



**ACROBA**  
connect & produce through agile production

## **D7.1 Initial Dissemination & Communication Plan WP7.**

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#### Approval Status

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## 1. Executive summary

The ACROBA project is to be promoted as a platform adaptable to different industrial use cases in production. One of the important factors of success is its capacity to generate interest from the scientific and industrial community whether robotic expert or potential industrial end user, or even student audiences to develop continuous knowledge of the platform. As such, each targeted community has different priorities and interests in the ACROBA project and the communications and dissemination plan have to be tailored accordingly. For that reason, the “Initial Dissemination & Communication Plan” document will be used to create a strong awareness of the project among all target groups and ensure the project achieves its full impact. The plan will be updated during the project, along with a database of stakeholders and technical/scientific networks of interest.

This report details the communication tools that will be developed and used in the framework of the project (visual identity, templates, presentation, videos and other promotional tools), as well as the dissemination activities planned to ensure a proper adoption of ACROBA’s development and results by the targeted communities (industrial, technology providers, scientific, academic and robotics experts).

A thorough monitoring of each communication and dissemination activities will also be implemented to measure the quantitative and qualitative impact of WP7 activities.

## 2. Communication tools and materials

### 2.1. Communication objectives

The main objective regarding communication strategy around ACROBA project is to promote the actions and the results of the project. The communication actions target multiple audiences: general audience, stakeholders, scientific and industrial audience, ... The content will thus vary from specific to more generic based on the target. Although most results will arrive in the last year of the project, it is important to communicate on all types of actions performed during the project life as well as on the project’s activities and results. Different tools will be developed in order to support the specific and varied communication activities.

## **2.2. Communication tools**

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The different communication tools will enable on the one hand to develop the “brand identity” of ACROBA by giving the concept a visual identity which conveys the ideas of innovation, modernity and flexibility. On the other hand, the communication tools will be used to promote the various communication and dissemination activities of ACROBA through the different means and communication channels (print, web, etc.). All communication materials will be saved in the Microsoft Teams workspace, in the section “WP7 – Dissemination and Communication” where each partner has access to the communication resources.

### **2.2.1. ACROBA visual identity**

A book of style has been established in order to define the visual identity of the project for all necessary documents. It includes the colour scheme, the fonts and visual elements to be used in different type of materials, as well as the set of project logos and icon.

#### *2.2.1.1. ACROBA logo*

The ACROBA project logo that includes the baseline “*connect & produce through agile production*” is declined in different versions:



Figure 1 - ACROBA's Logo forms

#### 2.2.1.2. ACROBA font

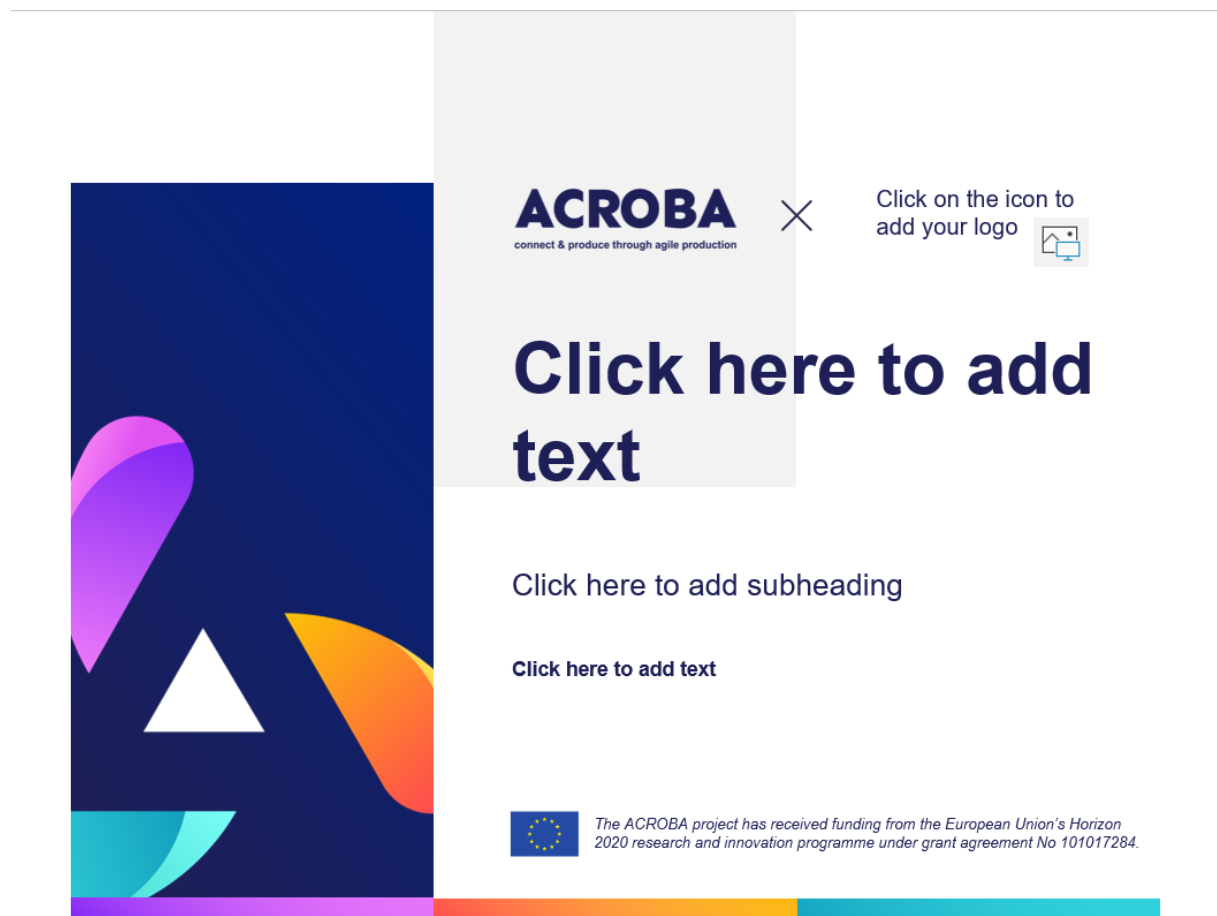
Two free fonts have been chosen for the official documents related to the project. Every partner can download these fonts and use them:

- SEN – Extrabold: for titles (size 40) and content (size 11) in Power Point presentation. The font is not common but has been downloaded and already included in the template provided to all partners.
- ARIAL: for titles (size 14 and 12 depending on the title) and contents (size 11) for word document

### 2.2.2. ACROBA templates

Templates for three kinds of documents have been designed according to the book of styles:

- A PowerPoint template for presentations:



*Figure 2 - ACROBA's PowerPoint template*



- A Word template for official letters:



×



**From**  
**Lorem Ipsum**  
Address  
City  
Phone  
Mail

**To**  
**Lorem Ipsum**  
From Lorem Ipsum  
Address  
City

**Paris, le 04 février 2021**

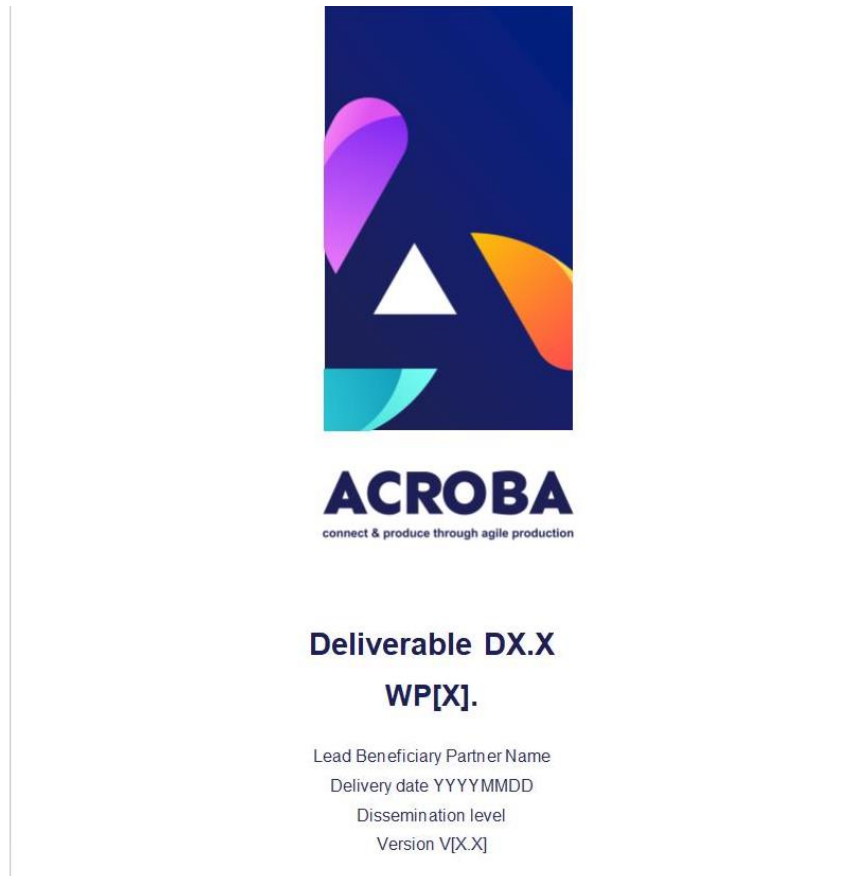
Monsieur Lorem ipsum,

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

*Figure 3 - ACROBA's Word letter template*

- A second Word template for report and deliverables:



*Figure 4 - ACROBA's Word template for reports and deliverable*

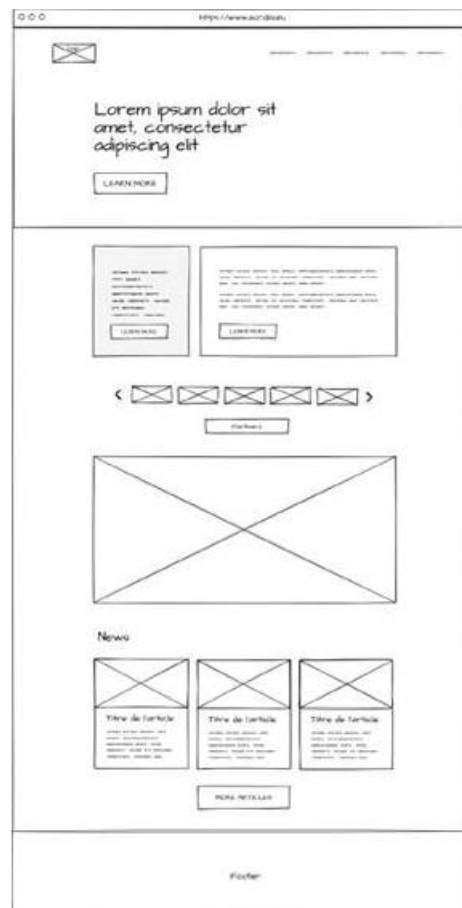
In addition to these general templates, a PowerPoint document featuring general information about ACROBA has been created. The presentation introduces the project partners and their roles in the project, an overview of the project activities, challenges and expected impacts (see full presentation in *Annex 6.2*).

This presentation, as well as all the other templates, have been distributed to all partners in a format that enables modifications (.ppt or .word) so that they can be adapted to their needs and communication objectives when used (short online presentation to potential users, presentation at workshops, or internal presentation...), or as the first section of a larger, tailored presentation when presented to targeted audiences.

Depending on the communication purpose, each partner can also integrate the logo of their company in the dedicated spot in the corner of the PowerPoint template without losing the ACROBA identity.

## 2.2.3. ACROBA online presence

### 2.2.3.1. ACROBA website



*Figure 5 - Wireframe homepage*

The ACROBA website (currently under construction) is accessible at: <https://www.acrobaproject.eu/>. The website is the main online dissemination and communication tool of the project.

It contains information on the project, the consortium, the objectives of the project, the use cases, documents to download, news and events. This information is addressed to various audiences, from scientists and industrial researchers to SMEs, large group, policy makers and the general public.

The ACROBA website is structured in 8 pages:

**Homepage:** the website homepage starts with a photo representing the project, the logo and a catch phrase. As the user scrolls down, there is a brief introduction of the project presenting its objective. Further on the page, there will be the video of the project (or coloured pictures) in order to give the general audience a direct idea of what the project is about. Under the video, three boxes will highlight the latest news and will bring you to the dedicated page “Latest news” if you click on them. At the bottom of the homepage, there is the acknowledgement of EU funding and links to the website plan, contact information, legal notice as well as to the different social media of the ACROBA community.

**Project:** information about the project including description of the concept, summary of the use cases (with a link to the “Use cases” page), project’s objectives, mention of the partners (with a link to the “Partners” page) and the list of activities to be organized by the project.

**Consortium:** list and description of all consortium partners. This page shows the diversity of companies and countries involved in the project by displaying a map of Europe and partners’ country. There is a 10 lines description of each partners, with their logo, city and country.

**Use cases:** description of the use cases, with some lines about the sector, the technology and what is expected from ACROBA’s development.

**Events:** list of future and past events with a small description for each, such as hackathons, participation to conference, workshops, webinars, and instructions on how to participate.

**Latest news:** list of all articles written on the website about the latest developments and activities of the project, news about the partners, ACROBA meetings, strategic publications, etc.

**Documents:** download every official document that provides information about the project (general presentation, poster, factsheet, ...) for a general audience

**Contact:** visitors can fill in the contact form and get involved in the ACROBA community. The contact form is mainly to express interest in the project and the events/trainings that are organized by the project. EMC2 manages the inbox and makes sure the messages are read and distributed to the right persons.

#### *2.2.3.2. ACROBA social media*

The profiles of ACROBA on social networks have been created and will be managed and updated by EMC2 using information provided by all partners, as well as content specifically created by EMC2 and the project coordinator. Accounts were created on YouTube, Twitter and LinkedIn where the number of visits and views will be monitored, and the performance measured. Social media accounts will be updated on a regular basis in order to maintain discussion of the ACROBA project among the target audience. These online platforms are complementary to ensure a proper project communication. As soon as there is a news or an event of the project, it will be announced through the different social media platforms in addition to the project website, in order to generate traffic and reach a wide audience.

Many things are newsworthy for social media, different types of information can be shared through ACROBA social media accounts:

- New steps in the project: new steps in demonstrators, materials sent or received, tests performed, milestones reached, results achieved...
- ACROBA website's articles about the project;
- Project meetings;
- High quality images (robots, cognitive platforms, ...) – this will bring life, dynamism to the project's accounts. Moreover, visual elements work better on social media;
- Relay of the partner's posts related to the project (major progress, ...);
- Vacancies at the universities (or companies) recruiting for the project;
- New dates of the events related to the project (Hackathon);

- Recruiting participants for events and hackathons
- Project videos.

The ACROBA social media accounts (YouTube, Twitter and LinkedIn) will be updated during the project life. It should be noted that any new social media platforms with high impact potential will be evaluated and considered in order to expand ACROBA's communication reach.

#### 2.2.3.2.1 Process

The partners must contact EMC2 whenever they have news to share and provide them with the content. The partners must make sure the information they share for communication purpose is not confidential.

When a new post is shared on ACROBA social accounts (events organised by the project, achievements etc.), the partners are invited to share the information on their websites and/or social media.

Whenever a partner has new content to share, they will contact EMC2 following a common format. This list of basic information is shared with EMC2 using the Teams discussion channel or sent to EMC2 by email at: [marion.poncet@pole-emc2.fr](mailto:marion.poncet@pole-emc2.fr), [etienne.gaultier@pole-emc2.fr](mailto:etienne.gaultier@pole-emc2.fr) EMC2 will also send a monthly reminder to partners through the Teams discussion channel to share any news worthy of communication. The template for sharing news will be as follows:

<b>Date</b>	
<b>Location</b>	City, country / Online
<b>Topic</b>	New equipment, tests, article, events ...
<b>Your text</b>	Describe the new item. What is the message?
<b>Partners involved</b>	Were there other people / structure present?
<b>Target audience of the post</b>	Researcher, technician, business, policy-makers, general audience
<b>Photo</b>	Yes / No

*Table 1 - Template for new items and surveys*

### 2.2.3.2.2 ACROBA accounts on social media

Medium	Username	Type of information	Tags	Partner responsible
<b>LinkedIn</b> <i>Platform for professionals where an ACROBA community will be established</i>	ACROBA project  (created on M3)	<ul style="list-style-type: none"> <li>• Breaking news</li> <li>• Corporate news</li> <li>• Links towards articles (from the project website)</li> <li>• Videos (from the YouTube channel)</li> <li>• Illustration photos</li> <li>• Events organise by the project</li> </ul>	#H2020, #Horizon2020, #EuropeanProject, #robotics, #cobotics, #Acrobaproject	EMC2 + contribution from other partners
<b>Twitter</b> <i>Gathers professional journalists and a more general audience</i>	@AcrobaProject  (created on M3)	<ul style="list-style-type: none"> <li>• Short breaking news</li> <li>• Links towards articles (from the project website)</li> <li>• Videos (from the YouTube channel)</li> <li>• Illustration photos</li> <li>• Events organise by the project</li> </ul>		
<b>YouTube</b> <i>Enables to link videos more easily</i>	ACROBA EU PROJECT  (created on M3)	<ul style="list-style-type: none"> <li>• Host videos realised by the project</li> </ul>	Generic tags can be added under a video: #Acrobaproject, #EuropeanProject, #Robotics	
<b>Wikipedia</b> <i>Can be complementary to the project's website</i>	(creation TBD)	<ul style="list-style-type: none"> <li>• Presentation of the project and its concept</li> <li>• Technical information</li> <li>• Link towards scientific literature</li> </ul>		

Table 2 - ACROBA social media presence

LinkedIn is used to release breaking news as well as corporate news which should remain short. It will display photos, and videos from the YouTube platforms. It can also link towards press articles hosted by this social network or on the project website. It is a platform for professionals, where an ACROBA community will be established. It also gathers corporate accounts and other H2020 projects.

Twitter is used to release short breaking news. It will display photos and videos from the YouTube platforms. It gathers professional journalists, industrials and a more general audience. It works with a system of followers of account, which is useful to keep professionals posted.

Each partner that publishes news on the project is requested to identify @Acrobaproject for Twitter and @ACROBA project on LinkedIn.

A Wikipedia page will be developed (M6) and be dedicated to the presentation of the project and its concept.

#### 2.2.4. ACROBA promotional material

A list of promotional materials has been defined during the project elaboration. Many have already been created and shared with project partners, while others are currently under development.

Tool or material	Partners involved	Status
Logo	EMC2	Delivered
Templates	EMC2	Delivered
General Presentation	EMC2	Delivered
Social network pages	EMC2	Delivered
Website	EMC2 + BFH	To be delivered on M3
Wikipedia page	EMC2 + BFH	TBD
Posters	EMC2	To be delivered on M6
Roll-Up/kakemono	EMC2	To be delivered on M6
Leaflets	EMC2	To be delivered on M6
1 <sup>st</sup> video (introduction of the project objectives and concept)	EMC2	To be delivered on M6
2 <sup>nd</sup> video (results and pilot)	EMC2	TBD

*Table 3 - List of communication tools and materials*

The promotional materials developed will be used during the conferences and events organized within the framework of the ACROBA project. The roll-up and poster will ensure the project's visibility, thanks to their eye-catching nature.



Leaflets should be distributed to promote the participation of ACROBA to events such as business fairs and attract visitors. Factsheets can be distributed to provide more thorough information to the visitors and keep their interest in the project.

#### *2.2.4.1. ACROBA project roll-up, factsheet, poster, leaflets*

At M6, a second batch of communication materials will be released by EMC2. It will include:

- **Kakemono/roll-up:** (vertical hanging banner) to promote the project at fairs. A Kakemono is a visual support that must remain simple to be eye-catching. It will feature the project logo with the baseline, a photo representing the concept, and the logos of the partners as well as the EU funding acknowledgement.
- **Factsheet:** a "factsheet" or brochure aims to present key information about the project. The contents are therefore quite extensive as they aim to be as complete as possible within the space available on the A4 double-sided document.
- **Poster for general audience:** project posters are visual elements that contain little text (e.g., bulleted list with three dots for only three key ideas). They are intended to indicate what the project is about without giving too many details.
- **Promotional leaflet:** to be distributed during events featuring the general information as on the other materials.

EMC2 will develop the first drafts of these materials, with the support of a designer expert, and will submit them to the partners for validation of the content and appreciation of the design, before finalising the support.

EMC2 will distribute digital files to all partners, accompanied with the corresponding print configurations, who are then responsible for printing locally, in accordance with their promotional needs.

These materials will be updated during the life of the project.

#### *2.2.4.2 ACROBA video*

Two videos will be realised by EMC2 within the frame of ACROBA project:

- **First video (due at M6):** will present an introduction of the project objectives and concept for any newcomers to the project, to understand the project ambition and challenges. It will most probably use motion design to visually explain the project's ambition.

- Second video (around M38): will present an update of the project results and showcase the project pilots as successful implementation of the project platform. This video will be based on partners interviews and visit to their facilities.

The goal of these videos is to promote the project to a wider audience and offer a quick and entertaining introduction to the project and its results. The Video can be used in conference and webinars as introduction content.

#### *2.2.4.3. ACROBA press releases*

Each partner is encouraged to make available to its network of journalists its own press release during project lifespan and to try to give interviews about ACROBA challenges and achievements.

The foreseen releases are expected:

1. At the beginning of the project; M1 (January 2021) – already produced and shared with all partners;
2. At the Master Acrobathon; M40 (April 2024);
3. At the end of the project to present the exploitation activities to be carried out after the project lifespan. M42 (June 2024).

The first press release announcing the project launch has been sent to the partners on February 12<sup>th</sup>, 2021 which they can adapt it to their own communication needs and present their role in the project.

The partners are encouraged to publish the press release in an article on the website of their organisation or share the press release with their organisation's profile on social media.

#### **2.2.5. Acknowledgment of EU funding**

It is important to note that any dissemination material on any media will indicate that the ACROBA project received funding from the European Union's H2020 programme, unless the Agency requests or agrees otherwise or unless it is impossible.

The European Union emblem should always make its appearance and when displayed together with another logo, the EU emblem must have appropriate prominence.



Please see below the content that should accompany the media tools used the project:

For communication activities:

*This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017284.*

For infrastructure, equipment, and major results:

*This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017284.*

A Disclaimer excluding Agency and Commission responsibility should be also noted:

*This communication/publication reflects only the author's view. It does not represent the view of the European Commission and the European Commission is not responsible for any use that may be made of the information it contains.*

### 3. Communication monitoring

In order to achieve the successful implementation of Communication and Dissemination activities and surpass the objectives, performance monitoring will be conducted throughout the entire duration of the project.

An online form/report is under creation for reporting all dissemination and communication activities undertaken by project partners. All partners are requested by the dissemination and communication team to report the results of each dissemination activity immediately after they are presented.

The form/report shall include the type of activity performed, dates of duration and frequency, place, target group addressed, geographical coverage (local, regional, national or European), numbers of persons reached, and any other information deemed relevant, such as photos, feedback gathered by the respective partner from the target audience, gained contacts to be listed in the contacts repository for further dissemination purposes, etc.

The upload of these form/reports as well as media files should be done via the Microsoft Teams general repertory on the dedicated Dissemination folder.

A survey, using the tables below, will be sent every three months to all partners in order to collect their social media publication related to ACROBA on one side and participation to events where ACROBA project was presented on the other side. EMC2 will collect basic information from each partner to update the list of activities in which they have participated and monitor partners efforts in communication activities.

Partner's name	Social media post	Date	Content

*Table 4 - ACROBA list of partners social media activities*

Partner's name	Type of communication activities: (Social media post, event participation, press release share...)	Date	Location (if not online)	Target group addressed	Geographical coverage

*Table 5 - ACROBA list of events where ACROBA project is presented*

The monitoring will be performed internally every 3 months and will be used to demonstrate communication efforts in the technical reporting of the project. The tables will be stored online in the Teams share point, so that partners can update it on a regular basis (and at least every 3 months).

These monitoring reports will allow the identification of risks and deviations related to established objectives and performance indicators previously set. Any necessary corrective measures will be taken to address potential implementation problems.

The online presence of ACROBA will also be monitored using specific analytics monitoring software i.e., Google analytics and relevant social media analytics.

In order to evaluate the ACROBA dissemination and communication activities, quantitative indicators and associated metrics have been set up where applicable. The Key Performance Indicators have been established as follows:

No.	Indicator	Method of measurement	Target
1	Project web site / Stats	No. of unique visitors	5000
2	Peer reviewed Articles	No. of published articles	8
3	Articles in industry magazines	No. of published articles	16
4	Participation at conferences (no. of visitors >1000), target events with presentation/ papers	No. of conferences, workshops, events, for attended	12
5	Participation at conference, target events with presentation/poster/paper in proceedings	No. of visitors to presentation / poster / conference booth	1000
6	Organisation of Hackathons	No. of successful Hackathons completed	12
7	Organisation of target events	No. of events organised	6
8	Organisation of target events	No. of participants	400
9	Dissemination to networks and on-going projects. e.g. DIH2, AI Europe, AI4EU, ....	No. networks and on-going projects	10
10	Dissemination to networks and on-going projects	No. of professionals/ organisations	1000

11	Relevant stakeholders' peer-to-peer contact	No. of relevant stakeholders contacted	200
12	Relevant stakeholders involved	No. of relevant stakeholders involved	100
13	Interviews with public media	No. interviews on media	3
14	Movie/clips	No. of published movies/clips	2
15	Press release	No. of press releases published	3

*Table 6 - Communication target to be monitored*

## 4. Dissemination strategy

In order to ensure high awareness of the ACROBA project, extend its outreach and promote its outcomes, dissemination activities will be planned early in the project. This Dissemination and Communication plan outlines the target audiences, key messages and communication channels. This plan will be continuously updated throughout the lifecycle of the project, and with formal updates at M6, M18 and M42. The plan summarizes the roles and responsibilities of the partners and the conditions ensuring proper dissemination of the generated knowledge, related to confidentiality, publication and use of the knowledge.

### 4.1. Target stakeholders groups and dissemination actions

In the interest of global awareness of the ACROBA project, a series of actions to reach out to the different stakeholder groups is planned. Partners of the ACROBA project will ensure that information is communicated in a clear and intelligible manner. For that, the different dissemination and communication plan activities have been tailored to each target group.

**Target stakeholder groups**, in particular from industry as future adopters of the ACROBA Platform, have been identified, classified and segmented. Industrial feedback will be especially important for the definition of the ACROBA solutions and will be considered as part of the requirements. ACROBA has preliminarily identified the following stakeholder groups and intend to update and refine the list in accordance with the growth of relevant knowledge and of the maturity of specific project's results. A review of the targeted stakeholders list will be performed at M6.

Stakeholder group	Interest in the project	Dissemination approach and channels
<b>1: Manufacturers / Agile Production Industry 4.0 Stakeholders</b>  <i>Manufacturing SMEs and large enterprises in healthcare, plastic industry, consumer electronics and electric motors. Other industrial sectors embracing agile production.</i>	<ul style="list-style-type: none"> <li>• Learn/get trained on the project's results</li> <li>• Establish cooperation agreements with related ACROBA partners to adopt the Platform for their production facilities</li> <li>• Participate in the project's events.</li> </ul>	<p>Website; Demo Videos; Presentations at industry-related meetings, tradeshows, and conferences and dedicated individual presentations to decision makers of the industries,</p> <p>ACROBA specific planned events: Hackathons,</p> <ul style="list-style-type: none"> <li>• Webinars,</li> <li>• Demonstration days,</li> <li>• DIH Tour,</li> </ul>
<b>2: Robotics systems manufacturers and integrators</b>  <i>Provider of robotic systems, including sensors and special equipment suppliers, robotic systems integrators.</i>	<ul style="list-style-type: none"> <li>• Learn/get trained on the project's results</li> <li>• Utilise the results to improve their customer's processes</li> <li>• Participate in the project's events.</li> </ul>	<p>Website; Demo Videos; Presentations at industry-related meetings, tradeshows, and conferences and dedicated individual presentations to interested companies.</p> <p>ACROBA specific planned events:</p> <ul style="list-style-type: none"> <li>• Hackathons,</li> <li>• Webinars,</li> <li>• Demonstration days,</li> <li>• DIH Tour.</li> </ul>
<b>3. Industry associations and clusters and DIH</b>  <i>EU and national initiatives and technology clusters that promote and research new manufacturing technologies, e.g. BDVA, FIWARE, also involved into pan-European networks of DIH, in particular DIH2 and TRINITY dedicated to agile production.</i>	<ul style="list-style-type: none"> <li>• Include the project's results in collaborate research activities</li> <li>• Disseminate the results and ACROBA events to their members.</li> <li>• Bilaterally participate in the knowledge exchange.</li> </ul>	<p>Website; Demo Videos; Presentations at industry-related; meetings; Tradeshows, and conferences; Dedicated individual presentations;</p> <p>Exploiting the existing network of each partner</p>
<b>4: IT and professional services</b>  <i>ICT, software engineering and other professional service. companies that provide software or consulting for manufacturing.</i>	<ul style="list-style-type: none"> <li>• Participate in the project's events</li> <li>• Exploit the project's open results or get inspiration for new ideas.</li> </ul>	<p>Website; Demo Videos; Presentations at industry-related meetings, tradeshows, and conferences and dedicated individual presentations; Public workshops.</p> <p>ACROBA specific planned events: Hackathons,</p> <ul style="list-style-type: none"> <li>• Webinars,</li> <li>• Demonstration days,</li> <li>• DIH Tour,</li> </ul>
<b>5: Academia and Researchers</b>	<ul style="list-style-type: none"> <li>• Advance the project's research,</li> </ul>	<p>Articles in scientific journals; participation at international conferences and forums.</p>

<i>Individuals and organisations engaged in Industry 4.0 research.</i>	<ul style="list-style-type: none"> <li>• extend the innovations to other areas of application</li> <li>• Inspire future research initiatives</li> <li>• Participate in the project's events.</li> </ul>	ACROBA specific planned events: <ul style="list-style-type: none"> <li>• Hackathons,</li> <li>• Webinars,</li> </ul>
<b>6: Public Authorities/Agencies and Ministries</b>  <i>Public authorities interested in the industrial development, including Standardisation and certification authorities for robot systems</i>	<ul style="list-style-type: none"> <li>• Evaluate the project's impact</li> <li>• Consider project's experience for further research or innovation initiatives</li> <li>• Get input for standardisation activities.</li> </ul>	Website. Participation to public event dedicated to policies and innovation. Direct contact.
<b>7: General public</b> <i>Worker unions, civil society representations.</i>	Understand the innovation activities and the benefits on social improvement.	Website, video, flyers and poster

*Table 7 - Target groups of stakeholders for dissemination and communication*

A stakeholder database is already under preparation by IMR and gathers all technical and scientific networks and structures of interest for dissemination activities. This database will be finalised at M6 and saved in the Microsoft Teams workspace.

The database will be regularly updated, notably after each event organised during the project where participants will be asked to join our database.

DIHs					
June 2020					
DIH	address	city	member state	website	email
3IF.be & 3IF.be Fieldlab	Kasteelpark 10	Heverlee	Belgium	<a href="http://www.3if.be">http://www.3if.be</a>	<a href="mailto:ulrich@3if.be">ulrich@3if.be</a>
Everis DIH	Reu de Spa, 8	Brussels	Belgium	<a href="http://www.everis.com">http://www.everis.com</a>	<a href="mailto:patricia.jimenez@everis.com">patricia.jimenez@everis.com</a>
Flanders' FOOD, FF	Wetenschapsstraat 14a	Brussels	Belgium	<a href="http://www.flandersfood.com/">http://www.flandersfood.com/</a>	<a href="mailto:Veerie.rjckkaert@flandersfood.com">Veerie.rjckkaert@flandersfood.com</a>
IMEC	Kapeldreef, 75	Leuven	Belgium	<a href="https://www.imec-int.com/en/home">https://www.imec-int.com/en/home</a>	<a href="mailto:Stefan.VanBaelen@imec.be">Stefan.VanBaelen@imec.be</a>
Institute for Agricultural and Fisheries Research	Burg, Van Gansberghelaan 115 bus 1	Merelbeke	Belgium	<a href="http://www.ilvo.vlaanderen.be">www.ilvo.vlaanderen.be</a>	<a href="mailto:Jurgan.Vangeyte@ilvo.vlaanderen.be">Jurgan.Vangeyte@ilvo.vlaanderen.be</a>
Réseau LIEU – Liaisons Entreprises-Université	Passage des Déportés 2	Gemboux	Belgium	<a href="http://www.reseau.lieu.be/en">http://www.reseau.lieu.be/en</a>	<a href="mailto:director@reseau.lieu.be">director@reseau.lieu.be</a>
Sirris Hub / Data and software Innovation	BluePoint Brussels Reyerslaan 80	Brussel	Belgium	<a href="http://www.sirris.be">http://www.sirris.be</a>	<a href="mailto:wim.codenise@sirris.be">wim.codenise@sirris.be</a>
Sirris Hub/smart product	Sirris Liege Science Park Rue Bois St-Jean 12	Seraing	Belgium	<a href="https://www.sirris.be/">https://www.sirris.be/</a>	<a href="mailto:thierry.coutelier@sirris.be">thierry.coutelier@sirris.be</a>
Algebra LAB DIH	Ilica 242	Zagreb	Croatia	<a href="https://www.algebra.hr/lab/">https://www.algebra.hr/lab/</a>	<a href="mailto:caroline.Mair@sirris.be">caroline.Mair@sirris.be</a>
Cyprus Digital Innovation Hub (CyRIC)	28th Octovriou Avenue, Engomi, 72	Nicosia	Cyprus	<a href="https://www.cyric.eu/cyri_hub/">https://www.cyric.eu/cyri_hub/</a>	<a href="mailto:olivier.gramaccia@sirris.be">olivier.gramaccia@sirris.be</a>
Aarhus University/DITCOM	Langelandsgade 139	Aarhus	Denmark	<a href="https://ditcom.au.dk/">https://ditcom.au.dk/</a>	<a href="mailto:leo.mrsic@algebra.hr">leo.mrsic@algebra.hr</a>
MADE - Manufacturing Academy of Denmark	Vesterbrogade 1E 2nd floor	Copenhagen	Denmark	<a href="http://MADE.dk/">http://MADE.dk/</a>	<a href="mailto:info@cyric.eu">info@cyric.eu</a>
Intelligent Industry ecosystem	Eteläranta 10	Helsinki	Finland	<a href="https://intelligentindustry.dimecc.com/">https://intelligentindustry.dimecc.com/</a>	<a href="mailto:antonish@cyric.eu">antonish@cyric.eu</a>
Super IoT	University of Oulu Pentti Kaiteran katu 1	Oulu	Finland	<a href="http://www.superiot.fi">http://www.superiot.fi</a>	<a href="mailto:ahe@cc.au.dk">ahe@cc.au.dk</a>
Cap Digital	14 rue Alexandre Parodi	Paris	France	<a href="http://www.capdigital.com/">http://www.capdigital.com/</a>	<a href="mailto:brynskov@cavi.au.dk">brynskov@cavi.au.dk</a>
CITC-EuraRFID	165 avenue de Bretagne	Lille	France	<a href="http://www.itocluster.fr">http://www.itocluster.fr</a>	<a href="mailto:nfedmondson@made.dk">nfedmondson@made.dk</a>
DIGIWEST (Images et Réseaux)	4 rue ampère	Lannion	France	<a href="http://www.images-et-reseaux.com/fr">http://www.images-et-reseaux.com/fr</a>	<a href="mailto:antti.karjalainen@imecc.com">antti.karjalainen@imecc.com</a>
Faubourg Numérique	101 rue du général Leclerc	Saint-Quentin	France	<a href="http://faubourgnumerique.com/">http://faubourgnumerique.com/</a>	<a href="mailto:jukka.jokitalo@oulu.fi">jukka.jokitalo@oulu.fi</a>

*Figure 6 - Stakeholder database*



This dissemination plan includes all the activities to be carried out during the project. These are detailed below, along with the target groups addressed and the communication channels to be used in each case.

## **4.2. Dissemination to the scientific community**

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Dissemination activities toward the scientific community will be carried out through publications in scientific conferences and in peer-reviewed journals by prioritizing open access journals and event. The link to these publications and congress proceedings will be uploaded on the project website to facilitate the access for potential readers. Further opportunities of scientific interactions will be pursued through open scientist's network.

### **4.2.1 Scientific publications of results in high impact peer-reviewed journals**

The consortium estimates that at least 8 technical papers will be published during the timeframe of the project. A tentative list of publication topics has already been defined :

- Critical Robot Autonomy in Agile Production
- Organizational change in reaction to the implementation of robots
- Effectiveness of the (training) interventions (empirical paper and Intervention protocol paper)
- Digital-Twin based Validation of Safe Human Robot Interaction
- Novel Robot programming methodologies for Human Robot collaboration
- Multi-modal-robotic perception, control and planning for contact-based tasks with generalization based on DRL

The scientific journals for publication will be selected based on several criteria such as:

- Number of subscriptions
- Price
- Technical content

The table below will be completed during all the project and updated at M6. Thanks to the criteria above, AITIIP, BFH, BIBA, DEU and SIG selected several journals relevant for ACROBA to publish technical papers.

Scientific journals	Dates	Editorial Group	Target Group
<b>Robotics and Computer-Integrated Manufacturing</b>	Volume releases every 2 months	Elsevier	Scientific community, including relevant industry and sectors
<b>International Journal on Advanced Manufacturing Technology</b>	Volume releases every 2 months	Springer	Scientific community, including relevant industry and sectors
<b>Journal of Mechanical Engineering and Automation</b>	Volume releases every year	Open access Scientific & Academic Publishing	Scientific community, including relevant industry and sectors
<b>International Journal of Advance Robotic Systems</b>	Volume releases every year	Sage Publication	Scientific community, including relevant industry and sectors
<b>The International Journal of Robotics Research</b>	Volume releases every year	Sage Publication	Scientific community, including relevant industry and sectors
<b>Advances in Mechanical Engineering</b>	Volume releases every year	Sage Publications	Scientific community, including relevant industry and sectors
<b>The IEEE Transactions on Robotics</b>	Volume releases every year	IEEE	Scientific community, including relevant industry and sectors
<b>IEEE Intelligent Systems</b>	Volume releases every year	IEEE	Scientific community, including relevant industry and sectors
<b>Journal of Intelligent Manufacturing</b>	Volume releases every year	Springer	Scientific community, including relevant industry and sectors
<b>Journal of Applied Intelligence</b>	Volume releases every year	Springer	Scientific community, including relevant industry and sectors
<b>IEEE Robotics and Automation Letters</b>	Volume releases every year	IEEE	Scientific community, including relevant industry and sectors

*Table 8 - Selections of relevant journals per target group*

#### 4.2.2 Conferences

During the project, information about the major scientific and technical achievements will be presented in different national and international events. Participation will be subject to selection and further integration during the project. ACROBA will participate in **at least 12 high impact European or international robotic events** during the project's life, in order to search for synergies and possible collaborations with relevant stakeholders. The current health situation is very likely to limit the number of planned events, as regular forums and trade fairs are either cancelled or being held online. Whenever possible, ACROBA will maintain its participation to events (online events and publication) and will update its plan accordingly with the situation.

Preliminary key messages to stand out in the submission of abstracts will be related to: critical-scale multi-agent; deep reinforcement and transfer learning creating distributed robot perception capabilities, Human motion tracking systems, collision avoidance, certifiable solution.

All partners will be involved in the dissemination of the project at conferences, taking advantage of conferences they usually attend and participating to additional ones.

Before any events organized by ACROBA, an article will be published on the website in order to present the event and encourage people to participate. The articles will be shared on ACROBA's social media. The partners are encouraged as well to share the article on their company's social media in order to reach as large an audience as possible.

At the end of each event, an article on the website will summarize and give the main outcomes of the event.

Conference	Dates location	& Type of event	Target Group
<b>International Conference on Innovative Applications of Artificial Intelligence</b>	M13 – M36 (2022 – 2023)  Annual event (February – North America)	Technical Conference	Scientific community, including relevant industry and sectors
<b>International Conference on Robotics and Automation</b>	M13 – M36 (2022 – 2023)  Annual event (May/June – Worldwide)	Technical Conference	Scientific community, including relevant industry and sectors
<b>European Robotics Forum</b>	M4 - M13 – M36 (2022 – 2023)  Annual event (March/April – Europe)	Exhibition, Conferences	Industrial and scientific
<b>European robotic week</b>	M13 – M36 (2022 – 2023)  Annual event (November – Europe)	Exhibition, Conferences	Academia and Researchers Industrial
<b>Hannover Messer</b>	M13 – M36 (2022 – 2023)  Annual event (April – Germany)	Exhibition	Industrial
<b>HiPEAC Conference</b>	January 2022,2023,2024 (Europe)	Exhibition, Conferences, Seminars, workshops	Students, Academia, Research of Computer Systems, Computer Architects, Design tool builders, System designers,
<b>HiPEAC Computer System Week</b>	Spring/Autumn 2021, 2022,2023,2024 (Europe)	Seminars, workshops, EU project exhibition	Students, Academia, Computer Architects, Design tool builders, System designers,
<b>ACM CHI Virtual Conference on Human Factors in Computing Systems</b>	M5  May 2021 (Japan)	Technical Conference	Scientific community, including relevant industry and sectors
<b>International Conference on Autonomous Agents and Multiagent Systems</b>	M17 – M29 – M41  May 2022, 2023, 2024 (Europe)	Technical Conference	Scientific community, including relevant industry and sectors
<b>International Conference on Intelligent Robots and Systems</b>	M13 – M36 (2022 – 2023)  Annual Event (Sept./Oct.) Worldwide	Technical conference	Scientific community, including relevant industry and sectors.

*Table 9 - Selection of relevant events per target group*

## 4.3 Dissemination to industrial stakeholders

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### 4.3.1 Dissemination and training workshops

The training and dissemination workshops are planned to raise awareness of ACROBA projects result and application to other industrial sectors, among the industrial audience. They will be divided in 2 types of events:

#### *4.3.1.1. Demonstration Open Days*

This action will ensure the promotion of the ACROBA Platform as an attractive innovative technology able to adapt to any industrial scenario, allowing the roll out of fast deployment of advanced robotic solutions in agile manufacturing industrial lines in EU, and especially for SMEs.

#### **Objective and targets**

Real, in context demonstration is the best way to understand the technology and assess its potential for process improvement and ease of implementation. The targeted audiences for this action are industrial players, willing to know more about ACROBA universal cognitive robotic platform. The ease of implementation of the platform will make the solution very attractive for SMEs which will also be our main target for the Demonstration Open Days. Large manufacturing companies will also be involved.

Manufacturing industrials, with special emphasis on SMEs, will be invited to visit the demonstrators and follow a workshop on IA driven cognitive abilities in robotics aiming at identifying a relevant use-case to implement the project results on their production process. DIH representatives will be invited to co-present by pitching industrial solutions on the market that could benefit to the audience. Profiles expected to attend are process engineers, production engineers, robotic integrators. Registration will be open to any interested industry stakeholders, with a target of 40% of SME participation.

### Evaluation & follow-up indicators

Participants will be required to register to the event and specify information about their expectations of the day and their business. They will be asked to sign an attendance sheet and will indicate that they consent to the use of their data (for newsletter distribution and integration of ACROBA stakeholders database). The list of participants will also be used to report number of participants to the EC. At the end of each day, attendees will be asked to answer a “satisfaction survey” in order to measure the impact qualitatively. The consortium will ensure the respect of the General Data Protection Regulation (GDPR), participants information will be stored in EMC2 servers, and data will be shared only with the explicit consent of each participant.

The key performance indicator for this dissemination event will be the total number of participants. It will be monitored by EMC2, as *WP7 leader*.

### Places and organizers

**4 workshops at local level** will be organized by the partners in charge of the pilot deployments in each of the locations (ES, DE, RO, IE). These days **will be organized by each end-user** (CABKA, MOSES, VIC, STER, ICPE, STAM) at their production site as well as AITIIP and DEU in their showroom to introduce their robotic system developed and powered under ACROBA platform. Involved partners will support each end-user in the organisation and hosting of the workshops and contribute as speakers themselves during the workshop, introducing their work in the project.

Organizer	Partners involved	Location	Targeted number of participant
CABKA	VIC	Germany	20
STER	AITIIP	Ireland	20
ICPE	STAM	Romania	20
DEU	MOSES	Spain	20

*Table 10 - Organisation plan for Workshops*

Each event will follow a similar agenda, beginning with an introduction to the project, presentation of the stakeholders, presentation of specific use-cases, technology demonstrations, conclusions and networking.

#### 4.3.1.2 DIH Robotic Days

These days aim at exploiting synergies within Digital Innovation Hub (DIH) Networks. EMC2 and ROB as clusters and IMR as DIH<sup>2</sup> partners will each organize a robotics day at their facilities with the aim of engaging, brokering and guiding SMEs to the network, as well as connecting to investors. 3 Robotic days will be organized.

#	Date	Partners concerned	Engagement Technique	Moments to Disseminate information	Expectations	Target Group
<b>Demonstration Open Days</b>	M30 - M36	Leader: EMC2  CABKA, MOSES, VIC, STER, ICPE, STAM, AITIIP, DEU	Direct Mailing; Flyers; Social Media	3 months before each open days	One day per partner concerned, presentation of the demonstrator, following by a workshop and a pitch from DIH representatives	Manufacturing industries embracing Agile production Principles EC projects
<b>DIH Robotic Days</b>	M25 – M36	Leader: EMC2  Concerned: ROB, IMR	Direct Mailing; Flyers; Social Media	2 months before each DIH robotics days	One day per cluster/ DIH <sup>2</sup> partner.	Manufacturing industries embracing Agile production Principles EC projects

*Table 11 - Dissemination plan for Demonstration Open Days & DIH Robotic days*

#### 4.3.2 Training courses and Webinars

##### Objective and targets

The training courses and webinars are designed for professionals and students. Such training sessions aim to raise awareness about ACROBA results and interest in robotic solutions for agile manufacturing in general, but specifically the objective is to train current and future professionals in robotic platforms and ensure (1) interest for ACROBA solution and (2) ease of integration of the platform for further replication. Target audiences will be engineering students on one hand, and professionals on the other side, mostly R&D managers, process and production engineers, technicians with experience and/or interest in robotics will be invited as well.

### **Evaluation & follow-up indicators**

Participants will be required to register to the event and specify information about their expectations of the day and their business. They will be asked to sign an attendance sheet and will indicate that they consent to the use of their data (for newsletter distribution and integration of ACROBA stakeholders database). The list of participants will also be used to report number of participants to the EC. At the conclusion of each event, attendees will be invited to answer a “satisfaction survey” so the impact can be measured qualitatively.

The key performance indicator for such dissemination event will be the total number of participants. It will be monitored by EMC2, as *WP7 leader*.

#### *4.3.2.1 Webinars*

These webinars will give an extensive presentation of the project and ACROBA platform. Webinars will be open to any industrial professional but also scientific and research centre willing to learn about cognition in robotics and the ACROBA platform. The participants will be register to the event. The presentation of these webinars will introduce the audience to the technical concept of the project and its impact on production in agile manufacturing.

Commonly like for every event of the ACROBA project, they will be asked to sign an attendance sheet and consent data so the consortium can report to the EC, and will be invited to fill a “satisfaction survey” in order to ensure the quality of project events.

Organizers: IMR, AITIIP, NUTAI and IKOR.

#### *4.3.2.2 Training courses to professionals*

These courses will be prepared and held by AITIIP. IMR, IKOR, VIC and NUTAI will also exploit the contents for personalized training for integration of ACROBA or maintenance.

Training will be organized in several premises of ACROBA's partners: AITIIP, IMR, IKOR, NUTAI.

During these trainings, other partners can contribute together to make more practical cases for these courses. For example, MOSES providing a demo case for the AITIIP training course.



The target audience for this action are industries and SMEs in particular, interested in automating their manual processes, implementing new robotic solutions into their production line and acquiring transversal skills in industry 4.0 technologies. Professionals expected to attend are process engineers, production engineers, R&D managers. With this training course, we aim to further explain the potential of the ACROBA platform and train professionals to implement such robotic solutions into their own premises, as successful implementation stories will be presented as demo cases.

A maximum of two representatives per companies will be selected on a “first come first served” basis, provided that their business has proven relevance with the ACROBA project.

Organizers: IMR, AITIIP, NUTAI, VIC and IKOR.

#### 4.3.2.3 Lectures to students

Academic partners (DEU, BFH, BIBA, SIGMA) will use ACROBA use-cases as examples and create engineering practical exercises with the platform.

The target audience for this action are the schools and university learning about production engineering, computer science and industrial engineering.

The academic partners will integrate the first results of the ACROBA platform on their lectures.

#	Date	Partners concerned	Engagement Technique	Moments to Disseminate information	Expectations	Target Group
<b>Webinars</b>	M9 – M13  M21 – M25	Leader: EMC2  IMR, AITIIP, NUTAI, IKOR	Direct Mailing; Website; Social Media; (Ask for consent data)	Before (one month), during and afterwards (surveys)	4 webinars organized in total (1 per partner)	Manufacturing industries embracing Agile production Principles
<b>Training courses to professionals</b>	M21 – M24  M27 – M30	Leader: AITIIP  IMR, NUTAI, IKOR, VIC	Direct Mailing; Website; Social Media; (Ask for consent data)	Before (one month), during and afterwards (surveys)	2 SMEs accompanied Thirty hours of accompaniment	Manufacturing industries embracing Agile production Principles, with special focus on SMEs
<b>Lectures to students</b>	M12 - M15  M24 – M27	Leader: EMC2,  DEU, BFH,	Direct Mailing; Website; Internal implication of student from academic partners. Social Media	during and afterwards (surveys)	Thirty hours per school subject and per promotion	Public, NGOs, supporters and schools and universities

		BIBA, SIGMA				
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*Table 12 - Dissemination plan for Webinars and Online lectures*

### 4.3.3 Virtual Exhibition of pilots

#### Objective and targets

To stay in the theme of robotics and digital transformation, a Virtual Exhibition of pilots will be organized by NUTAI. ACROBA experimental pilots will become showcases where wider audiences can see innovative technologies in a virtual exhibition space.

The virtual exhibition will be organized in the last 6 months of the project to present the final use cases and their functional operation. This online showcase will become by the end of the project the entry point for anyone willing to learn more about ACROBA and cognitive robotics applied to agile manufacturing.

Each ACROBA pilot will be presented in a day on a virtual place, generated with a virtual meeting platform able to support the ACROBA global virtual technological event online, where each attendee will be able to travel from a virtual room to another.

The objective is to demonstrate the relevance ACROBA platform and simulate exhibitions in a virtual environment.

The targeted audience are industrials from robotics, scientific communities, European projects partners and European commission members.

The material used for this exhibition can't be defined at this early stage of the project, it will be studied according to the development of the project and the guidelines will be updated on the next draft of the plan, scheduled at M6.

#	Date	Partners concerned	Engagement Technique	Moments to Disseminate information	Expectations	Target Group
<b>Virtual Exhibition of pilots</b>	M30 - M36	Leader: NUTAI  Concerned: ALL	Direct Mailing; Flyers; Posters; Website;	Before the celebration of the virtual exhibition, while it is ongoing (live with updates)	To gather as much information as possible about the attendee's event activity history. It will lead us to understand their	Industries, SMEs, Robotic expert, Robot and Cobot manufacturing companies, CSIs (

			Social Media; Virtual Exhibition Mobile app	using social networks) and After the event, to gather information and feedback for ACROBA project- (virtual exhibition App ev ent activity history and data base)	interest on ACROBA, from the industrial sector and scientific/technological field.  Leverage the event marketing and management tool to understand the concerns that the implementation of new technologies bring.  ACROBA real experimental pilot use cases will become showcases where wider audiences (stakeholders, technical and scientific networks) can see innovative technologies framed in indu stry 4.0 in a virtual exhibition space.	Certified System Integrators),-scient ific community. EC projects European Commission
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*Table 13 - Dissemination plan for Virtual Exhibition*

#### 4.3.4 ACROBA Hackathons

Another interesting measure to maximize the impact of the project is the realization of several hackathons as a tool to drive the ACROBA solution to address pressing real-life business problems and social issues. Hackathons are contests between teams of developers aiming at rapidly solving technical issues and paving the way for the exploitation of the minimum viable product (MVP) created, usually within 48 hours. Hackathons have some clear advantages for ACROBA over traditional innovation management processes.

They are inclusive, agile, promote multidisciplinary collaboration, and have shorter innovation cycles that are better suited to address fast-changing consumer demands. Hackathons runners will build 'proof of concept' and a MVP for a specific predefined manufacturing problem identified as requiring an agile production solution. Each contest will result in several functional basic applications of a robotic system powered under ACROBA platform.

#### *4.3.4.1. Hackathons opportunities*

These events will create the opportunity to:

- Identify lacking features of the platform and improve the modules of the platform (e.g by providing content to the deep-learning module),
- Disseminate the platform towards all targeted audience group,
- Strengthen linkages with the robotics DIH.

#### **Objectives and target**

Hackathons are to be considered as a mechanism to co-create the ACROBA solution thus increasing its excellence and to maximise impact of the project by enabling the early adoption of the platform by the community. ACROBA platform involving into many use-cases, the most important objective of these events is to create new concepts and ideas that could fit with agile production expectations. Also, rapidly discovering a diversity of many problematics from prototypes, into potentially ACROBA platform, into real new use-cases.

These Hackathons are open to Academics (students, researchers & experts) and Industrials (R&D engineers, start-up developers) as participants.

Manufacturing companies can participate in the hackathons as use-case providers and visitors. Finally, people from press, politicians, public servants, activists & innovation hub could participate as societal observers.

#### *4.3.4.1. Hackathons setup*

ACROBA will set up hackathons with. 11 mini-hackathons from M20 to M36 culminating in a cross-border master-hackathon happening on M40: the master-hackathon which will be organized by EMC2. The “master-hackathon” will be the final of the championship gathering teams that ranked 1st at each mini-hackathons.

8 mini-hackathons will be organized by consortium members as described in the following table. In addition, 3 mini-hackathons will be organized by DIH. DIH orchestrators will have to provide a use-case of agile production coming from a manufacturer of their region. Two DIH will be supported by ROB, and one by EMC2, with guidelines and meetings at their facilities

two days ahead of the event to help to settle the details and promote ACROBA with a dedicated booth on site during the event.

Organizer	Title of the Mini-hackathon	Use-case
<b>BIBA</b>	AI for safety-critical industrial applications	Specific: Human-Robot collaborative assembly of power transformers
<b>DEUSTO</b>	Innovative robotic architectures	Generic: technical challenges of WP1
<b>EMC2</b>	Industrial system for manufacturing extra-large parts	Specific: Additive manufacturing of metal parts such as moulds
<b>IMR</b>	Generic Robot Manipulation Skills	Generic: IMR Generic test bed
<b>ROB</b>	Intelligence for a production line	Specific: Manufacturing of plastic or metal parts.
<b>SIGMA</b>	Robotic Perception & Control	Generic: technical challenges of WP2
<b>STAM</b>	Human-robot collaboration	Generic: WP5 use cases
<b>VICOM</b>	Real-time robot simulation	Generic: Specific robot integration, Object tracking, Parameter identification

*Table 14 - ACROBA Mini-Hackathons description and scope*

Out of the 11 mini-hackathons, 8 will require manufacturing partners to provide industrial use-cases. The DIH organizing the further 3 mini-hackathons will be selected on the bases of a call for expressions of interest that will include the capacity to provide SME industrial use case as basis for the mini-hackathon challenge.

There will be two kinds of rewards for hackathon runners. No money will be directly awarded to the winners, however ACORBA will define in-kind prices:

- Mini-hackathons: Award will be defined and updated in the next communication and dissemination plan. Award will be selected to be attractive to participants and maximize team registration (to the equivalent value of €1000 per team for the 3 teams ranking 1st, 2nd, & 3rd).
- Master-hackathon (Acrobathon): Award will be defined and updated in the next communication and dissemination plan (to the equivalent value of €1000 per team, for the 3 teams, ranking 1st, 2nd, & 3rd) in addition to a one-pager article in a relevant international magazine such as “service robots” of the International Federation of Robotics.

Each mini-hackathon is estimated to gather 9 teams of 3 hackathons runners. There will be 8 consortium mini-hackathons, 3 DIH managed mini-hackathons **and 1 master-hackathon that should involve some 300 people** as participants.

Teams will be able to register online for the hackathons. Selection criteria will involve gender consideration to encourage the participation of female developers, as well as the relevance of each team's experience.

Concerning hackathon juries, they will be selected by each organizer. This jury will be composed of 2-3 members from different the member companies of each organiser

Hackathon juries will also include women, to encourage female participation in engineering studies.

This jury will have to evaluate on the following criteria:

- Technical complexity
- Originality
- Usefulness (adaptability)
- Impact on productivity

#	Date	Partners concerned	Engagement Technique	Moments to Disseminate information	Expectations	Target Group
<b>Hackathons</b>	M20 - M36	Leader: EMC2  Concerned : BIBA, DEU, SIG, IMR, STAM, VIC, ROB	Direct Mailing; Website; Social Media Registration campaign; Collaborating with the administration of a school/university	Before, during and afterwards (dissemination of results)	8 events with 9 teams of 3 hackathons runners	Manufacturing industries embracing Agile production Principles Public, NGOs, supporters and schools Scientific community, including relevant industry and sectors
<b>DIH Hackathons</b>	M20 - M36	Leader: EMC2  Concerned : ROB	Direct Mailing; Website; Social Media Registration campaign; Collaborating with the administration of a	Before, during and afterwards (dissemination of results)	3 events with 9 teams of 3 hackathons runners	Manufacturing industries embracing Agile production Principles Public, NGOs, supporters and schools

			school/university			Scientific community, including relevant industry and sectors
<b>Master-Hackathon</b>	M40	Leader: EMC2	Direct Mailing; Website; Social Media Registration campaign	Before, during and afterwards (dissemination of results)	1 event with 9 teams of 3 hackathons runners	Manufacturing industries embracing Agile production Principles Public, NGOs, supporters and schools Scientific community, including relevant industry and sectors

*Table 15 - Dissemination plan for Hackathons*

#### 4.3.5. ACROBA On-Site Lab (AOSLs) for manufacturing SMEs

ACROBA will stimulate the uptake of novel intelligent technology by EU manufacturing SMEs trying to be agile in production by implementing Artificial Intelligence (AI) solutions into their production processes.

It is this knowledge that will be further exploited with the execution of the ACROBA On-Site Lab (AOSLs) for manufacturing SMEs.

##### 4.3.5.1. AOSLs objectives and process

ACROBA will implement the AOSLs via two ACROBA partners involved in DIHs (ROB in ROBOCOAST in Finland and IMR as the Irish DIH and as a DIH<sup>2</sup> partner in Ireland) directly benefitting EU manufacturing SMEs. The objective of an AOSL is the implementation of a robotics solution to answer a current manufacturing problem the SME is facing on their Digital Transformation (DT) journey. The robotics solutions must be developed, integrated, and “powered” under the ACROBA platform. AOSLs will enhance and accelerate the “Assessing feasibility and replicability of the platform” as detailed in Task 6.4.2 manufacturing SMEs (one per DIH) will be selected from the larger regional industrial ecosystem of the DIH based on the following criteria:

- manufacturing SMEs from DIH network interesting to have AOSLs in their premises.
- the digital maturity of the manufacturing SME (mid-way/TRL5 on their DT) before the AOSL as observed by the DIH.
- the greatest return on investment for ACROBA and the manufacturing SME.

The selection will be organized by the respective DIHs (ROB and IMR) in full cooperation with technical support from BFH. The final selection and project findings will be documented in a news piece on the project website and related social media posts. In addition, after the AOSL the manufacturing SME will – together with the DIH – produce a report on the findings of the AOSL to further improve the ACROBA offering.

The AOSL will resource the manufacturing SME with ‘direct personnel costs’ and the associated ‘other direct costs’ for carrying out the effort. The available budget will dictate the scope of the AOSL. The personnel will include a Technologist in Residence (TiR) and an Entrepreneur in Residence (EiR) for the duration of the AOSL from the respective DIH. The TiR at ROB and IMR, with BFH, will support the technical functions (specifically integration/testing/knowledge exchange related to the solution) and the EiR at ROB and IMR will support the business case for sustainability of the AOSL results for the manufacturing SME and the ACROBA project.

The timing of the AOSL will include a two-month preparation, starting on M24; the execution in three-month timeline; and a report issued two months afterwards.

The AOSL will have access to the associated experts via BFH in order to ensure these aspects are fully addressed.

#### **4.4 Dissemination and networking with DIH and industry associations:**

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DIH and Industry associations are the first point of access to industrial ecosystems. To ensure the successful dissemination of the projects activities and results and to maximize project



replication potential to a large range of industries and sectors, we will build strong relationships with European Digital Innovation Hub and develop a network of DIH and industry associations.

- **DIH Tour:**

5 workshops DIH tours will be organized by EMC2 and ROB to present the project and explore further replication of the concept in other sectors implementing the methodology of creativity seminars. 3 of them will be organized by EMC2 and 2 by ROB. The DIH Tour will begin in M16.

The DIH tours aim at bringing added value to the 5 ACROBA pilots, and inversely, recognize where the pilots can add value to the DIH Network. Indeed, interaction with DIH will allow ACROBA partners to integrate DIH feedbacks and desired features into the platform and ensure its replicability to other industrial sector and type of production. Meanwhile, ACROBA's network of DIH will also be able to add ACROBA's solution to their portfolio of robotics solution to be showcase to their respective ecosystem.

These workshops will specifically be open to robotics stakeholders and industrial community reached through the communities of DIH<sup>2</sup>, TRINITY, RODIN, ROSIN, and DIH.NET.

- **Project Clustering Activities**

They will be pursued in collaboration with similar objectives of EU projects or national / regional projects aiming to identify and explore value-adding activities in further exploiting and disseminating project results. The opportunities of clustering with other projects selected for a grant within the same or compatible Horizon 2020 topics will be pursued as much as possible, so to minimize the replication of similar activities and to exploit any possible synergy. ACROBA will also maintain direct communications with the European Commission, European Network of National Contact Points (NCPs) involved in the H2020 challenge of Leadership in Enabling and Industrial Technologies.

The aim is to develop interconnections between other members from DIH and H2020 projects, with a view to creating future consortia for European projects.

EMC2 will be in charge of mapping the possible connexion with European robotics projects and initiatives and will develop activities to ensure the development of strong links.

Every consortium partner involved in other European R&D projects or relevant EU initiative will be involved in the development of clustering activities.

Several actions are plans to further develop ACROBA connexion with existing project and European initiatives:

- Research and mapping of possible synergies with other European R&D project (Table below listing the projects)
- Meetings and discussion between ACROBA consortium members and participants of targeted European R&D projects. E.g: presentation of one or several project during ACROBA steering committee, visit one or several projects demonstrators if location is close...
- Definition of an Opportunity analysis (like a SWOT analysis)
- Define networks relationship with other European initiatives (e.g: Memorandum of Understanding).

Acronym / Duration	Partner	Know-how to be applied in ACROBA
<b>MEGAROB</b>	AITIIP	Development of a flexible, sustainable and automated platform for high accuracy manufacturing operations using spherical robot and laser tracker on overhead crane. The expertise will be applied for the development and implementation for the ACROBA solution.
<b>REPLICATOR</b>	MRNEC	Knowledge in modular robotic perception and emerging self-organized control will be applied for the ACROBA developments.
<b>COGNITPLANT</b>	MRNEC	Aims to develop deep learning agents for optimizing some materials production and products manufacturing. Acquired expertise will be applied to ACROBA modules' development.
<b>DIH2</b>	IMR	Supporting the power of robotics to transform the agility of manufacturing in Small and Medium-sized Enterprises (SMEs). ACROBA will take advantage of the connections to contribute to enable agile production.
<b>ROSIN</b>	-	Enhances the reach of open source packages ROS and ROS2 with focus on industrial applications. ACROBA aims to build on this and allowing ROS/ROS2 to become the centre of agile production platforms in the future.
<b>SOFTMANBOT</b>	SIGMA, STAM	Deformation and contact control using heterogeneous sensor information to track on real-time the changes of the product while handling them with the

		robot. Similar multi-modal perception strategies will be required in ACROBA but with a detection of higher-level events.
<b>SHAREWORK</b>	STAM	Modules for safe human-robot collaboration. Design and implementation of HRC modules in manufacturing scenarios. ACROBA will take advantage of this expertise for the implementation of the platform.
<b>R4WIN Manunet</b>	STAM, ICPE	Development and prototyping of a robotic cell to wind the coils of electric motors. Knowledge acquired will be used for the implementation of ACROBA platform in real industrial environments.
<b>TRINITY</b>	-	This project is creating a network of multidisciplinary and synergistic local digital innovation hubs (DIHs) that cover a wide range of topics that can contribute to agile production. ACROBA will connect with TRINITY for dissemination purposes, e.g. platform promotion.
<b>ARMION</b>	DEUSTO	Project focused on advancing in the digitalization of the machine tool sector, moving to new HW and SW architectures, which complement the traditional automation systems. ACROBA will take advantage of the knowledge and expertise acquired about these HW and SW architectures.
<b>VESSEDIA</b>	DEUSTO	Project to improve the security of the Internet of Things (IoT) by making formal methods more accessible for areas of application that wish to improve the security and reliability of applications. Lessons learnt will be applied to ACROBA for guaranteeing the platform security.
<b>MANUWORK</b>	VICOM	Focuses on the development of an integrated platform that includes a tool for determining optimal human-automation levels for load balancing, a tool for the evaluation of worker satisfaction, and a framework for the adaptive shopfloor support based on an Augmented Reality. The expertise will be applied in ACROBA to enhance the collaboration between human and robot.
<b>FALCON</b>	BIBA	Developed a Virtual Open Platform to connect product-service usage information to design and development processes. ACROBA will apply an adapted version of the semantic techniques used to collect product usage data.
<b>COALA</b>	BIBA	The project aims to develop a human-centered digital assistant providing a more proactive approach to support operative situations involving cognitive load, time pressure and strict tolerances. ACROBA will take advantage of the shaping of the collaboration between AI-based assistant and the human.

*Table 16 - Link with other R&D projects*


## 5. Conclusion

This communication and dissemination plan is a flexible and living plan. Based on the defined target groups and objectives described, the strategy aims at maximizing the use of breakthrough developments in the project and all regular project deliverables to spread relevant news through a wide and diverse scope of channels. In doing so, dialogue and information exchange with the scientific community as well as with relevant industries and a broader public will be stimulated so that the ACROBA project development can constantly adapt to existing and future user needs. ACROBA project is at a very preliminary stage and the plan for communication and dissemination activities will need to be refined in accordance with the project activities and partners resources to maximise its impact. The plan will be internally updated in M6 of the project, including latest communication materials and tools as well as more detailed plan for dissemination activities. Official updates to be forward to the EC are planned at M18 and M42.

## 6.1 Timetable for Dissemination activities

45

## 6.2 General presentation template




**ACROBA**  
connect & produce through agile production

# Ai-Driven Cognitive Robotic Platform for Agile Production Environments

NAME PRESENTER & ORGANIZATION




EVENT DATE & PLACE

 The ACROBA project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101017284.

**ACROBA**  
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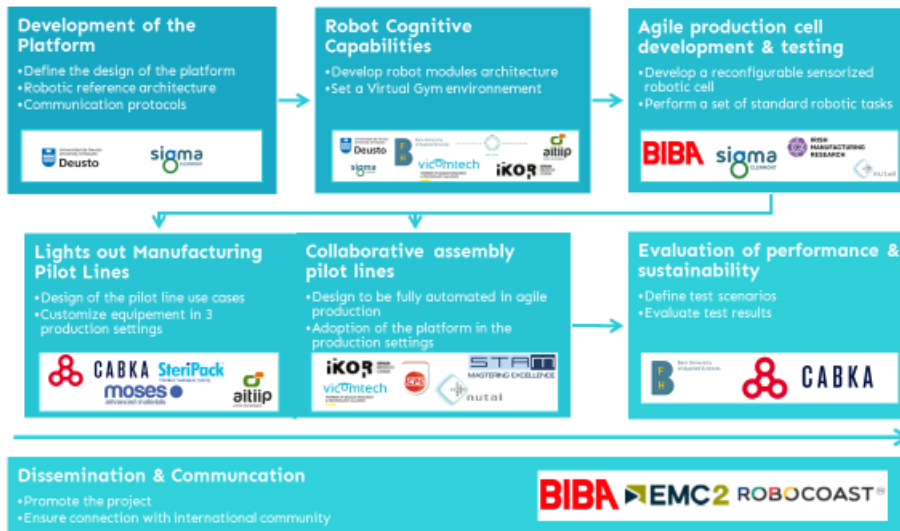
## Consortium

17 Partners covering all specialities

Clusters	Research centres / UNIV
  	      
	<div>Large companies / SMEs</div>       

**ACROBA**  
connect & produce through agile production

## ACROBA Overview



**ACROBA**  
connect & produce through agile production

## What is ACROBA Project ?



ACROBA

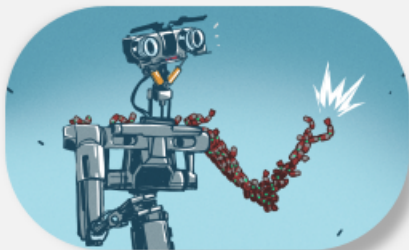
## Challenge



Develop and demonstrate a novel concept of cognitive robotic platforms based on a modular approach able to be smoothly adapted to virtually any industrial scenario applying agile manufacturing.

ACROBA

## Impacts



Tasks	ACROBA cost saving VS conventional automation
Hardware/equipment	10%
Management	20%
Hardware engineering	10%
Software engineering	50%
Installation	10%
Commissioning	50%





## Theme

Using ACROBA platform to concretize a use case that you want to develop

## Scheduling

11 Hackathon : 08/2022 – 12/2023

1 Master-Hackathon : 04/2024

Each Hackathon will count 9 teams of 3 runners.

The best teams will be invited to participate to the Grand Finale, [Master-Hackathon](#)



## What is it ?

ACROBA solutions for manufacturing SMEs in Europe in order to accelerate digitization

## Organizers



12/2022 02/2023 05/2023 07/2023







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To get up-to-date information on demo sessions, business coaching, trainings, design contests, etc.

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### Project partners

















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