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Grant Agreement n. 785419

Deliverable D9.2
Plan for Exploitation and Dissemination of Results (PEDR)

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0.1	30/07/2018	UNICAMPANIA	First draft
0.2	02/08/2018	UNICAMPANIA	Final
0.3	16/02/2019	UNICAMPANIA	First draft @M12
0.4	05/03/2019	LOC, UNICAMPANIA	Final update @M12
1.0	30/09/2019	LOC, UNISA, UNICAMPANIA	Update @M19
2.0	16/03/2020	UNICAMPANIA	Update @Mo24

Deliverable Contributors

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Topic Manager's Opinion:

Leonardo Aircraft _____

NAME	DATE	SIGN
Ciro Annicchiarico		

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Executive Summary

The present "Plan for the Exploitation and Dissemination of results", in short PEDR, is a strategic document to plan and iteratively update the actions for exploitation and dissemination of results aroused within the LABOR project and even after its conclusion.

In the context of Task "T9.2 – Exploitation of knowledge" the PEDR will be revised as a living document and maintained by all project partners. The ground rules, roles and responsibilities are as follows:

- The Intellectual Property Rights Manager (IPRM), nominated by the PSC in the person of Dr. Cristina Cristalli, will set up the Plan for Exploitation and Dissemination of Results (PEDR), prepared by the Task Leader (TL) of T9.2 (UNICAMPANIA) as this Deliverable D9.2 at Mo6, and will be updated yearly until the end of the project.
- Each participant will put its own significant effort into exploitation and aims at exploiting the project successfully in order to integrate it into innovative products and services and to fulfil new market and research opportunities. All this will be done jointly by all participants, under guidance of the Coordinator and the IPRM, and will be laid down in the PEDR.
- Therefore the participants will maintain an internal list of possible exploitable results from the start of the project, to allow relevant long-lead-time activities to be scheduled. This list will be updated on the circulation of any deliverable or publication within the Consortium, to ensure exploitation and dissemination plans are managed and developed as required, and the progress of this list will be a regular agenda item for the IPRM.
- The aim is the smooth transition to commercialization effort after the end of the project.
- Intellectual Property Right (IPR) sharing issues were defined in the Consortium Agreement (CA) and in the Implementation Agreement (IA) before the start of the project, and will be maintained appropriately throughout the project duration.
- Measure of progress and success: Progress and success will be measured through the number of patents or IPR protection, as well as the number of end users interested to the technologies developed in LABOR.
- As an underlying principle, protection and exploitation of results will override dissemination. For this reason, all publications in the project will pass through an internal monitoring process to allow redaction of items that are not yet public. This will focus on ensuring the project outcomes can be exploited, not on preventing the dissemination of project results.
- The exploitation and dissemination of knowledge does not only serve participants' own interests but also has economic, technological and social benefits for industry and society as a whole. Therefore the PEDR will show the value of the results on a European level, which goes beyond the level of the participants concerned.
- IPRM was nominated: Cristina Cristalli (LOC)

In more detail, the PEDR will include the following information:

- Exploitable foreground: In this section, participants are asked to identify all the exploitable results arising from the project and their intentions for use (see Table 1). This section includes:
    - A roadmap for exploitation measures during and after the project's lifetime (see Table 1).
    - A list of necessary steps to be taken in order to successfully exploit the project results (see Table 1).
- List of applications for patents, trademark, and registered designs made during the project's lifetime (see Table 2)

- List of scientific publications (see Table 3)
- Dissemination of knowledge: in this section participants are asked to list all the actions carried out in order to make their research results known to the public (see Table 4)
- Publishable results: in this section, participants should provide a summary description of each exploitable result, to be published in the "Cordis Technology Marketplace"

The current document is an intermediate update @M19 based on the feedback of the LABOR project officer. An explicit explanation of both exploitation and disseminations strategies is now laid down in the document, which contains also updated lists of exploitable foregrounds, publications, communication and dissemination activities.

List of Abbreviations

PSC	Project Steering Committee
IPRM	Intellectual Property Rights Manager
TL	Task Leader
IPR	Intellectual Property Right
CA	Consortium Agreement
IA	Implementation Agreement
LOC	Loccioni short name
GA	Grant Agreement
CPS	Cyber Physical Systems
TBC	To Be Confirmed
KPI	Key Performance Indicator

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1 Strategy and plan for exploitation of project results

To foster actual exploitation of the project expected results and those that will come up during the execution of the LABOR project, project partners will follow a specific roadmap from exploitation to innovation, whose phases are summarized in the following.

1. Identification of Innovation Items
    a. *Rationale*: establish a repository of exploitation items for innovation by monitoring the technical progress of the project @Mo12, @Mo24, @Mo36.
    b. *Instruments*:
        i. Table of exploitable Product and Service Portfolio (Table 1)
    c. *Achievements (until Mo18)*: 15 exploitable results have been identified (see Table 1).
2. Developing Innovations
    a. *Rationale*: evaluate collection of items and assess their maturity and technology-fitness. Evaluate applicability and align with individual exploitation interests.
    b. *Instruments*:
        i. Risk and Maturity Assessment
        ii. Technology characterization
        iii. Prioritization
    c. *Achievements (until Mo18)*:
        i. Updated product and service portfolio
        ii. Collaboration via project private area
        iii. Continuous assessment of results (ongoing)
3. Developing Business Models
    a. *Rationale*: establish company business models, governance structures and agreements among participating partners. Assess market situation and evaluate competitors.
    b. *Instruments*:
        i. Market survey
        ii. Patent survey
        iii. Business modelling & assessment
        iv. Governance and contracts
    c. *Achievements (until Mo24)*: Business Model Canvas (see Figure 1).
4. Business Uptake and Financial Investment Assessment
    a. *Rationale*: assess business uptake and perform financial investment assessment
    b. *Instruments*:
        i. Market analysis
        ii. Investment planning
        iii. Business planning
        iv. Return-of-investment
        v. Technology-readiness (maturity)
        vi. Cost-Benefit Analysis
    c. Achievements (until Mo18):
        i. Assessment of expected TRL for all exploitation items (see Table 1)

The exploitation analysis will be concurrent with the design phase. This will allow to choose among the technical solutions the ones that maximize the impact on the market within an affordable and

sustainable development and a human-machine collaborative solution. Stakeholders and potential beneficiaries will be involved in such a process. The developed solutions have high potential for large use in industrial applications as a whole. However, the modularity of such a solution will also allow the adoption of separated devices and functionalities as, lightweight drilling-and-inspection, sealing-and-fastener insertion, self-adaptive positioning-and-clamping end-effectors, software solutions to enable human-machine collaboration and robotized collaborative force-based drilling, etc. In Table 1 an initial list of possible exploitable results has been defined. It shows the main components of the overall solution that will be interested to gain the market, their actual TRL, the owner and if they can be considered as a product or as a service.

The LABOR business model for the main exploitable results will be analysed using Osterwalder's business model canvas approach [1]. Figure 1 reports the Canvas model that will be used.

ID	Achievement	Owner	Plan to the Market	Current TRL	TRL in 5 years
1	**LABOR Lean Robotic Cell**	LOC	Direct sale to main aircraft manufacturers **as a composite product**	5	8
2	**2D Inspection tool for robotized solution**	LOC	Direct sale to main aircraft manufacturers and other sectors, like automotive, **as a stand-alone product**	5	8
3	**3D Inspection tool for robotized solution**	LOC	Direct sale to main aircraft manufacturers and other sectors, like automotive, **as a stand-alone product**	5	8
4	**Drilling tool integration for lightweight robotic solutions (with automatic drill bit change)**	LOC	Show to and train potential aircraft manufacturers, SMEs involved in assembly operations. Make aware SMEs of the potential market niche. Direct sale to main aircraft manufacturers and other sectors, **as a stand-alone product**	6	8
5	**Sealing tool for wet fastener insertion through lightweight robotic solutions**	LOC	Show to and train potential aircraft manufacturers, SMEs involved in assembly operations. Make aware SMEs of the potential market niche. Direct sale to main aircraft manufacturers **as a stand-alone product**	6	8
6	**Fastener insertion tool integration for lightweight robotic solutions (with automatic fasteners warehouse)**	LOC	Show to and train potential aircraft manufacturers, SMEs involved in assembly operations. Make aware SMEs of the potential market niche. Direct sale to main aircraft manufacturers **as a stand-alone product**	6	8
7	**CPS approach for distributed intelligence**	LOC	Direct sale to main aircraft manufacturers and other sectors, like automotive, **as a product**	5	8

			(communication and data exchange framework)		
8	**Human-Robot collaboration algorithms**	UNICAMPANIA	Direct sale to main aircraft manufacturers **as a stand-alone product / software package**	5	8
9	**Self-adaptive positioning algorithm for robot referencing**	LOC	Direct sale to main aircraft manufacturers **as a stand-alone product / software package**	5	8
10	**Robot alignment system based on kinematics calibration**	LOC	Direct sale to main aircraft manufacturers **as a stand-alone product / software package**	5	8
11	**Cooperative force-based drilling algorithm**	UNISA	Consultant/services		
12	**Virtual simulations of robotic cell functionalities**	UNICAMPANIA	Consultant/services		
13	**Off-line cell programming based on CAD data**	LOC	Direct sale to main aircraft manufacturers **as a stand-alone product / software package**	5	8
14	**Lectures and research initiatives**	ALL	Service		
15	**Ergonomics and Workplace optimization**	UNICAMPANIA	Consultant/services		

Table 1 - Exploitable results with current and 5 years TRL.

<table>
<tr>
<td rowspan="2">7. KEY PARTNERS
Partners who will interact with quality inspection tools will play a key role:
- Quality control experts
- Business process improvement experts
- Domain experts for industry</td>
<td>5. KEY ACTIVITIES
- Finding new technology early adopters in industry
- Update Loccioni solutions with new quality inspection tools
- Marketing and community building</td>
<td rowspan="2">1. VALUE PROPOSITION
Smart on-line quality control systems improve performance of quality tests, implementing adaptive behaviors, reacting to the variability of complex multi-stage production and providing reliable information for decision making at local and global level. Quality inspection tools, constituted of HW and SW installations, involve advanced metrology and are able to:
- Self-adapt according to environmental conditions of the production line
- Self-optimization and self-adaptation of the sensing functions to the variable product/process parameters, in order to reduce measurement uncertainty
- Self-diagnosis and self-calibration
- Modularity of testing operation
- Self-learning for diagnosis and classification</td>
<td>4. CUSTOMER RELATIONSHIPS
In order to create a connection with customers, several activities can be planned:
- Strategic partnerships
- Co-design of the solution</td>
<td rowspan="2">2. CUSTOMER SEGMENTS
The types of company to reach are:
- Companies with high quality standard
- Companies with high production rate and customization needs
- Business with problems in quality control (esp. for in-process control)
- Transport market (e.g. Automotive, Aerospace, etc…)
- Household appliance market
- Consumer Electronics market</td>
</tr>
<tr>
<td>6. KEY RESOURCES
- Quality control experts
- Customers already acquired ready for new quality inspection tools deployment
- Hardware resources (sensors, DAQ, PC, automation …)</td>
<td>3. CHANNELS
- Awareness: Workshops, Press (Scientific, General Public, etc.)
- Evaluation: Free trials in industry, Demonstration in Loccioni premises, fair exposition and demonstration, Hands-on workshops
- Purchase: Direct
- Delivery: Customers references
- After Sale: customer care service</td>
</tr>
<tr>
<td colspan="3">9. COST STRUCTURE
Costs depend on developing the solution:
- Development (human resources)
- Hardware costs
- Marketing and Sales</td>
<td colspan="3">8. REVENUE STREAMS
Customers will pay for:
- Quality inspection tool installation
- Software/hardware support and update
The revenue stream is also related to the innovative approach that Loccioni can offer and that will bring high efficiency and quality in production process for Loccioni customers.</td>
</tr>
</table>

Figure 1 - Business Model Canvas

2 IPR actions

2.1 List of applications for patents or trademarks and registered designs

The management of IPR is strictly ruled by the Consortium Agreement which includes all provisions related to the management of IPR including ownership, protection and publication of knowledge, access rights to knowledge and pre-existing know-how as well as questions of confidentiality, liability and dispute settlement. In the Consortium Agreement the Partners have identified the background knowledge included and excluded.

List of possible patents, trademarks and registered designs has been defined and during the project's lifetime will be updated on a yearly basis in the table hereafter.

Type of IP Rights	Subject or title of application	Confidential Classification [YES or NO]	Foreseen embargo date [dd/mm/yyyy]	Application reference(s) (e.g. EP123456)	Applicant(s) (as on the application)
Choose type of IP right, please!		Choose YES or NO, please!	Choose date [dd/mm/yyyy], please!		
Choose type of IP right, please!		Choose YES or NO, please!	Choose date [dd/mm/yyyy], please!		
Choose type of IP right, please!		Choose YES or NO, please!	Choose date [dd/mm/yyyy], please!		
Choose type of IP right, please!		Choose YES or NO, please!	Choose date [dd/mm/yyyy], please!		

Table 2 – List of applications for patents, trademarks and registered designs

3 Strategy and plan for dissemination activities

The **objectives** of the dissemination activities can be summarized as follows:

- to inform stakeholders using different channels and tools (e.g., website, electronic brochures, digital presentation, presentations at public events);
- to engage interested key people through communication actions, like articles and announcements in printed publications, local magazines and electronic publications (see also Comminication Plan in Section 6.1);
- to promote awareness among the different target groups - from users to citizens -, about project and its key issues (e.g. organizing workshops, exhibitions at trade fairs or conferences, creating communication network and participating in thematic conferences and events);
- to increase visibility by means of Clean Sky dissemination actions and to develop common initiatives with other European projects working on similar themes (e.g., participating in workshops organized by the European Commission or in the framework of other funded projects or inviting other projects partners to join meetings organized in the framework of the LABOR project);
- to involve the scientific community stimulating the debate about the project themes and involving directly students and researchers in the project activities;
- to develop a group of potential customers who are suited for and interested in a marketable products resulting from LABOR project.

Dissemination strategy comes up from a mix of rationality and creativity. Some details about procedures, target groups, instruments and expected results are presented in the following paragraphs.

3.1 Procedures

Each partner of LABOR has its own relations and network and its own resources to carry on the dissemination activities planned in the WP9. Therefore, communication and dissemination initiatives are left to “partners creativity” and their initiative, nevertheless the following procedures are suggested to carry out dissemination:

- create and implement planned dissemination activities tailored on its own target group
- suggest and realize further dissemination activities according to new and dynamic opportunities
- produce evidence of the performed activity by sending information and material to the partner responsible of the web site for immediate publication and recording on the PEDR

According to the GA, the dissemination activities will be mainly addressed to the target groups listed in Table 3. In particular:

- a workshop will be organized at the end of the project to present the new concept of lean assembly cell proposed by LABOR;
- participation in a trade fair selected in collaboration with the TM to target the most relevant audience;
- one or two joint technical papers on magazines describing the whole assembly solution will be produced by the whole consortium.

Target group / Dissemination instrument	Research & Academic Community	Industrial community	Investors	General Public
Press releases			x	x
Publications & Workshops	x	x		
Project website	x	x	x	x
Clustering activities	x	x	x	x
Online and printed dissemination material	x	x		x

Table 3 - Main dissemination tools that will be used during and after the project and target groups.

3.2 Expected results

To assess the effectiveness of the dissemination activities, the KPI in Table 4 will be adopted.

Code	Indicator	Expected Progress			Actual Progress	
		After Y1	After Y2	After Y3	Mo24	Mo36
Scientific	Number of publications	1	6	8	5	
Scientific	Number of thesis or Ph.D.	0	1	2	4	
Industrial	Number of trade fair participation	0	0	1	0	
Scientific	Number of lectures and courses	1	2	3	2	
Scientific/industrial	Number of presentations	1	3	5	5	
Scientific/industrial	Number of workshops organized by the consortium	0	0	1	0	
Events	Number of conferences, exhibitions and workshops where the project is presented	3	5	9	4	

Table 4 - KPI for the dissemination activities.

4 Scientific Publications

4.1 List of scientific publications

Scientific publications are relevant indicators of the scientific and technological advancement beyond the state of the art produced by the project. However, as stated in the CA, the underlying principle is that protection and exploitation of results will override dissemination. For this reason, all publications in the project will pass through an internal monitoring process to allow redaction of items that are not yet public. This will focus on ensuring the project outcomes can be exploited, not on preventing the dissemination of project results.

Scientific publications will be listed and updated on a yearly basis in the table hereafter and, of course, recorded in the "Continuous Reporting" section of the EU portal.
The internal identifier in Table 5 does not indicate a certain priority and it will be continued in serial numeration.

Identifier	Publication Title	Main Author	Title of the periodical or the series	Number, or Date	Relevant pages	Permanent identifiers [1] (if available)	Is/Will open access [2] provided?
P01	Safety in human-multi robot collaborative scenarios: a trajectory scaling approach	M. Lippi, A. Marino	12th IFAC Symposium on robot control	August 2018	190-196	10.1016/j.ifacol.2018.11.540	Yes (green)
P02	Smart Inspection Tools in robotized aircraft panels manufacturing	A. Bruni, E. Concettoni, C. Cristalli, M. Nisi	IEEE International workshop on Metrology for Aerospace	June 2019	629-634		Yes (green)
P03	A fuzzy inference approach to control robot speed in human-robot shared workspaces	A. Campomaggiore, M. Costanzo, G. Lettera, C. Natale	6th International Conference On Informatics in Control, Automation and Robotics	July 2019	78-87	DOI:10.5220/0007838700780087	Yes

1 A permanent identifier should be a persistent link to the published version full text if open access or abstract if article is pay per view) or to the final manuscript accepted for publication (link to article in repository).
2 Open Access is defined as free of charge access for anyone via Internet. Please answer "yes" if the open access to the publication is already established and also if the embargo period for open access is not yet over but you intend to establish open access afterwards.

Identifier	Publication Title	Main Author	Title of the periodical or the series	Number, or Date	Relevant pages	Permanent identifiers [1] (if available)	Is/Will open access [2] provided?
P04	Robotica lean e adattativa per l'aeronautica	C. Cristalli	Platinum	n. 33 2019	102	ISSN: 2038-2596	Yes
P05	A Multimodal Perception System for Detection of Human Operators in Robotic Work Cells	M. Costanzo, G. De Maria, G. Lettera, C. Natale, D. Perrone	2019 IEEE International Conference on Systems, Man, and Cybernetics	October 2019	702-709	ISBN: 978-1-7281-4568-6/19	Yes (green)

Table 5 – List of scientific publications.

5 Other dissemination activities

5.1 List of dissemination activities

Dissemination work in LABOR is coordinated by Task T9.1 and will be achieved by using different channels and events to spread information and knowledge of LABOR. The present table (Table 6) lists the most common types of dissemination activities not included in the previous sections.

The internal identifier does not indicate a certain priority and it will be continued in serial numeration.

The type of dissemination activity might be chosen from one of the following categories: Conference, Workshop, Web publication, Press release, Flyer, Article published popular press, Video, film or TV clip, Media briefing, Presentation, Exhibition, Thesis, Interview, Poster, Other.

Main initiator is the LABOR partner who leads the dissemination activity, i.e., UNICAMPANIA.

Under "Contents of dissemination activity" any explanatory text to give more details on the activity might be entered.

If possible the type of audience, the dissemination activity was brought to, shall be chosen from these categories: Scientific Community (higher education, Research), Industry, Civil society, Policy makers, Medias, Other.

Identifier	Type of dissemination activity	Main Initiator	Title of dissemination activity	Contents of dissemination activity	Date	Place
D01	Conference	UNISA	Safety in human-multi robot collaborative scenarios: a trajectory scaling approach	Paper presentation at Syroco 2018	30/08/2018	Budapest, HU
D02	Conference	UNICAMPANIA	A fuzzy inference approach to control robot speed in human-robot shared workspaces	Paper presentation at ICINCO 2019	30/07/2019	Prague, CZ
D03	Workshop	LOC	Smart Inspection Tools in robotized aircraft panels manufacturing	Paper presentation at Metroaerospace 2019	30/06/2019	Turin, IT
D04	Conference	UNICAMPANIA	A Multimodal Perception System for Detection of Human Operators in Robotic Work Cells	Paper presentation at SMC 2019	06/10/2019	Bari, IT

Table 6 - List of other dissemination activities.

6 Strategy and plan for communication activities

6.1 Communication plan

Communication activities have to start at the outset of the project and they are aimed at letting the target audiences (scientific community, industrial community, students, general public) know the project existence, its goals, challenges and participants. Information about specific technical results will be tackled by dissemination activities, as presented above. Communication initiative will be devoted mainly to inform the general public about the general outcome of the project and the communication material will generally not contain any technical information.

Each partner will try to involve in any communication initiative all project participants and, if necessary, the Clean Sky 2 JU, according to the rules set in the GA.

In accordance with part B of the GA, to maximize communication, the following tools will be adopted:

- Printed and media material
- Project web site
- Communication events, such as project presentations and workshops

Each communication activity will be included in Table 7.

All beneficiaries will contribute with part of their budget to such type of activities, with a stronger involvement of UNICAMPANIA, who has the role of WP9 leader.

6.2 Website

The web site has been issued on Mo3 at the URL https://www.labor-project.eu (Figure 2 shows the home page) as planned.

Figure 2 - Home page of the LABOR project web site .

The web site has a public and a private area. The first one is devoted at promoting project objectives and results, while the second one is mainly a functional area where partners exchange files in a repository where both working and official documents can be easily accessed. The details of its structure can be found in Deliverable D9.1

6.3 Project Logo

To enforce the project identity towards the community a project logo has been designed and adopted since the proposal submission phase and it is adopted in every official document of the project (deliverables, meeting minutes, list of participants, presentations). The image of the logo, which give also credits to the Clean Sky JTI, focuses on the cooperative robotic strategy proposed by the project to achieve its objectives.

Figure 3 - Logo of the LABOR project.

6.4 Project leaflet and poster

To promote the project in the occasion of public events a leaflet (Figure 4) to distribute has been prepared together with a project poster (Figure 5), that has been distributed to all project partners during the Kick-off meeting so as to expose it in the respective premises. It has been also presented at public events listed in Table 7.

Figure 4 - Leaflet of the LABOR project.

Figure 5 - Poster of the LABOR project.

6.5 Social media

According to the Social Media Guide for EU funded projects (v. 1.0), the consortium has identified Mr. Gaetano Lettera as the person in charge of social media activities of the LABOR project, as he is also the webmaster of the LABOR web site.

The LABOR steering committee decided to adopt Facebook and Twitter as platforms for the social media activities, which consists in the possibility to share via these two channels any article on the project web site (see Figure 7). Moreover, a Facebook page has been set up and will be maintained during the whole project duration. The home page is shown in Figure 6.

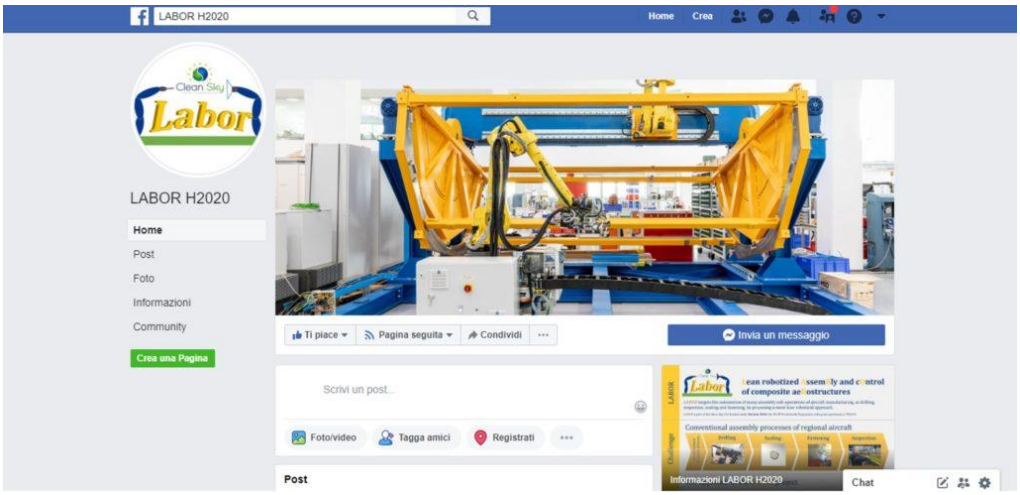

Figure 6 - Facebook page of the LABOR project.

Identifier	Type of dissemination activity [3]	Main Initiator	Title of dissemination activity	Contents of dissemination activity	Date	Place	Type of audience	Approx. size of audience	Addressed countries
C01	Article published popular press	UNICAMPANIA	Uomo-macchina, Opportunità e Sviluppi, Scenari vol. n. 10 "Industria 4.0", inserto de Il Sole 24 Ore	Interview	30/07/2018	Milan, IT	General public	1 M	Italy
C02	Poster	UNICAMPANIA	LABOR project	Poster presentation at ICINCO 2018	30/07/2018	Porto, P	Scientific community	200	Europe
C03	Presentation	UNICAMPANIA	Esperienze di trasferimento tecnologico	Project general presentation	21/03/2018	Caserta, IT	Industrial representatives	100	Italy
C04	Webradio interview	UNICAMPANIA	Presentation of the project	Interview	30/11/2018	Napoli, IT	General public	10 k	Italy
C05	Article published popular press	LOC	Robotica lean e adattativa per l'aeronautica	Article in a magazine	01/04/2019	Milan, IT	General public	1 M	Italy
C06	Poster	TM	LABOR project	Poster presentation @Cleansky	22/05/2019	Linkoping, SW	Cleansky core partners	100	Europe
C07	Poster	UNICAMPANIA	LABOR project	Poster presentation @MakerFaire	18/10/2019	Rome, IT	General public	20 k	Italy
C08	Presentation	UNICAMPANIA	LABOR project	Project general presentation	23/10/2019	Verona, IT	General public	100	Italy
C09	Article published popular press	UNISA	I robot sono cooperanti e collaborativi	Article in a magazine	09/12/2019	Milan, IT	General public	1 M	Italy

[3] Types of dissemination activities to be chosen from: Publication, Conference, Workshop, Web publication, Press release, Flyer, Article published popular press, Video, film or TV clip, Media briefing, Presentation, Exhibition, Thesis, Interview, Poster, Other

Identifier	Type of dissemination activity [3]	Main Initiator	Title of dissemination activity	Contents of dissemination activity	Date	Place	Type of audience	Approx. size of audience	Addressed countries
C10	Article published popular press	UNISA	100 Italian Robotics & Automation Stories 2020	Article in a magazine	05/02/2020	Rome, IT	General public	1 M	Italy

Table 7 - List of communication activities.

Figure 7 – Article sharing via social media platforms.

To assess the effectiveness of the communication activities the KPI in Table 8 will be adopted.

Code	Indicator	Expected Progress			Actual progress	
		After Y1	After Y2	After Y3	Mo24	Mo36
Website	Number of website accesses	500	1500	5000	4500	
Website	Number of posts (incl. Fb page)	8	20	50	16	
Brochure	Total number of brochure distributed	50	150	500	200	
Posters	Number of posters installed in relevant places	10	20	30	7	
Press	Number of publications on paper press	2	5	10	4	
Press	Number of publications on online press	2	6	10	2	
Press	Number of publications on TV/radio	1	2	5	1	

Social media	Number of feedbacks (ask for information) collected. Number of followers and interactions	4	8	50	131	
Video	Number of tutorials and corporate video produced	0	1	1	1*	
Images and Pictures	Photo-Shooting and image book	0	1	1	1*	

Table 8 - KPI for the communication activites – (see video and photo galleries on the web site).*

7 References

[1] Osterwalder, A. and Pigneur, Y. 2010, 18-19. Business Model Generation. A Handbook for visionaries, game changers and challengers. New Jersey: John Wiley & Sons. Inc.