: ERF workshop reports at TRINITY Network webpages.

ODIN solutions in TRINITY catalog

For wider dissemination of the ORIN results and technical innovations, new use cases and technical modules were added to TRINITY catalog https://trinityrobotics.eu/catalogue/ To avoid duplicate data end simplify the maintenance, information is linking to original ODIN sources.

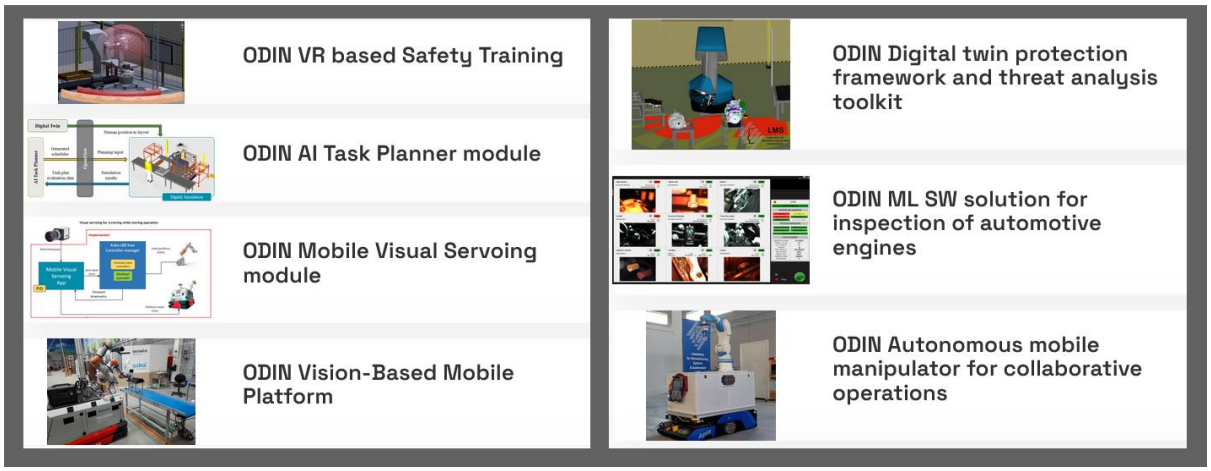

Figure 19: ODIN technical modules in TRINITY Catalog.

Agile manufacturing at euRobotics portal

To ensure discussion and communication after the ODIN project duration, ODIN partners and stakeholders have been encouraged to join the euRobotics community portal, where TRINITY Innovation Network has own group for discussion, networking, and information sharing. Joining discussion group is free for all interested stakeholders at https://www.robotics-portal.eu/innovation_networks

3.4.2. Liaisons with other DIHs, industry or research organisations and projects

Active stakeholder engagement was done during the project with other partners relevant to ODIN. Different stakeholders were identified, leading to a large network to be utilized for liaison. Depending on the content to be disseminated, various networks were contacted.
Depending on the parties contacted, the liaisons varied from emails to discussions, presentations and workshops organized. Some of the contacted organizations and projects are presented in the figure below.

Figure 20: ODIN connections with Digital Innovation Hubs (DIHs) and other initiatives

With the listed initiatives and DIHs, the following workshops and activities have taken place:

- Robotics4EU, Co-creation workshop in Agile Production (Delft, The Netherlands, 3 October 2023)
- Various: AI enabled HRC - 11th Hybrid Production Systems workshop, (ERF2024, Rimini, Italy)
- Various: Shaping Tomorrow's Factory: HRC and Agile production, (ERF2024, Rimini, Italy)
- AIonDemand: Several meetings and request for providing a list of assets for their platform

BEST DIH Collaboration:
At the late phase of ODIN project, Tampere University participated in a BEST DIH projects 4th ITS - Interregional collaboration between DIHs and EDIHs event at Sárvár Hungary. The two-day program aimed to introduce participating partners and stakeholders to local examples in the field of digital transformation and collaboration between Digital Innovation Hubs.

In the meeting cooperation projects of Digital Innovation Hubs (DIHs) were presented focusing on key projects supporting companies in transitioning to advanced digital technologies. Part of the best practices from partners in various European regions presentations, ODIN project and its results were presented as an example of technologies advancing European manufacturing. Besides the active discussions, an information package about ODIN projects results, technologies listed in TRINITY catalogue, and coming dissemination materials from ODIN -project were emailed to various DIHs, EDIHs, and other similar stakeholders around Europe.

EDIHs and other stakeholders engaged:

- Pannon Business Network EDIH, Szombathely, Hungary
- The Galician Innovation Agency, Santiago de Compostela A Coruña, Spain
- ART-ER Attractiveness Research Territory, Bologna, Italy
- West Regional Development Agency ADR Vest, Timisoara, Romania
- EDA – Enterprise Development Agency, Banja Luka, Bosnia and Herzegovina
- DATAlife EDIH, Santiago de Compostela, Spain
- AI REDGIO 5.0 initiative, EU -project

ODIN connections with industry or research associations:

Besides the listed DIHs and EDIHs, several associations and other relevant organisations have been contacted. The table below presents the comprehensive list of cooperations:

Table 2: ODIN connection with industry or research associations

Name	Function	Link	Partner involved	Level	Dissemination / collaboration
EFFRA	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	https://www.effra.eu/	TAU, LMS	EU	Disseminate ODIN results
ManuFuture	Govern research, technological development and innovation (RTDI) efforts aimed at the transformation of the European manufacturing industry at policy and operational levels.	http://www.manufuture.org/	TAU, LMS	EU	Disseminate ODIN results
EuRobotics	non-profit association for all stakeholders in European robotics	https://www.eu-robotics.net/	TAU, LMS	EU	Disseminate ODIN results join/organize events (ERF)
CIRP	The International Academy for Production Engineering aims to address scientifically, through international co-operation, issues related to modern production science and technology.	https://www.cirp.net/	TAU, LMS	EU	Disseminate ODIN results in CIRP annals/journals Join events
CECIMO	CECIMO is an umbrella organisation that serves the common interests and values of the European Machine Tool Industries and related Manufacturing Technologies at EU and global level.	https://www.cecimo.eu/	TAU	EU/world	Disseminate ODIN results Join events
EuRobotics	non-profit association for all stakeholders in European robotics	https://www.eu-robotics.net/	ROBOCEPTION, LMS	EU	Disseminate ODIN results join/organize events (ERF)
EIT Manufacturing	EIT Manufacturing's mission is to bring European manufacturing actors together in innovation ecosystems that add unique value to European products, processes and services and inspire the creation of globally competitive and sustainable manufacturing.	https://eitmanufacturing.eu/	ROBOCEPTION, LMS	EU	Disseminate ODIN results
DoF-Adaptiv	In this project, the use of assistive robotic arms will be facilitated by the application of deep neural networks. A sensor-based situation recognition will be combined with an algorithm-based control to form an adaptive AI-based control system. Unlike with automatic control, the user retains control.	https://hci.w-hs.de/research/projects/dof-adaptiv/	Germany, Westfälische Hochschule	EU	Disseminate ODIN results, organize events

Table 3: ODIN liaison with other EU projects

Name	Function	Link	Partner involved	Level	Dissemination / collaboration
TRINITY	Robotics, digital tools and cybersecurity	https://trinityrobotics.eu/	TAU, LMS	EU	Disseminate ODIN results Bidirectional information exchange Co-organize events ODIN pilot material dissemination
AI Regio	AI REGIO project is addressing policy, technology and business barriers facing the AI-focussed DIHs	https://www.airegio-project.eu	TAU	EU Regional	Disseminate ODIN results Bidirectional information exchange
Science SIE	Sustainable Industry Ecosystem - Collaboration Framework for Green and Digital Technologies: targets industrial SME needs	https://sites.tuni.fi/sie-en/	TAU	Finland	Disseminate ODIN results TAU's HRC Pilot Line will be used in ODIN at TAU side fo
Vanguard Initiative	ESM Pilot initiative addresses the development of a European network of pilot plants in manufacturing efficiency and sustainability.	https://www.s3vanguardinitiative.eu/pilots/efficient-and-sustainable-manufacturing-esm	TAU	EU	Disseminate ODIN results Join events
5G-SMART	5G-SMART will explore the roles of mobile network operators and new business models. 5G-SMART will result in development of future 5G standards for the manufacturing sector complemented by new 5G enabled manufacturing products and solutions.	https://5gsmart.eu/the-project/	ROBOCEPTION	EU	Disseminate ODIN results
KI4mrk	BMBF-funded project about the practical implications of using AI methods in human-robot-collaboration especially for SMEs	https://www.ki4mrk.de/	ROBOCEPTION	Germany	Disseminate ODIN results
AIHUB Tampere	AI Hub Tampere is a regional hub project funded by ERDF. The project aims at consulting local SMEs in the use/application of AI. The hub provides help and guidance in the ability to adopt the newest software/technology in the field of AI. One of our particular focuses is intelligent machines, such as autonomous, driverless construction machines.	https://research.tuni.fi/aihubtampere/	TAU	Finland	Disseminate ODIN results
TeknoHub	TeknoHub project is regional project in Eastern Finland funded by ESF (European Social Fund). The overall goal of the TeknoHub project is to develop the rapid digital and technological transformation capacity of supplier companies and small and middle size enterprise main suppliers in Upper Savonia, thus creating the conditions for a significant and rapid increase in the total capability of companies to adapt to changing customer demands and the operating environment changed by the corona epidemic.	https://kestech.fi/tag/teknohub/	TAU	EU Regional, Eastern Finland	Disseminate ODIN results, organizing events
JARVIS	JARVIS is an EU-funded project committed to advancing human-robot collaboration in a user-centric manner. JARVIS aims to develop a reusable set of tools that enable AI driven multimodal means of interaction	https://www.jarvis-project.eu/	TAU, LMS	EU	Disseminate ODIN results

Table 4: ODIN connection with industry or research associations

Name of Project/Network/Initiative	Function	Link	Partner involved	Level	Dissemination / collaboration	Status
EFFRA	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	https://www.effra.eu/	TAU, LMS	EU	Disseminate ODIN results	Fixed
ManuFuture	Govern research, technological development and innovation (RTDI) efforts aimed at the transformation of the European manufacturing industry at policy and operational levels.	http://www.manufuture.org/	TAU, LMS	EU	Disseminate ODIN results	Pending
EuRobotics	non-profit association for all stakeholders in European robotics	https://www.eu-robotics.net/	TAU, LMS	EU	Disseminate ODIN results join/organize events (ERF)	Pending
CIRP	The International Academy for Production Engineering aims to address scientifically, through international co-operation, issues related to modern production science and technology.	https://www.cirp.net/	TAU, LMS	EU	Disseminate ODIN results in CIRP annals/journals Join events	Pending
CECIMO	CECIMO is an umbrella organisation that serves the common interests and values of the European Machine Tool Industries and related Manufacturing Technologies at EU and global level.	https://www.cecimo.eu/	TAU	EU/world	Disseminate ODIN results Join events	Pending
EuRobotics	non-profit association for all stakeholders in European robotics	https://www.eu-robotics.net/	ROBOCEPTION, LMS	EU	Disseminate ODIN results join/organize events (ERF)	Fixed
EIT Manufacturing	EIT Manufacturing's mission is to bring European manufacturing actors together in innovation ecosystems that add unique value to European products, processes and services and inspire the creation of globally competitive and sustainable manufacturing.	https://eitmanufacturing.eu/	ROBOCEPTION, LMS	EU	Disseminate ODIN results	Fixed
DoF-Adaptiv	In this project, the use of assistive robotic arms will be facilitated by the application of deep neural networks. A sensor-based situation recognition will be combined with an algorithm-based control to form an adaptive AI-based control system. Unlike with automatic control, the user retains control.	https://hci.w-hs.de/research/projects/dof-adaptiv/	Germany, Westfälische Hochschule	EU	Disseminate ODIN results, organize events	Pending

Table 5: ODIN liaison with other EU projects

Name of Project/Network/Initiative	Function	Link	Partner involved	Level	Dissemination / collaboration	Status
TRINITY	Robotics, digital tools and cybersecurity	https://trinityrobotics.eu/	TAU, LMS	EU	Disseminate ODIN results Bidirectional information exchange Co-organize events ODIN pilot material dissemination	Fixed
AI Regio	AI REGIO project is addressing policy, technology and business barriers facing the AI-focussed DIHs	https://www.airegio-project.eu	TAU	EURegional	Disseminate ODIN results Bidirectional information exchange	Fixed
Science SIE (Finnish Academy of Sci	Sustainable Industry Ecosystem - Collaboration Framework for Green and Digital Technologies: targets industrial SME needs		TAU	Finland	Disseminate ODIN results TAU's HRC Pilot Line will be used in ODIN at TAU side for development and tests.	Fixed
Vanguard Initiative	ESM Pilot initiative addresses the development of a European network of pilot plants in manufacturing efficiency and sustainability.	https://www.s3vanguardinitiative.eu/pilots/efficient-and-sustainable-manufacturing-esm	TAU	EU	Disseminate ODIN resultsJoin events	Fixed
5G-SMART	5G-SMART will explore the roles of mobile network operators and new bu	https://5gsmart.eu/the-project/	ROBOCEPTION	EU	Disseminate ODIN results	Fixed
KI4mrk	BMBF-funded project about the practicalimplications of using AI methods	https://www.ki4mrk.de/	ROBOCEPTION	Germany	Disseminate ODIN results	Fixed
AIHUB Tampere	AI Hub Tampere is a regional hub project funded by ERDF (EU Regional Development Funding) and the Council of Tampere Region (Pirkanmaan liitto). We are governed by Tampere University. The project aims at consulting local SMEs in the use and application of artificial intelligence in business development. The hub provides help and guidance in the ability to adopt the newest software and technology in the field of AI. AI Hub Tampere encourages companies to contact us when facing AI related challenges. One of our particular focuses is intelligent machines, such as autonomous, driverless construction machines. We are also funded by, closely networked, and in frequent contact with FIMA, Business Tampere, and Business Finland.	https://research.tuni.fi/aihubtam	TAU	Finland	Disseminate ODIN results	Fixed
TeknoHub	TeknoHub project is regional project in Eastern Finland funded by ESF (European Social Fund). The overall goal of the TeknoHub project is to develop the rapid digital and technological transformation capacity of supplier companies and small and middle size enterprise main suppliers in Upper Savonia, thus creating the conditions for a significant and rapid increase in the total capability of companies to adapt to changing customer demands and the operating environment changed by the corona epidemic. The project will also develop a common, structural model for companies and educational institutions in the Upper Savonia region, which will also support all the needs for renewal and change in the technology and digitalisation capabilities of technology companies in the region.		TAU	EU Regional, Eastern Finland	Disseminate ODIN results, organizing ev	Pending

3.4.3. Active collaboration with liaison projects

For deeper collaboration, different projects were considered and engaged:

- Digital Innovation Hub TRINITY: https://trinityrobotics.eu/
- All activities with DIH TRINITY have been presented in the previous subsections.
- ESMERA http://www.esmera-project.eu/welcome/ ODIN results were disseminated to Esmera project partners and FSTP participants. ODIN partners participated in the FSTP evaluations to gain information on industry needs and latest developments.
- Sustainable Industry Ecosystem (SIE): https://sites.tuni.fi/sie-en : SIE is a large Finnish project (five partners from Finland), funded by the Academy of Finland, supporting SMEs in their green and sustainable digital transformation. The project develops and utilizes a Human-Robot Collaboration Pilot Line (https://research.tuni.fi/hrc-pilotline/pilotline360/) as a reconfigurable advanced robotics R&D&I platform for academics and industry.
- TeknoHub project https://kestech.fi/tag/teknohub/ was collaborated with by arranging several events and ODIN demonstrations to Finnish manufacturing SMEs.
- ODIN project also collaborated and networked with the "ICT-46 group/cluster" under the direction of the Robotics4EU: ODIN project has been funded by the EC under the call for proposal ICT-46-2020 together with twelve (12) other projects. All the projects funded were a mix of RIA and IA schemes to the exception of Robotics4EU which is a Coordination and Support Action (CSA). One of the role and activity of Robotics4EU is to develop connections and twinning activities within the ICT-46 group. As a result, ODIN is an active member and frequently joined the group meetings organised by CIVITTA, the coordinator Robotics4EU. In addition to the usual presentations of the projects, the group is also active in the identification and implementation of potential future collaboration and common dissemination activities.

4. REPORT ON DISSEMINATION ACTIVITIES

4.1. Events

4.1.1. Participation in events

Project partners have disseminated and communicated ODIN in several conferences and workshops. The consortium participated in different European and international events where the project has been presented and networking activities have taken place with the industry/academia and other related H2020 projects. The project's promotional material such as brochures, roll-up, poster has been extensively used for dissemination purposes.

During the project duration, all the partners contributed to the communication, promotion and dissemination activities by attending various types of events such as Fairs and exhibitions, Workshops, Conferences, Pitch event, Webinar, and Own event.

The original list of dissemination events attended by the partners has been updated following the reviewers recommendation to provide a list of events where ODIN demonstrators (robots and other hardware) have been presented. To this regard we added a specific column in the list and the partners had to provide this detail. In total, we tracked sixteen (16) events where partners presented the ODIN demonstrators.

See below the exhaustive list of events attended by the partners:

Table 6: ODIN Participation in dissemination events (1 out of 3)

LIST OF DISSEMINATION EVENTS												
No.	Partner	Event type	Status	Description of contribution	Demonstrator presented?	Title of event	Event URL	Date	Place	Type of audience	Size of audience	Countries addressed
1	LMS	Participation to a workshop	Attended	project presentation	No	ERF2021 Workshop - Robotics FSTP funding, any good for SME's? – TRINITY experiences	https://www.eu-robotics.net/robotics_forum/	13/04/2021	Online	Industry	80-100	International
2	LMS	Participation to a workshop	Attended	project presentation	No	ERF2021 Workshop - 8th Workshop on Hybrid Production Systems (HPS)	https://www.eu-robotics.net/robotics_forum/	14/04/2021	Online	Industry	>100	International
3	LMS	Participation to a workshop	Attended	poster presentation	No	ERF2021 Workshop - New Horizon projects	https://www.eu-robotics.net/robotics_forum/	14/04/2021	Online	Industry	>100	International
4	LMS	Participation to a workshop	Attended	poster presentation	No	ERF2021 Workshop - Towards Applied AI in Agile Production, Logistics and Lab Automation	https://roboception.com/en/innovation-en/erf2021/	14/04/2021	Online	Industry	>100	International
5	COMAU	Participation to a workshop	Attended	Stand	No	ERF2021 Workshop - 8th Workshop on Hybrid Production Systems (HPS)	https://www.eu-robotics.net/robotics_forum/	14/04/2021	Online	Industry	>100	International
6	S21SEC	Own event	Attended	project presentation	No	NextSecure (online), the annual cybersecurity event of S21sec	https://www.s21sec.com/nextsecure/	09/06/2021	Online	Industry	80-100	European
7	COMAU	Participation to a workshop	Attended	oral communication	No	"Working side by side with robots: human factors in industrial settings"	https://www.hr-recycler.eu/working-side-by-side-with-robots/	18/06/2021	Online	Research Community	60-80	European
8	TAU	Participation to a workshop	Attended	project presentation	No	IEEE International Conference on Automation Science and Engineering (CASE) 2021. Workshop: Novel robot technologies for agile manufacturing	https://case2021.sciencesconf.org/	23/08/2021	Online	Research Community	0-20	International
9	TECNALIA	Trade Fair	Attended	Stand	No	Mindtech 2021 - Metal Industry and Technologies International Trade Fair	https://mindtechvigo.com/en/home/	14/09/2021	Vigo, Spain	Industry	40-60	International
10	DGH	Trade Fair	Attended	oral communication	No	Mindtech 2021 - Metal Industry and Technologies International Trade Fair	https://mindtechvigo.com/en/home/	14/09/2021	Vigo, Spain	Industry	40-60	International
11	TAU	Trade Fair	Attended	oral communication	No	Alihankinta - Subcontracting trade fair	https://www.alihankinta.fi/en/	21/09/2021	Tampere, Finland	Industry	0-20	National
12	ROBOCEPTION	Exhibition	Attended	oral communication	No	Fachmesse fur industrie automation	https://www.automation-chemnitz.de/en/	22/09/2021	Chemnitz-Germany	Industry	>100	National
13	ROBOCEPTION	Participation to a Conference	Attended	oral communication	No	Deutschen Innovationsgipfel	https://www.deutscher-innovationsgipfel.de/	30/09/2021	Munchen Germany	Industry	>100	National
14	ROBOCEPTION	Trade Fair	Attended	Stand	No	Vision	https://www.messe-stuttgart.de/vision/en/	05/10/2021	Messe Stuttgart	Industry	>100	International
15	WHEMEA	Participation to a Conference	Attended	project presentation	No	Smart Manufacturing – The Drive to achieving Industrial IoT	https://gb-research.com/manuhuddle/	06/10/2021	Online	Research Community	>100	International
16	ROBOCEPTION	Pitch event	Attended	Stand	No	CAG Productivity Symposium 2021	symposium/	07/10/2021	Germany	Industry	>100	National
17	LMS	Exhibition	Attended	Stand	Yes	PSA Booster Day 2021	/	14/10/2021	France	Industry	>100	European
18	DGH	Exhibition	Attended	oral communication		PSA Booster Day 2021	/	14/10/2021	France	Industry	>100	European
19	ROBOCEPTION	Webinar	Attended	oral communication	No	Eyes and Brains for Your Robot	https://roboception.com/en/eyes-and-brains-webinar/	21/10/2021	Online		0-20	European
20	VIS	Exhibition	Attended	Stand	No	Advanced Engineering UK	https://www.visualcomponents.com/resources/events/advanced-engineering/	03/11/2021	Birmingham / UK	Industry	>100	National
21	VIS	Participation to a workshop	Attended	project presentation	No	OPC Day Finland 2022	https://www.automaatioseura.fi/sas/jaosto/opc/tapahtumat/opc-day-finland-2021/?	16/11/2021	Online	Industry	>100	European
22	PILZ	Exhibition	Attended	Stand	No	Metalmadrid	https://www.metalmadrid.com/es/robomatica/	17/11/2021				
23	DGH	Exhibition	Attended	oral communication	No	Metalmadrid	https://www.metalmadrid.com	17/11/2021	Madrid Spain			National
24	VIS	Exhibition	Attended	Stand	No	Metalmadrid	https://www.visualcomponents.com/resources/events/metalmadrid/	17/11/2021	Madrid Spain	Industry	>100	National
25	ROBOCEPTION	Webinar	Attended	oral communication	No	Eyes and Brains for Your Robot	https://roboception.com/en/eyes-and-brains-webinar/	25/11/2021	Online		0-20	National
26	PILZ	Exhibition	Attended	project presentation	No	Advanced Factories	https://www.advancedfactories.com/en/	29/03/2022	Barcelona, Spain	Industry	>100	International
27	PILZ	Participation to a Conference	Attended	oral communication	No	IEEESpain: Use of standards in Industry: IoT, Robotics, Automotive and Communications	https://www.facebook.com/IEEE.Espana/posts/pfbid02VEUq9LFFFJ6amqqeLqiKW4QAZbZcZqYPZj7vZApCHnVyzECpqs23ZdNtMZn3H9AJl	20/04/2022	Puerta de Toledo (Spain)	Research Community	40-60	European
28	VIS	Participation to a workshop	Attended	oral communication	No	Visual Components Partner Days	/	04/05/2022	Helsinki, Finland	Industry	>100	International
29	VIS	Trade Fair	Attended	Stand	No	Elmia Automation	https://www.visualcomponents.com/resources/events/meet-us-at-elmia-automation/	10/05/2022	Jönköping, Sweden	Industry	>100	National
30	DGH	Trade Fair	Attended	oral communication	No	Robotic Hannover Messe 2022	HANNOVER MESSE	29/05/2022	Munich, Germany	Industry	>100	International

Table 7: ODIN participation in dissemination events (2 out of 3)

31	VIS	Trade Fair	Attended	Stand	No	Robotic Hannover Messe 2022	https://www.visualcomponents.com/resources/events/meet-us-at-hannover-messe-2022/	29/05/2022	Hannover , Germany	Industry	>100	International
32	ROBOCEPTION	Exhibition	Attended	project presentation	No	AUTOMATE	https://www.automateshow.com/	06/06/2022	Detroit, Michigan, USA	Industry	>100	International
33	DGH	Exhibition	Attended	oral communication	No	BIEMH International Machine Tool Exhibition	https://biemh.bilbaoexhibitioncentre.com/en	13/06/2022	Bilbao, Spain			International
34	S21SEC	Exhibition	Attended	oral communication	No	BIEMH International Machine Tool Exhibition	https://biemh.bilbaoexhibitioncentre.com/en	13/06/2022	Bilbao, Spain	Industry	>100	International
35	PILZ	Exhibition	Attended	Stand	No	BIEMH International Machine Tool Exhibition	https://biemh.bilbaoexhibitioncentre.com/en	13/06/2022	Bilbao, Spain	Industry	>100	International
36	TECNALIA	Exhibition	Attended	Stand	Yes	BIEMH International Machine Tool Exhibition	https://biemh.bilbaoexhibitioncentre.com/en	13/06/2022	Bilbao, Spain	Industry	>100	International
37	VIS	Trade Fair	Attended	Stand	No	GTMA- Manufacturing Solutions 2022	https://www.visualcomponents.com/resources/events/meet-us-at-manufacturing-solutions/	15/06/2022	Limerick, Ireland	Industry	>100	National
38	LMS	Participation to a workshop	Attended	project presentation	No	ICT-46 Collaboration TelCo - Robotics4EU	/	21/06/2022	Online	Research Community	20-40	European
39	ROBOCEPTION	Trade Fair	Attended	Stand	Yes	AUTOMATICA München	https://automatica-munich.com/en/	21/06/2022	München, Germany	Industry	>100	International
40	VIS	Trade Fair	Attended	Stand	No	AUTOMATICA München	https://www.visualcomponents.com/resources/events/meet-us-at-automatica-sprint/	21/06/2022	München, Germany	Industry	>100	International
41	LMS	Trade Fair	Attended	Stand	No	IndTech 2022	https://indtech2022.eu/	27/06/2022	Grenoble, France	Industry		International
42	ROBOCEPTION	Participation to a workshop	Attended	project presentation	No	ERF2022 Workshop - Applied AI in Agile Production, Logistics and Lab Automation	https://erf2022.eu/	28/06/2022	Rotterdam Netherlands	Industry	>100	International
43	LMS	Participation to a workshop	Attended	project presentation	No	ERF2022 Workshop - 9th Workshop on Hybrid Production Systems (HPS)	https://erf2022.eu/	28/06/2022	Rotterdam Netherlands	Industry	>100	International
44	TAU	Participation to a workshop	Attended	project presentation	No	ERF workshop participation with DIH TRINITY, title: Network building and sustainability of DIHs	https://erf2022.eu/	28/06/2022	Rotterdam Netherlands	Industry	>100	International
45	VIS	Exhibition	Attended	Stand	No	ERF2022 Workshop	https://erf2022.eu/	28/06/2022	Rotterdam Netherlands	Industry	>100	International
46	LMS	Participation to a Conference	Attended	paper submission	No	Technical presentation at the 71st CIRP General Assembly	https://www.cirp2022.org/en/home	25/08/2022	Bilbao, Spain & Online	Research Community	>100	International
47	VIS	Trade Fair	Attended	Stand	No	Technishow	https://www.visualcomponents.com/resources/#events	30/08/2022	Utrecht, The Netherlands	Industry	>100	National
48	VIS	Trade Fair	Attended	Stand	No	Motek	https://www.motek-messe.de/en/	04/09/2022	Stuttgart, Germany	Industry	>100	International
49	DGH	Exhibition	Attended	oral communication	No	MetalMadrid 2022	Advanced Manufacturing Madrid | Vive la transformación industrial (metalmadrid.com)	19/09/2022		Industry	>100	National
50	VIS	Trade Fair	Attended	Stand	No	PPMA TOTAL	https://www.ppmashow.co.uk/	27/09/2022	Birmingham, United Kingdom	Industry	>100	National
51	TAU	Organisation of a workshop	Attended	oral communication	Yes	Company group visiting our lab from Parkano, Finland. Presentation and Demos in lab. 8 persons.	N/A	10/11/2022	Tampere, Finland	Industry	0-20	National
52	DGH	Trade Fair	Attended	oral communication	No	JAI'2022 - 8th Conference on Technologies and Solutions for Industrial Automation	JAI'2022 | VIII Jornadas sobre Tecnologías y Soluciones para la Automatización Industrial (uvigo.es)	14/11/2022	Vigo, Spain	Industry	60-80	European
53	PILZ	Participation to a Conference	Attended	oral communication	No	JAI'2022 - 8th Conference on Technologies and Solutions for Industrial Automation	https://jai2022.uvigo.es/	14/11/2022	Vigo, Spain	Industry	>100	European
54	TAU	Organisation of a workshop	Attended	oral communication	Yes	SME company group visiting our lab from TeknoHUB project, Eastern-Finland. Presentation and Demos in lab. 20 persons.	N/A	28/11/2022	Tampere, Finland	Industry	0-20	National
55	LMS	Exhibition	Attended	project presentation	Yes	Presentation of white goods demonstrator during Masterly EU project kick off meeting at LMS		18/01/2023	Patras, Greece	Research Community	0-20	European
56	LMS	Exhibition	Attended	project presentation	Yes	Presentation of white goods demonstrator during Master EU project kick off meeting at LMS		24/01/2023	Patras, Greece	Research Community	20-40	European
57	TAU	Organisation of a workshop	Attended	project presentation	No	Webinar about machine vision in robotics 20.2.2023. Organised by national ESR project TeknoHUB (Finland). ODIN partners: Roboception, TAU		20/02/2023	Online	Industry		National
58	VIS	Trade Fair	Attended	Stand	No	Global Industrie	https://www.visualcomponents.com/resources/events/global-industrie-lyon/	07/03/2023	Lyon, France	Industry	>100	International
59	LMS	Participation to a workshop	Attended	project presentation	No	ERF2023 Workshop - TRINITY Workshop: Feasibility of Agile Manufacturing, what really moves SMEs		14/03/2023	Odense, Denmark	Industry	>100	International
60	VIS	Exhibition	Attended	Stand	No	ERF European Robotics Forum	https://erf2023.sdu.dk/	14/03/2023	Odense, Denmark	Research Community	>100	International
61	LMS	Participation to a workshop	Attended	project presentation	No	ERF2023 Workshop - 10th Workshop on Hybrid Production Systems (HPS)		15/03/2023	Odense, Denmark	Industry	>100	International
62	LMS	Participation to a workshop	Attended	project presentation	No	ERF2023 Workshop - ROBOTICS4EU Workshop: Piloting a Maturity Assessment Model for Robotics in Europe		15/03/2023	Odense, Denmark	Industry	>100	International
63	ROBOCEPTION	Organisation of a workshop	Attended	project presentation	No	ERF2023 Workshop - Good Data for Agile Production, Logistics and Lab Automation	https://roboception.com/en/innovation-en/erf2023/	15/03/2023	Odense, Denmark	Industry	>100	International
64	VIS	Organisation of a workshop	Attended	project presentation	No	VC Partners Days		21/03/2023	Helsinki, Finland	Industry	>100	International
65	WHEMAN	Participation to a Conference	Attended	project presentation	No	6th Annual Smart Manufacturing Excellence Simmit - 22nd – 24th March 2023 | Munich, Germany	https://www.cparityevent.com/smart-manufacturing-excellence-summit/	22/03/23	Munich, Germany	Industry	>100	International

Table 8: ODIN participation in dissemination events (3 out of 3)

66	TAU	Organisation of a workshop	Attended	oral communication	Yes	AGCO company group visiting our lab from Linnavuori, Nokia, Finland. Presentation and Demos in lab. 9 persons.		11/05/2023	Tampere, Finland	Industry	0-20	National
67	TAU	Exhibition	Attended	Stand	No	Manufacturing Performance Days 2023, on June 5-7 2023 in Tampere, Finland	https://mpdays.com/	06/06/2023	Tampere, Finland	Industry	>100	International
68	DGH	Trade Fair	Attended	oral communication	No	Mindtech 2023 - Metal Industry and Technologies International Trade Fair	https://mindtechvigo.com/en/home/	20/06/2023	Vigo, Spain	Research Community	80-100	International
69	LMS	Event co-organised with other EU projects	Attended	project presentation	Yes	Presentation of white goods demonstrator during DIMOFAC EU project meeting at LMS		04/07/2023	Patras, Greece	Research Community	20-40	European
70	LMS	Participation to a Conference	Attended	paper submission	No	17th CIRP Conference on Intelligent Computation in Manufacturing Engineering	https://cirpicme.org/	12/07/2023	Naples, Italy	Research Community	80-100	International
71	VIS	Exhibition	Attended	Stand	No	AUTOMATICA München	https://www.visualcomponents.com/resources/events/meet-us-at-automatica-2023/	27/07/2023	Munich, Germany	Industry	>100	International
72	VIS	Exhibition	Attended	Stand	No	Smart Factory Expo	https://www.visualcomponents.com/resources/events/smart-factory-expo-2/	07/08/2023	Birmingham, United Kingdom	Industry	>100	International
73	TAU	Participation to a workshop	Attended	oral communication	Yes	TREDIH project final seminar	https://www.lyyti.fi/reg/TREDIH_tyopajademotilaisuus_0745	08/09/2023	Tampere, Finland	Industry	0-20	National
74	LMS	Participation to a Conference	Attended	oral communication	No	EMO Hannover MESSE Conference: "Redefining Manufacturing: Showcasing EU-funded initiatives in Agile Production"	https://www.cecimo.eu/conference-redefining-manufacturing-showcasing-eu-funded-initiatives-in-agile-production/	21/09/2023	EMO Hannover, Germany	Industry	20-40	International
75	TAU	Participation to a workshop	Attended	oral communication	No	Robotics4eu Co-creation workshop in Agile Production	https://www.robotics4eu.eu/events/co-creation-workshop-in-agile-production/	07/10/2023	Delft, Netherlands	Research Community	20-40	International
76	VIS	Exhibition	Attended	Stand	Yes	Motek	https://www.visualcomponents.com/resources/events/motek-2023/	10/10/2023	Stuttgart, Germany	Industry	>100	International
77	TAU	Trade Fair	Attended	oral communication	No	Teknologia 23 -fair	https://teknologia.messukeskus.com/?lang=en	07/11/2023	Helsinki, Finland	Industry	20-40	European
78	VIS	Exhibition	Attended	Stand	Yes	Teknologia 23 -fair	https://www.visualcomponents.com/resources/events/technology-fair-2023/	07/11/2023	Helsinki, Finland	Industry	>100	International
79	LMS	Participation to a workshop	Attended	oral communication	No	European Robotics Week	https://www.aanmelder.nl/erw	21/11/2023	Hannover, Germany	Research Community	20-40	International
80	TAU	Participation to a workshop	Attended	oral communication	No	ERF2024 Implementing Responsible Robotics ready for society workshop	https://erf2024.eu/	13/03/2024	Rimini - Italy	Research Community	>100	International
81	TAU	Organisation of a workshop	Attended	project presentation	No	ERF2024 Workshop TRINITY Innovation Network- steps forward	https://erf2024.eu/programme/	13/03/2024	Rimini - Italy	Research Community	40-60	International
82	LMS	Participation to a workshop	Attended	project presentation	No	ERF2024 AI enabled HRC – 11th Hybrid Production Systems workshop	https://erf2024.eu/	13/03/2024	Rimini - Italy	Research Community	40-60	International
83	LMS	Participation to a workshop	Attended	project presentation	No	ERF 2024 Shaping Tomorrow's Factory: HRC and Agile production - ACROBA EU Project Workshop	https://erf2024.eu/	14/03/2024	Rimini - Italy	Research Community	20-40	International
84	TAU	Participation to a workshop	Attended	project presentation	No	NUOTTA webinar AI ja kehittyneet teknologiat robotiikassa	https://events.teams.microsoft.com/event/21f0d93c-9ec6-476d-a26a-0411b8f4da31@b2645686-d964-4582-84d2-1c60c4846fc2	13/03/2024	Online, Finland	Other (please specify)	40-60	National
86	TAU	Organisation of a workshop	Attended	oral communication	No	Presenting ODIN projects and TAU technical work in a workshop with Fastems Ltd.		22/03/2024	Tampere, Finland	Industry	0-20	National
87	TAU	Participation to a Conference	Attended	project presentation	Yes	SIAS2024 conference	https://www.automaatioseura.fi/sias2024/program/	14/06/2024	Tampere, Finland	Research Community	0-20	International
88	LMS	Participation to a Conference	Attended	paper submission	No	Paper presentation at CIRP CATS 2024 Conference	http://www.cats2024.eu/	24-26/04/2024	Karslruhe, Germany	Research Community	>100	International
89	TAU	Organisation of a workshop	Attended	oral communication	Yes	Demo Day with TechBoost project	https://www.linkedin.com/posts/ropoottimias_robotiikka-tuotantotekniikka-activity-7206291275182927873-DUhX	11/06/2024	Tampere, Finland	Industry	20-40	National
90	TECNALIA	Participation to a Conference	Attended	oral communication	No	BIEMH International Machine Tool Exhibition	https://biemh.bilbaoexhibitioncentre.com/en	03/06/2024	Bilbao, Spain	Industry	0-20	International
91	COMAU	Exhibition	Attended	Stand	Yes	ERF 2024 COMAU Booth including ODIN Mobile Robot		13/03/2024	Rimini - Italy	Research Community	>100	International
92	ROBOCEPTION	Organisation of a workshop	Attended	project presentation	No	ERF 2024 Workshop Obtaining Good Data for Agile Production, Logistics and Lab Automation	https://roboception.com/workshop-at-erf-2024/	13/03/2024	Rimini - Italy	Research Community	>100	International
93	DGH	Organisation of a workshop	Attended	oral communication	Yes	First Opening of DGH R&D and Competence Learning Center		04/09/2024	Boecillo, Spain	Policy Makers	>100	National
94	TAU	Participation to a workshop	Attended	project presentation	No	BEST EDIH The 4th Interregional Thematic Seminar	https://www.interregeurope.eu/best-dih/news-and-events/events/4th-its-interregional-collaboration-between-dihs-edihs	07/11/2024	Sarvar, Hungary	Policy Makers	20-40	European
95	TAU	Participation to a workshop	Attended	project presentation	No	OPLITE project seminar about EU funding possibilities for companies	https://projektit.seamk.fi/alykkaat-teknologiat/oplite/	15/11/2024	Tampere, FInland	Industry	0-20	

4.1.2. Industrial workshops series

One of the key practical dissemination activities targeting the plant operators and end-users, was the organization of industrial workshops aiming to showcase our demonstrators to a pool of technical staff directly dealing with the industrial operations we automatized. In the DoA we foreseen a total of three (3) industrial workshops but decided to further extend the reach of the overall number of workshops.

See below the complete list of industrial workshops we organized in the framework of the ODIN project:

The 1st Automotive Smart Factory Public Workshop, 25 May 2023

The partner AIC organised the first ODIN industrial workshop at their Automotive Intelligence Center located in the outskirt of Bilbao (Spain) on the 25th of May 2023. This event kick-off the ODIN industrial workshop series and set the ground for best practices. During the event, AIC invited the ODIN partners STELLANTIS, LMS, TECNALIA and DGH to participate as well as local industrial actors who show interest in our project and technologies. The event will consist in a general presentation of the ODIN project's objectives and early results and continued with a visit of the automotive smart factory demonstrator at AIC to finally end with living discussions between the ODIN partners and the participants.

Figure 21: The 1st industrial workshop held at AIC

The 2nd Automotive Smart Factory Public Workshop, 09 May 2024

Almost a year after the 1st industrial workshop, AIC organized its 2nd edition of the Automotive Smart Factory Workshop at their Automotive Intelligence Center premises in Bilbao (Spain). For this second iteration, we invited the ODIN partners and local industrial actors interested to learn more about our project and technologies while opening the event to European stakeholders via online participation. The event consisted in the following sessions:

- Project Overview presentation: focusing on the ODIN components and the large-scale pilot lines.
- Presentation of the Aeronautics Pilot Line by the partners TECNALIA and AEROTECNIC.
- Presentation of the White Goods Pilot Line by the partners LMS and Beko Europe.
- Presentation of the Automotive Pilot Line by the partners LMS, STELLANTIS, AIC, TECNALIA, DGH.
- Presentation of the Automotive Smart Factory: demonstration of the inspection process of the engine assembly of gearbox with 2D and 3D camera, as well as the artificial inspection technology carried out.

The workshop continued by a site visit of AIC premises and especially the Virtual Development Center (VDC) under the supervision of Victor De La Fuente. The simulation competence centre has a six-degree-of-freedom driving simulator where vehicle dynamics and user analysis studies are conducted to test the systems of the "vehicle of the future". In this regard, AIC has created a vehicle simulation environment that serves as a platform to explore the synergies between user monitoring systems, communications and driving aids across the five levels of vehicle autonomy.

Figure 22: Group picture during the 2nd industrial workshop held at AIC

Automotive Workshop at Stellantis

Following the successful installation of the ODIN automotive demonstrator at Stellantis' factory in Torino (Italy), the project organized a series of five (5) industrial workshops from the 16th to the 20th of September 2024. During the workshop series, the different technologies developed during the ODIN project were showcased to the audience and the factory personnel provided their feedback on the solution's potential and usability in an industrial environment. For the occasion, Stellantis invited the project coordinator LMS and the partner TECNALIA to join all the workshops and address the technical questions of the participants. The partners DGH, COMAU, PILZ and ROBOCEPTION also participated to some the workshops bringing their specific expertise on the ODIN automotive demonstrator. The industrial participants were impressed by the flexibility of the large-scale pilot paradigm towards agile production and have great expectations for future developments leading to a fully implemented solution in the factory.

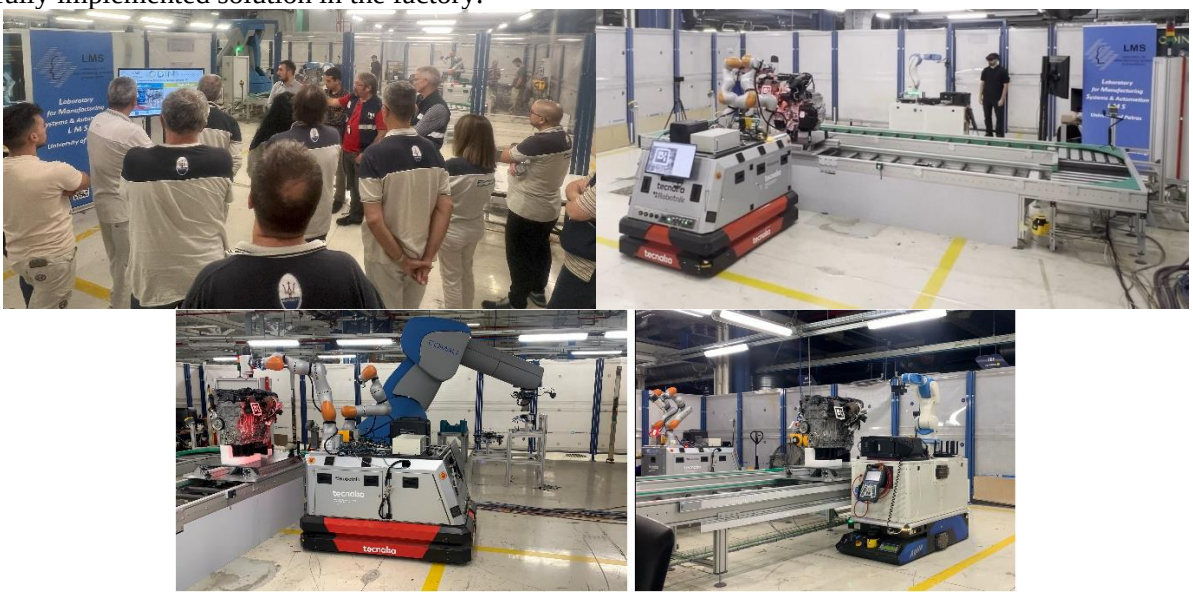

Figure 23: The Automotive industrial workshop series held at Stellantis

Aeronautics Workshop at Aerotecnic

On the 24th of October, the ODIN partners participated to the 7th and last General Assembly meeting, hosted by AEROTECNIC in Cadiz, Spain. The partners addressed the final technical questions on the development of the innovative components and focused on the deployment of the demonstrators in industrial environment. To this regard, the location of our final General Assembly meeting was not trivial as the ODIN Aeronautics Pilot Line has been installed precisely at Aerotecnic Composites SL's facilities in Cadiz. Therefore, we organized an industrial workshop in conjunction with our 7th GA meeting, allowing the partners to see the aeronautics demonstrator performing the automation of three operations.

Figure 24: Group picture during the Aeronautic workshop series held at AEROTECNIC

White Goods Workshop at Beko

Following the successful installation of the third ODIN demonstrator for White Goods application at the Italian premises of BEKO, the ODIN project decided to organize another series of four (4) industrial workshops from the 21st to the 22nd of November 2024 to collect the feedback from either factory managers or industrial personnel. Representatives from the coordinator LMS and the partners TAU and VIS also joined the workshops interacting with the participants and exchanging state-of-the-art technologies and solutions in the field of advanced collaborative robotics in industrial environments. The ODIN project is proud of the results of the industrial workshops, increasing the number of workshops from three (3) to twelve (12) and therefore multiplying the awareness raising and prolific discussions with the industrial staff and operators who represent the final end-users of the ODIN technologies and solutions. Overall, we are very satisfied with the results of the industrial workshop series and the opportunity we had to exchange and the interact with the industrial users.

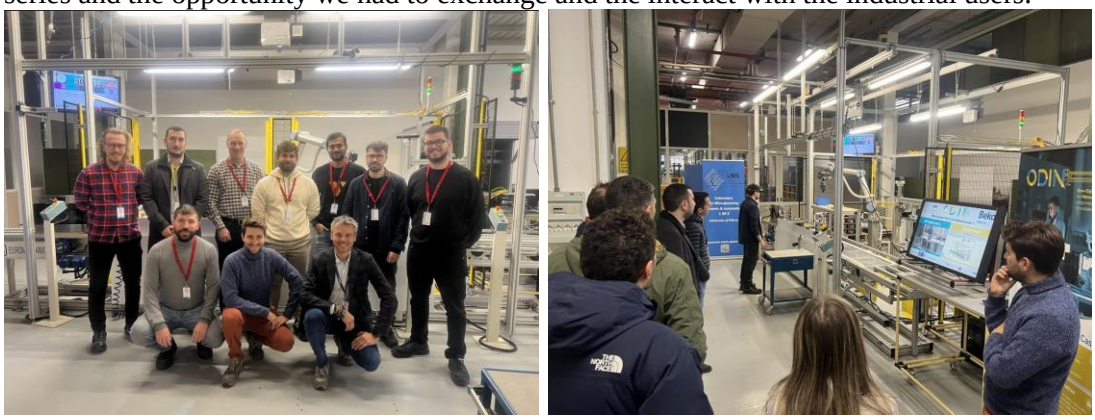

Figure 25: The White Goods industrial workshop held at Beko

4.2. Publications

4.2.1. Scientific publications

Publications in specialized journals and conferences are a conventional but effective way to disseminate project outcomes and attract the attention of the scientific, business, and public stakeholders. As of the DoA, the ODIN consortium planned to publish at least four (4) publications in scientific journals and eight (8) papers in conference proceedings. We also acknowledged the importance of Open Access (OA) policies towards accelerating and broadening the dissemination of the publicly funded results of the project, as well as towards boosting the visibility of European research.

By the end of the project, our ODIN partners have published the following S&T publications:

Papers in conference proceedings

- *Open-Digital-Industrial and Networking pilot lines using modular components for scalable production – ODIN project approach*; Procedia CIRP, Volume 106, 2022, Pages 162-167, ISSN 2212-8271; DOI
- *Automatic generation of realistic training data for learning parallel-jaw grasping from synthetic stereo images*; 2021 20th International Conference on Advanced Robotics (ICAR), Ljubljana, Slovenia, 2021, pp. 730-737; DOI
- *ODIN architecture enabling reconfigurable human – robot based production lines*; Procedia CIRP, Volume 107, 2022, Pages 1403-1408, ISSN 2212-8271, DOI
- "*Quality control of white goods parts using robotic technologies*; Procedia CIRP, Volume 104, 2021, Pages 1759-1764, ISSN 2212-8271; DOI
- *Visualization Concept for Representing Capability Matchmaking Results in a Virtual Environment*; Flexible Automation and Intelligent Manufacturing: The Human-Data-Technology Nexus. FAIM 2022. Lecture Notes in Mechanical Engineering. Springer, Cham.; DOI
- *Virtual reality-based safety training in human-robot collaboration scenario: User experiences testing*; AIP Conf. Proc. 29 January 2024; 2989 (1): 020002; DOI
- *A modular framework of robot gripping tools for human robot collaborative production lines*; Procedia CIRP, Volume 126, 2024, Pages 164-169, ISSN 2212-8271; DOI
- *An interactive Augmented Reality based framework assisting operators in human-robot collaborative assembly operations*; Procedia CIRP, Volume 126, 2024, Pages 170-175, ISSN 2212-8271; DOI
- *A vision-based human-robot collaborative system for digital twin*; Procedia CIRP, Volume 107, 2022, Pages 552-557, ISSN 2212-8271; DOI
- *Empowering Precision-Guided Automotive Assembly Operations: A Flexible Robot Vision Framework*; Procedia CIRP, Volume 127, 2024, Pages 50-55, ISSN 2212-8271; DOI

Publications in Journals

- *Data-efficient multimodal human action recognition for proactive human–robot collaborative assembly: A cross-domain few-shot learning approach*; Robotics and Computer-Integrated Manufacturing, Volume 89, 2024, 102785, ISSN 0736-5845; DOI
- *Quality control in manufacturing – review and challenges on robotic applications*; International Journal of Computer Integrated Manufacturing, 1–37; DOI
- *Safety-aware human-centric collaborative assembly*; Advanced Engineering Informatics, Volume 60, 2024, 102371, ISSN 1474-0346; DOI
- *Visual Servoing Architecture of Mobile Manipulators for Precise Industrial Operations on Moving Objects*; Robotics 2024; 13(5):71.; DOI
- *A Voice-Enabled ROS2 Framework for Human–Robot Collaborative Inspection*; *Appl. Sci.* 2024, *14*, 4138; DOI

5. MONITORING AND EVALUATION OF COMMUNICATION AND DISSEMINATION ACTIVITIES

5.1. Key Performances Indicators (KPIs)

In order to measure the impact of the conducted activities and to be able to adjust the dissemination and communication strategy in order to maximize visibility, a set of updated metrics has been developed. Such metrics allow the consortium to have a constant view of the amount and the effectiveness of the conducted dissemination activities. The complete set of dissemination activities is closely monitored and coordinated by the Dissemination Leader (INTRA) and the project Coordinator (LMS) to keep track of all on-going activities.

The table below presents the expected outcomes for each type of activity as well as the status at M47:

Activity	Target	Status at M47
Social media: LinkedIn, Twitter, Facebook, YouTube.	• At least 200 posts in social media • At least 500 followers in the project's social media accounts	• 467 posts • 975 followers
ODIN Public website	Reach to at least 1,000 visitors per year	8,465 unique visitors
European Robotics Forum (ERF) events	• Participate in at least 3 European Robotics Forum (ERF) events • Organize at least 3 clustering activities & participation in at least 3 topic groups	• 11 partners participated in 4 ERF events, including: • Organization of 5 clustering activities & participation in 10 other topic groups
Promotional activities for the dissemination of results (brochures, posters, newsletters, etc.).	• Publication of at least 8 newsletters • Distribute 2.000 brochures / leaflets in different events • Develop a standard dissemination kit	• 8 newsletters • 2500 brochures distributed • 1 dissemination kit available
Scientific journals	At least 1 scientific publication per year	5 publications
Conference participation	At least 2 scientific publications per year	10 publications
Organization of Industrial workshops	Organize at least 3 industrial workshops	12 industrial workshops organized
Industrial Fairs and public demonstration of ODIN Prototypes	Participation in at least 3 industrial fairs	40 participations in fairs and exhibitions
Videos	Videos of each case study (LMS, TECNALIA, VIS)	9 videos
New activities and KPIs	• 4 Press releases • 20 blog posts	• 3 Press releases • 31 blog posts

Table 9: ODIN Key Performances Indicators and Targets at M47

6. STANDARDIZATION ACTIVITIES

The aim of this section is to present the outcomes of the standardization activities during the implementation of the ODIN project. A comprehensive report has been created to make this information available to relevant organizations and standardization technical committees, allowing them to reference and use it in their activities.

The report encompasses the following activities:

- Identification and analysis of gaps open/vague areas, missing norms etc. (further referred as gaps); between ODIN technologies and existing standards, including the reporting of findings and feedback to these working groups.
- Identification of related technical committees.

The more significant details of the report are included in D6.6. It is important to highlight that standardization activities will extend beyond the completion of the ODIN project, ensuring that the technology and new knowledge developed in the project are aligned with existing standards, as well as those that may supersede current ones or be newly established.

6.1. ODIN related technical committees

One of the final tasks has been the communication of the project findings in terms of gaps between project developed technologies and current standards to the technical committees identified. The results of this activity are presented hereafter, where the final list of the identified technical committees (TC) and working groups (WS) under Standards Definition Organizations (SDO) of interest for ODIN is included.

Table 10: List of stakeholders for ODIN standardization activities

Name	Technical Committee (TC) ID	Technical Committee (TC) Name	Working Group (WG) / Subcommittee (SC)	Main Topic	TC where information has been shared
ROS-Industrial Consortium	-	-	-	Consortium aimed to extend ROS to meet industrial applications	
Open Source Robotics Foundation, Inc.	-	-	-	Managing entity behind ROS and Gazebo	
ISO	ISO/TC 299	Robotics	ISO/TC 299/WG 1	Vocabulary and characteristics	X
ISO	ISO/TC 299	Robotics	ISO/TC 299/WG 2	Service robot safety	X
ISO	ISO/TC 299	Robotics	ISO/TC 299/WG 3	Industrial safety	X
ISO	ISO/TC 184	Automation systems and integration	ISO/TC 184/SC 1	Physical device control	X
ISO	ISO/TC 184	Automation systems and integration	ISO/TC 184/SC 4	Industrial data	X

Name	Technical Committee (TC) ID	Technical Committee (TC) Name	Working Group (WG) / Subcommittee (SC)	Main Topic	TC where information has been shared
ISO	ISO/TC 184	Automation systems and integration	ISO/TC 184/SC 4	Interoperability, integration, and architectures for enterprise systems and automation applications	X
ISO	ISO/TC 184	Automation systems and integration	ISO/TC 184/AHG 2	Digital Twin	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 3	Safety of integrated manufacturing systems	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 5	General principles for the design of machinery and risk assessment	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 6	Safety distances and ergonomic aspects	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 7	Interlocking devices	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 8	Safe Control Systems	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 11	Permanent means of access to machinery	X
ISO	ISO/TC 199	Safety of machinery	ISO/TC 199/WG 12	Human-machine-interactions	X
ISO	ISO/TC 172	Optics and photonics	ISO/TC 172/AHG	AR/VR as related to ISO/TC 172	X
ANSI/RIA	R15	Industrial Robotics Standards in the U.S.	R15.06	Drafting Subcommittee on Industrial Robot Safety	-
ANSI/RIA	R15	Industrial Robotics Standards in the U.S.	R15.08	rafting Subcommittee on Industrial Mobile Robot Safety	-
ISO	ISO/IEC JTC 1	Information technology	ISO/IEC JTC 1/SC 27	Information technology — Information security incident management — Part 1: Principles and process	X
ISO	ISO/IEC JTC 1	Information technology	ISO/IEC JTC 1/SC 29	Coding of audio, picture,	X

Name	Technical Committee (TC) ID	Technical Committee (TC) Name	Working Group (WG) / Subcommittee (SC)	Main Topic	TC where information has been shared
				multimedia and hypermedia information	
IEC	*IEC/TC 65*	Industrial-process measurement, control and automation	*IEC/TC65/SC 65E/WG 10, 12*	Standards for industrial process measurements, control and automation	X
IEC	*IEC/TC 9*	Communication, signalling, and processing systems	*IEC/TC9/WG 43*	Focuses on the communication, signalling, and processing systems used in railway applications	X
IEC	*IEC/TC44*	Safety of machinery - Electrotechnical aspects	*IEC/TC44/WG 15*	Requirements for the functionality and interfacing of cableless control systems for machinery	X

7. CONCLUSIONS

The deliverable D6.5 “Networking, Dissemination and Communication Activities– Final Report” provides the results of the communication, dissemination, and related activities within the ODIN project.

This deliverable reports the promotion and dissemination activities, giving an overview of the work carried out in the project duration, which include the communication strategy and promotional activities as well as the different dissemination activities carried out to share the knowledge generated during the project to our target groups. Furthermore, it provides a vision of the current status on the key performance indicators (KPIs) that are essential to verify the networking, communication and dissemination objectives proposed in the scope of Task 6.1 “Networking with EU initiatives and Integration in the DIH Networks” and the Task 6.2 “Dissemination and Communication – Pilots open to the world”.

In addition to its predecessor deliverable D6.2 “Networking, Dissemination and Communication Activities– Initial Report”, this document also includes a section dedicated to the standardization activities carried out during the second half of the ODIN project.

Overall, the ODIN project surpasses its expectation in term of Promotion, Dissemination and Standardization as illustrated by the numbers showcased in the section 5.1 “Key Performances Indicators (KPIs)”. Nevertheless, the consortium partners will remain committed to ODIN even after the end of the project and we will utilize the different platforms and the wide community we attracted over the last four years, to promote our future individual results and news but also joint activities the ODIN partners will conduct spanning from publications to future EU-funded projects.

8. GLOSSARY

NDC	Networking, Dissemination and Communication
ERF	European Robotics Forum
SIE	Sustainable Industry Ecosystem
DIH	Digital Innovation Hub
SME	Small and medium-sized enterprises
FSTP	Financial Support for Third Parties
EU	European Union