RICAIP

Research and Innovation Centre
on Advanced Industrial Production

RICAIP

Dissemination Strategy and Standards

Horizon 2020

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CTU CZECH TECHNICAL UNIVERSITY IN PRAGUE
CZECH INSTITUTE OF INFORMATICS ROBOTICS AND CYBERNETICS CTU IN PRAGUE
BRNO UNIVERSITY OF TECHNOLOGY
CEITEC Central European Institute of Technology BRNO | CZECH REPUBLIC
DFKI German Research Center for Artificial Intelligence
ZeMA Zentrum für Mechatronik und Automatisierungstechnik

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1 Purpose of the Document

The Dissemination strategy serves as the basis for an approach, which concerns all marketing activities during the duration of the Phase 2 of the RICAIP project to increase the potential of the centre for sustainability after the funding ends. Dissemination of project is an important activity that helps to inform the general public (or a specific part of it), research communities, industry, policy makers or other stakeholders about the results and innovation.

The Dissemination Strategy is tightly interlinked with the “Communication Strategy” and they create together one complexity, whereas the communication is a more general document aiming primarily at systematic promoting and sharing of targeted information on the project, its implementation, objectives, and outcomes to multiple audiences that go beyond the RICAIP’s own community with special emphasis on society and the media. On the other hand, the objective of the dissemination activities outlined in this document is to promote results towards the particular stakeholders, offer them the use, participation, further cooperation, and also other involvements leading to further improvements and innovation. In a long-term perspective, the aim of the dissemination activities is an uptake and utilisation of the project outputs, including the potential for market launch.

The aim of Dissemination Strategy is also to guide partners in planning and implementing their dissemination activities and ultimately, nurturing the ground for further successful sustainability of the Centre to ensure that RICAIP as a structure and institution grows and sustain even beyond the RICAIP project duration.

There is strong necessity to develop the structure for long-term partnerships and sustainability instruments. RICAIP Project as a Teaming project aims to build the institution in widening country, i.e. Czech Republic, and upgrade existing Czech centres of excellence into one new infrastructure through a coupling process with leading German scientific institutions. That means that also gaining both scientific and industrial contacts, contracts and research projects is elementary for the RICAIP dissemination.

In addition, this document will serve as a management tool for both the RICAIP consortium and the EC, ensuring that the project’s dissemination activities are adequately and timely planned and implemented.

This document is not a how-to manual; rather, it is a flexible, living document that shall help RICAIP and its partners develop a comprehensive approach to the dissemination and implementation of particular tools and activities. Therefore, as also foreseen by the RICAIP Project, the update on regular 12-18-month basis will be provided.

The dissemination and consequential exploitation of results is a complex process applicable to research and innovation at every level of technological readiness, as well as to basic research, where it is necessary to focus on follow-up research and end-use in highly innovative products, services and processes.

Methodology of the Dissemination Strategy

Following main stages must be achieved:

- **Awareness**
  Raising the awareness and engagement is closely tied with the communication activities described in the Communication Strategy. It consists of continuous informing of the clearly defined groups of stakeholders about the project results and impacts, paying special attention to promoting the project achievements and highlighting its excellence.
- **Community and confidence building**
  It is necessary to address each particular target group with the information tailored to its interests and through the channels suiting best the purpose of information delivery. Support of the running projects, partners and organisations shall be made in a transparent way with clear emphasis on the benefits that RICAIP brings to the stakeholders. This will also contribute to the sustainability of the RICAIP network and beyond.
- **Utilisation of the project results**
  Growing from the stakeholder's understanding and engagement in long-term perspective.

Methodology and structure of the dissemination:

- **What** to disseminate (project assets and results)
- To **whom** (target groups)
- **By what** means (tools, channels for each target group)
- **When** to disseminate (action plan)
- **Quantitative targets**
- **Monitoring and evaluation**
- **Ad-hoc and on-demand actions** – agile approach when needed

2 Introduction of the RICAIP in the Relation to Dissemination

The aim of the Research and Innovation Centre on Advanced Industrial Production (RICAIP) is to develop a strong cooperation at international level evolving the concept of Industry 4.0. RICAIP will virtually connect the testbed facilities in the Czech Republic (Prague, Brno) and Germany (Saarbrücken) and integrate them into a new Czech - German research infrastructure in advanced distributed industrial production.

The intention is to develop RICAIP as the European research infrastructure, the first of its kind in Europe. The RICAIP Centre will become an international hub for Industry 4.0, esp. for multi-site industrial production and multi-site production system development, and change the industrial research in a more interdisciplinary way, bringing excellence and new solutions to the sector.

The idea of a geographically distributed, but virtually integrated experimental testbed with an open access policy will help to integrate research activities in the subject field internationally and help to leverage the investments by a wider SME community. This will also be a strong driving force for standardization efforts. RICAIP will set the grounds for intensive cooperation between industry and academia.

The main objectives of the Dissemination Strategy are to **support active promotion** and **scientific networking at national and international level** to encourage the building of **stable and strong research** and **industrial partnerships and connections as a substantive factor for strengthening the position of the RICAIP Centre in the highly competitive environment.** As long as the overarching ambition of RICAIP is to become a crystallization centre for the European Research Infrastructure in the field of Industry 4.0, significant efforts shall be dedicated to the promotion of the opportunities offered by the RICAIP's distributed testbed, recruiting and integrating new testbed nodes across Europe.

RICAIP shall inform stakeholder organisations, local, national and international companies, and users of technologies relevant to the concept of Industry 4.0 about its potential, both technological and economical. Results rising from implementation of project activities will be particularly used to ensure the growth of RICAIP research excellence (transfer of know-how between partners). The involvement of regional authorities, regional industries and other relevant stakeholder organisations and especially end-users are expected.

3 Dissemination Objectives

Main objectives of the RICAIP Dissemination (and Communication) Strategy:

- To **inform the relevant R&I, as well as Industrial Policy stakeholders about the impacts of the RICAIP's activities** on economy and society in order to influence favorable policy making.
- To **integrate industry into the dissemination of research results to highlight application- and result-oriented research and development**, thus extending the industrial customer base.
- To **attract both the large national and international corporates and SMEs**, key players from the selected sector of the industry **for collaboration** within the RICAIP centre to foster both the contract research and collaborative research project in the field of distributed industrial production.
- To attract **new researchers and young talents** to join the RICAIP teams.
- To increase understanding and motivation to use and **sustain knowledge created by RICAIP** in various agendas: scientific collaborative research, industrial cooperation, skills and personnel development, other **best practice sharing**.
- To market the portfolio of R&I services among the major target group, with **specific focus on the industry**. Particular importance is given to the testbed-based services as it represents an important competitive advantage of the Centre, as well as to the targeted transfer of RICAIP's IPR to the industry.
- To tighten the **connection towards the industry, associations and stakeholders with** further measures, such as demonstrators, exhibitions, workshops, working groups, etc. in order to raise profile and diversify the service portfolio.
- To **widen RICAIP visibility throughout Europe and attracting scientific as well as industry partners from EU countries.** Specific goal is to promote the idea of building the pan-European open distributed R&I infrastructure in the field of Industry 4.0 thus recruiting new testbed nodes and broadening the RICAIP ecosystem beyond the project partnership.
- To highlight the **relevance of RICAIP at the policy level** among the national and international policy makers and authorities to demonstrate the added value of RICAIP to gain the support for the centre beyond the initial funding and secure the long-term sustainability of the commitments resulting from the project (i.e. tenure positions…).
- To present RICAIP as an organizational structure for further research projects and programmes – maximise this baseline for future growth.

4 Project Assets and Results

4.1 Scientific Results and Achievements

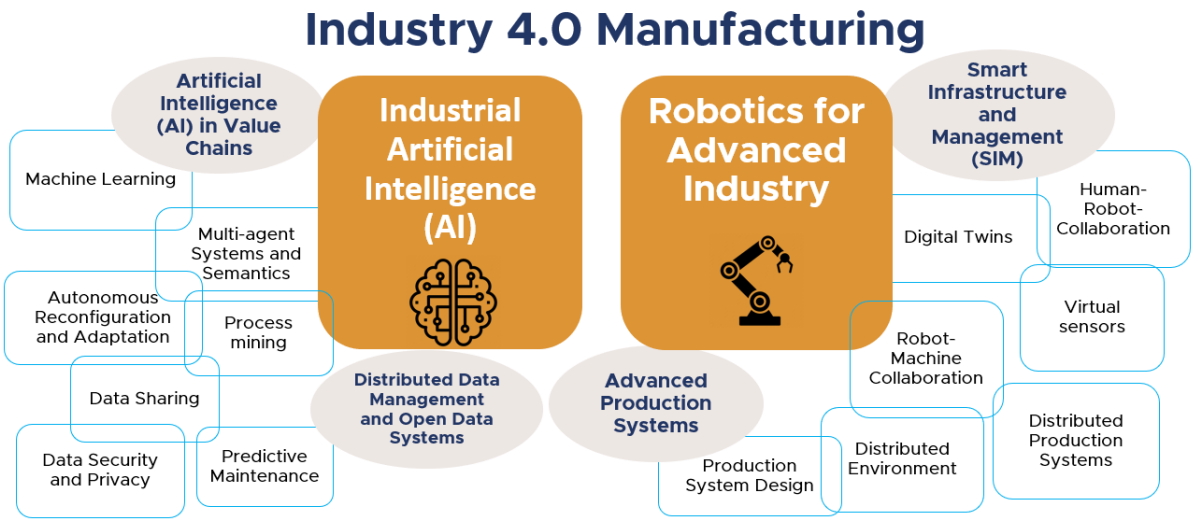
The RICAIP Centre has been established as a platform enhancing the scientific environment for sharing the scientific capacities and research infrastructure in terms of technology and HR and therefore it sets the ground for future research projects. The own scientific results will arise from these future involvements in collaborative projects and activities.

With reference to the Strategic Research and Innovation Agenda for RICAIP and also the Business Plan (both delivered in Phase I), it is important to outline the scientific focus of RICAIP for better positioning of the dissemination activities.

The priority research directions are as follows:

- Smart Infrastructure Management
- Artificial Intelligence
- Distributed data management and open data systems
- Production System
- Impacts (as non-scientific agenda focusing on impacts on society and environment)

Visualization of the research focus:



Scientific publications, scientific papers presented in peer-reviewed journals and conferences and research data:

- **Direct project results**: at the moment, the scientific results will be delivered in form of two use cases and demonstrators
- **Future results**: raising from future foreseen projects implemented within RICAIP infrastructure and/or involvement of RICAIP in collaborative research projects. The publication of scientific outputs in an academic context is one of RICAIP's main targets, nevertheless the scientific papers published or presented in highly rated scientific journals and conferences will result from future projects.

4.2 Non-Scientific Assets and Outcomes

As a teaming project, the RICAIP shall contribute to changing the scientific environment in the country of impact. Moreover, referring to RICAIP's interdisciplinary approaches, it shall contribute also to lowering of the gender gap in technical fields, to promoting the changes of Industry 4.0 and preparing the next generation for the different work demands and environment.

The non-scientific assets for further dissemination can be structured as follows:

- **Best practice** (new approaches, policies, management models, other knowledge sharing outcomes)
- **Opportunities** (for cooperation, employment, internships, contest)
- **Services** (events, use of the open shared infrastructure, training, education)

An indicative list of particular results raising from the RICAIP project implementation and WP deliverables can be identified as follows:

Type of the Asset	Example of Outcome / Result	Description *Link to WP/ Deliverable/Milestone*	Relevant Target Group
Best practice	**Testbed open access principles**	Open access rules and operational conditions to join, use and sustain the new core facility of the RICAIP Industrial Testbed – new business models for cooperation enabled by flexible production (incl. open access policy and reinvestment strategy) Link to D2.3	Industry, Academia

Type of the Asset	Example of Outcome / Result	Description *Link to WP/ Deliverable/Milestone*	Relevant Target Group
Best practice	**Educational and training tools**	Software and hardware tool-box to perform online and offline training. Research-based education through joint projects and qualification works. Link to D3.2	Academia
Best practice	**Tenure track policy**	Tenure track system as key success element for scientific leadership for research institutions Link to D3.4	Academia
Best practice	**Industrial chair policy**	Industrial tenured positions as a model of involving the industrial stakeholders into direct operation of research institutions via paid position provided by the sponsor Link to D3.5	Academia, Industry
Best practice	**Mobility programme**	Policies focused on raising the scientific excellence through knowledge transfer and exchanges of both early-stage and experienced researchers Link to D4.4	Academia
Best practice	**Young Investigator Award**	Principles of award for talented PhD students and postdocs focusing on motivating HR environment and talents acquisition Link to D4.7	Academia
Best practice	**Use Cases**	Comprehensive use case studies for future applications of the RICAIP principles of multi-site manufacturing: 1. Distributed production 2. Production as a service Link to D6.2 and D6.2	Academia, Industry
Best practice	**Recruitment processes and welcome services**	Processes for recruitment of research and administrative staff and concept of welcome services for new employees Link to D4.8	Academia
Opportunity	**New job positions**	• Job opportunities for talents • Recruitment of three tenure track positions • Industrial chair position Link to MS18, MS19	Academia, Industry, Students

Type of the Asset	Example of Outcome / Result	Description *Link to WP/ Deliverable/Milestone*	Relevant Target Group
Opportunity	**Collaborative projects**	• Opportunity to collaborate on R&D projects – grant and collaborative - delivering solutions to environmental, economic and technological challenges that cannot be solved individually due to lack of competencies or resources to perform operation in-house. • Leverage research budgets through collaborative funding programs • Helping industries in navigating grant applications by providing the know-how to unlock necessary funding for the company to thrive Link to MS32, MS33, MS41	Industry, Academia
Opportunity	**Young Investigator Award**	• Organization of the contest, possibility for young researchers to take part and register her/his excellent result Link to MS29	Academia, Students
Services	**Use of the open access infrastructure of Testbed Facilities**	• Access to cutting-edge research and R&D infrastructure to improve performance, open up new market opportunities and deliver manufacturing solutions and innovation. • Implementation of pilot projects on the basis of real manufacturing facilities • Modelling of large smart grids and their interconnection to production systems • Modelling of existing machines and extended physical installation by virtual (simulated) parts of the production systems • Realization of indicative use-case scenarios. • Modelling of product lifecycle, IoT connectivity, edge device	Industry Academia

Type of the Asset	Example of Outcome / Result	Description *Link to WP/ Deliverable/Milestone*	Relevant Target Group
		functionalities with respect to hybrid (local/cloud) data analytics • Technological support - identifying and exploiting new technologies Link to: WP2, D2.3, D2.7, MS8, MS32	
Services	**Cooperation in area of HR development**	• Industry driven student thesis. • Placement of industrial PhD positions and scholarships. • Joint PhD projects. • Industrial PhD positions funded by companies.	Industry, Students
Services	**Training programmes and education**	• Online training webinar launched • Skills training services for workers of industrial partners as a pre-phase of the technological modernization • Short term targeted training programmes for skills development. • Qualification services for industrial companies Link to: D3.2, MS15	Industry (management, technical staff) Academia Students
Services	**Interdisciplinary workshops, seminars, conferences, and other RICAIP branded events**	Participation at the training and information events, workshops, demonstrations, idea competitions and hackathons – for early insights about ground-breaking technology and knowledge: • Joint events in the RICAIP network incl. workshops and expert visits • Summer School hosted by industrial company • Scientific internships • National lectures • RICAIP Branded events: - RICAIP Scientific Conference - RICAIP Industry Days - RICAIP Open Day - RICAIP Industry 4.0 Information Days - RICAIP Brain & Breakfast sessions	Industry, Academia, Students

Type of the Asset	Example of Outcome / Result	Description *Link to WP/ Deliverable/Milestone*	Relevant Target Group
		Links to D4.5, MS24, MS25, MS26, MS27, MS28	
Services	**RICAIP Industry Days** (as one of the RICAIP branded events)	Open days for industrial partners and companies interested in Industry 4.0 incl. EU Testbed Core Findings on Industry 4.0 impacts on society, especially impacts of digitization, robotics, and the Industry 4.0 on employment, qualification and skills requirements, eventually new categories of jobs. Link to D7.4	Academia, Industry, Students
Services	**RICAIP Open Day** (as one of the RICAIP branded events)	Event for larger audience, Findings on Industry 4.0 impacts on society and environment. Link to D7.8	Academia, Students, Industry
Services	**RICAIP Showroom**	Complete set for physical, visual and interactive presentation of RICAIP and its domains, incl. Industry 4.0 implications - exhibiting of RICAIP results in wide context. Link to D7.11	Academia, Industry, Students, Public

5 Target Groups and Stakeholders

In a very comprehensive way, the description of the target groups is covered by the RICAIP Communication Strategy. As per se, these are identical also for dissemination activities. Following definitions are gathering the main features mainly of industrial and scientific stakeholders in regard to their most probable utilisation of the project results with strong reference to the Strategic Research and Innovation Agenda and Business Plan as delivered in Phase I. This does not lower the importance of the two other group of stakeholders, i.e. policy makers and general public.

5.1 Industrial Stakeholders

Industry is one main target group of the RICAIP communication and dissemination strategies to transfer ideas, concepts and results of the latest Industry 4.0 research advances and contribute to RICAIP sustainability. Referring to the description in the Communication Strategy, the companies are differently advanced into Industry 4.0. Therefore, the RICAIP actions and portfolio will be adjusted to their level and requirements. There is a need to provide valuable response according to the latest trends and implementations from economical point of view, evaluating solutions and results of the project. In regard to the companies' level of knowledge and maturity of digitalisation / automatization, the information, services and outputs must be segmented at three levels (beginners, middle, experts).

The main stakeholders are from the:

- automotive,
- aircraft,
- machine tools,
- special machine manufacturers sectors.

Type of businesses – both SMEs and large industries– reflecting the entire product lifespan and supply value chain as follows:

- End-users
- Partners and collaborators
- Machine builders and manufacturers
- Technology developers / providers and system integrators
- Start-ups and technology innovators
- Software and application developers and maintenance
- Industry-driven networks and associations, influencers (early adopters)

Positions:

- Managers
- Decision-makers
- Planners
- Workers (also linked to the trade unions and worker's councils)

Main principles of cooperation with industry:

- Two-way partnership.
- Open access and transparency.
- Social commitment approach - Social Responsible Research & Ethics & Humanity.
- Enhanced education opportunities for students.
- Encourage dialogue, best practice sharing and collaboration.
- Joint development of results of research for the benefit of the public.

Specifics of the large Industries:

- There is a need for large manufacturing enterprises to mature, test, and pilot technological solutions resulting from their internal RTD or technology scouting activities – Pilot projects.
- Large industries provide expert feedback on how to address AI and robotics problems from the industrial point of view and act as a reference for other industries in their domains.
- Joint research and innovation programmes for 5-10 years, TRL 6-7 (proof-of-concept is done, time-to market 1-3 years).
- Lower TRL possible, but must be reflected in the IPR acquisition strategy.
- Set up joint research and innovation labs incl. LIVING labs.
- Direct transfer of results to industrial partners for exploitations.
- Implementation of joint applied projects funded by external funding bodies - individual or joint ownership of results for coordinated exploitation.
- Joint designed demonstrators.
- On-demand development and tailoring of various education and training interventions for different categories of staff (management, engineering, technical, etc.).

Specifics of SMEs:

- SMEs and Entrepreneurs are key actors in terms of agility and creativity. They participate in building and evaluating solutions within lighthouse projects.
- Still, SMEs lack R&D capacity to implement their own RTD activities.
- Lack of financial resources to adopt modern technologies.
- SMEs rather focus on manufacturing capacities, highly specialized, limited business flexibility, higher risk exposure.
- The need to comply to the standards set up within the respective ecosystem of large corporations - comprehensive proofs of standards compliance.

Czech small and medium enterprises have started to adapt to the new technological changes. SMEs are eager to adopt digital technologies but they lack the expertise to do so. Big data is one of the most popular technologies and SMEs expect public support in deploying state-of-the-art shared digital infrastructure. Czech enterprises also excel at e-commerce. The share of SMEs purchasing online has increased by 20% since 2011 (among the highest growth in the EU) and almost a third of Czech enterprises' turnover comes from online sales.

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5.2 Academic and Scientific Community

Both scientific and academic community is the primary channel for dissemination of RICAIP results, for sharing ideas and knowledge on Industry 4.0 both to undergraduate and graduate students and early stage researchers that can strengthen the impact of RICAIP activities and contribute to new research agenda.

This applies to the scientific community and academia at national, European as well as international levels. Individual researchers, university and research centres, private research institutes, both operating in the ICT domain and beyond are subsegments of this target group. Universities and research centres operating in relevant or linked scientific fields. They participate in the adoption of training programmes defined in the project and testing its value and impact in providing data scientists to market.

The main channels of dissemination will be scientific publications, participation in relevant conferences membership and active contribution to the selected research networks and associations, participation in thematic fora and other dissemination / networking activities

natural for scientists and researchers. Specialized scientific RICAIP branded events will be organized for this target group (see Chapter 7).

Memberships and active contribution to the selected research networks and associations shall be mentioned as well, as they serve as effective channels to the scientific community (see Chapter 6.5):

- **AI Community**
  Already existing initiatives, project based or institutionally organised; formed by members (among academics/ researchers/ students/ industry representatives/ public authorities): AI4EU Platform, DIHs, CLAIRE, AISBL, PRAIRIE, open source community, innovation hubs, future AI PPP for Intelligent Robotics and Big Data research, ELLIS, EURAI, EFFRA etc.
- **Robotics and Manufacturing Community**
  euRobotics, EIT Manufacturing, Plattform-I4.0, Industrial Data Space, BDVA.
- **Related EU-funded projects and initiatives**
  Other projects resulting from AI and robotics calls (CSAs in particular).

Students and Young Talents

University students (PhD students, graduate and undergraduate) - studying not only technical, ICT, and mathematical fields, but also other subjects (as referred to the German abbreviation to MINT-studies, i.e. **M**athematik/ Mathematics, **I**nformatik/ Computer Science, **N**aturwissenschaften/ Natural Sciences, **T**echnik/ Technology), are the foremost important subsegment of the scientific target group.

Students are the future bearers of valuable knowledge either for industry or for the research sector. Also, their potential lays in upcoming collaboration, partnerships or human resources for RICAIP. Therefore, students are integrated in RICAIP via lectures, workshops, summer schools, projects and thesis work. After their study they shall be able to distribute their knowledge in a future job either in industry, research or RICAIP itself, thus acting as some kind of further antennas and ambassadors to multiply the impact of RICAIP's findings and knowledge. In the area of studying programmes, future job and skills requirements will arise and this requires new means and content during a diversified study. Through its alignment with the regional universities in the beginning, RICAIP can provide its research insights for lectures or contribute to the composition of studies.

5.3 General Public / Civil Society

RICAIP as a new industry- and society-oriented research and innovation centre will have a clear mission to raise the public awareness of the 4th industrial revolution and its impact on the lives of people. Dissemination of the relevant RICAIP results towards both individuals and civil society associations engaged on technology leadership and societal challenges will strongly contribute to fulfilling RICAIP's mission. In a context of responsible research and innovation where citizens are involved in innovation processes, civil society actors are engaged in a two-way exchange that builds on cocretion activities.

Subsegments:

- **Youngsters with their teachers and families** for overall motivation to be active and familiar with new technologies and AI-science;
- **Wider public and societal actors** that shall be informed about impacts of Industry 4.0 applications on their lives without fear or favour.

5.4 Policy Makers and Associations

As described in the Communication Strategy, this target group comprises the European, national, regional and/or local entities responsible for policy development. They are involved to identify possible policy improvements to support the adoption of AI and Robotics solutions at local, national or European level. Also, they participate in non-specialist engagement events and online surveys. Through cooperation with these stakeholders, the results of RICAIP will contribute to the sustainability of the centre as well as the EU ERA.

5.5 Synergies with EU and National Networks and Initiatives

RICAIP aims to be highly visible and try to find as wide publicity as possible. For this reason, RICAIP will also make extensive use of synergies and interlinks with existing networks and initiatives, namely through the memberships of its partners. RICAIP will also collaborate with other projects and platforms. In the area of European AI, there are a number of existing initiatives and networks that have achieved good progress in organising groups of key stakeholders; these include the AI4EU project, the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE), the network of digital innovation hubs in AI, the European Laboratory for Learning and Intelligent Systems (ELLIS), the European AI Association (EurAI), the HumanE AI project, as well as two thematically related public-private partnerships (BDVA and euRobotics).

RICAIP and EIT Manufacturing

As a driver of innovation in the area of Advanced Industrial Production, RICAIP will establish direct contact and liaisons with the major European initiative in the field of Innovation connecting 50 leading manufacturing actors from 17 countries – EIT Manufacturing (www.eitmanufacturing.eu). EIT Manufacturing was established in 2018 and represents financing of more than EUR 300 mil. for the period of 7 years. EIT Manufacturing is a diverse and multidisciplinary community. In this communication, RICAIP will position itself as an Innovation Hub in the field of Production Technologies putting special focus on its distributed testbed. Both CTU (i.e. CIIRC and the Faculty of Mechanical Engineering) and DFKI are core members.

RICAIP and CLAIRE

The initiative CLAIRE (Confederation of Laboratories for Artificial Intelligence Research in Europe) seeks to strengthen European excellence in AI research and innovation in accordance with European ethical values. CLAIRE is a large-scale, bottom-up initiative by the European AI community that brings together thousands of AI researchers and already helps to shape, consolidate and unify the AI research community across Europe. RICAIP will network closely with the CLAIRE community and recommend itself as a visible research and demonstration platform for CLAIRE. RICAIP becomes part of the CLAIRE network - as an institution and through its players. Thanks to the personnel and spatial interdependence, RICAIP and the European AI-Initiative CLAIRE are already well positioned for an intensive cooperation. Since its opening in April 2019, the CLAIRE office Czechia is located on the premises of CIIRC CTU. Moreover, both scientific and administrative staff at DFKI and CIIRC CTU are active In CLAIRE on daily basis, incl. membership in the extended leadership team of CLAIRE.

For RICAIP, the Europe-wide CLAIRE network offers the opportunity to exchange ideas with other researchers and institutions, to win new cooperation partners and to increase visibility in Europe beyond the countries of domicile. CLAIRE gains strong links with the national AI associations, the European AI Association (EurAI), the international Association for the Advancement of Artificial Intelligence (AAAI) and the European Space Agency (ESA). On the other hand, RICAIP can serve as scene for the presentation of concrete ideas or projects of the CLAIRE network.

RICAIP and ELLIS

ELLIS (European Laboratory for Learning and Intelligent Systems) was created in 2018 to initiate the creation of a network of excellence to advance research breakthroughs in AI. Machine learning has an impact on all surrounding disciplines such as computer vision and

sensory processing in general, data science, symbolic and rule-based knowledge, robotics, acting in an environment, and man-machine interaction. In this revolution the distinction between academic and industrial research is vanishing with rapid and broad commercialization of results. This has led to a competition of academic top-talent in which ELLIS strives to retain the best talents. Since the end of 2019, DFKI and CIIRC CTU are among new 17 ELLIS Units. The units aim to offer European researchers and young talents excellent conditions to carry out their research in Europe in the research focus of machine learning and related areas. The units were selected by an international evaluation committee based on proven scientific excellence and the implementation of measures to foster the ELLIS mission. The chain of ELLIS units serves as regional centre points of the impact of modern AI in society. Through ELLIS, RICAIP can gain links to the high-profile organizations outside Europe too (in USA and Japan). Thanks to a well-developed system of mobility programs supporting activities such as student and faculty exchanges within ELLIS, RICAIP can benefit drawing the experience and further synergies.

RICAIP and AI-on-Demand Platform AI4EU

The main goal of AI4EU is to efficiently build a comprehensive European AI-on-demand platform to lower barriers to innovation, to boost technology transfer and catalyse the growth of start-ups and SMEs in all sectors through Open calls. Collaboration with the AI-on-demand platform AI4EU is undertaken as a link to the community at large, for providing tools, algorithms and data to the community. The machine learning excellence sites envisioned offer webinars, regional workshops, on-site training, coaching and mentoring sessions through the AI4EU platform. DFKI is a partner in the AI4EU consortium.

RICAIP and Digital Innovation Hubs (DIHs)

Digital Innovation Hub are established networks reaching out to companies, industries and SMEs. In the context of robotics and AI, RICAIP partners have connections to the EU DIH related to AI for manufacturing. Links to DIHs are essential part of knowledge transfer actions and will serve to foster match-making and to exchange knowledge as well as services to initiate concrete collaboration opportunities with RICAIP. For this, especially the 30 DIHs in the AI DIH Network (see the list of AI DIHs at https://www.ai-dih-network.eu/) will be invited to participate in joint RICAIP's academic/industry events where they will have the opportunity to network with relevant academic and industrial partners. DIHs & EDIHs (formally part of the funded EC DEP Network), and all the other hundreds of DIHs in Europe - which focus also on AI - which will not become "EDIHs".

6 Dissemination Tools and Channels

6.1 Scientific publications

- Publications in journals (both scientific and expert).
- Presentation at high-ranked conferences (according to particular domains).

Indicative list of scientific journals (incl. Impact Factor and short journal description):

Journal title	Description	Impact factor
IEEE Transactions on Pattern Analysis and Machine Intelligence	Presents the most important research results in areas within TPAMI's scope.	**17.730**
International Journal of Computer Vision	Details the science and engineering of this rapidly growing field. Regular articles present major technical advances of broad general interest.	**6.071**
Automation in Construction	Publishes refereed material on all aspects pertaining to the use of Information Technologies in Design, Engineering, Construction Technologies, and Maintenance and Management of Constructed Facilities.	**6.35**
IEEE Transactions on Industrial Electronics	Includes all scope of items of the IEEE Industrial Electronics Society.	**7.503**
IEEE Transactions on Visualization and Computer Graphics	Publishes papers on subjects related to computer graphics, information and scientific visualization, visual analytics, virtual and augmented reality, focusing on theory, algorithms, methodologies, human-computer interaction techniques, systems, software, hardware, and applications in these areas.	**3.780**
Journal of Manufacturing Processes	Aim of the journal is to exchange current and future directions of manufacturing processes research, development and implementation, and to publish archival scholarly literature with a view to advancing state-of-the-art manufacturing processes and encouraging innovation for developing new and efficient processes.	**3.462**
IEEE Transactions on Industry Applications	Includes all scope items of the IEEE Industry Applications Society.	**3.347**
Production Planning and Control	International journal that brings together research papers on the management of operations in all industries. The journal focuses on research that stems from an industrial need and can guide the activities of managers and future researchers.	**3.340**

Journal of Intelligent Manufacturing	Provides a unique international forum for developers of intelligent manufacturing systems.	**3.535**
CIRP Journal of Manufacturing Science and Technology	Publishes fundamental papers on manufacturing processes, production equipment and automation, product design, manufacturing systems and production organisations	**3.27**
Journal of Building Performance Simulation	Welcomes building performance simulation contributions that explore the following topics related to buildings and communities.	**3.110**
International Journal of Advanced Manufacturing Technology	Bridges the gap between pure research journals and the more practical publications on advanced manufacturing and systems. It therefore provides an outstanding forum for papers covering applications-based research topics relevant to manufacturing processes, machines and process integration.	**2.496**
Building Simulation	Publishes original, high quality, peer-reviewed research papers and review articles dealing with modelling and simulation of buildings including their systems.	**2.238**

Non-exhaustive list of other relevant journals:

- European Journal of Information Systems;
- IEEE Transactions on Engineering Management;
- IEEE Security & Privacy;
- ACM Trans. on Information & System Security;
- Journal on Computer Fraud & Security;
- ACM TOCHI;
- Human-Computer Interaction;
- Int. Journal of HCI;
- IFAC Control Engineering Practice;
- IEEE Transactions on Automation Science and Engineering;
- IEEE Transactions on Image Processing;
- IEEE Signal Processing Magazine;
- The International Journal of Robotics Research;
- IEEE Transactions on Computers;
- European Journal of Operational Research;
- IEEE Transactions on Industrial Informatics;
- Computers and Operations Research;
- IEEE Transactions on Systems, Man, and Cybernetics.

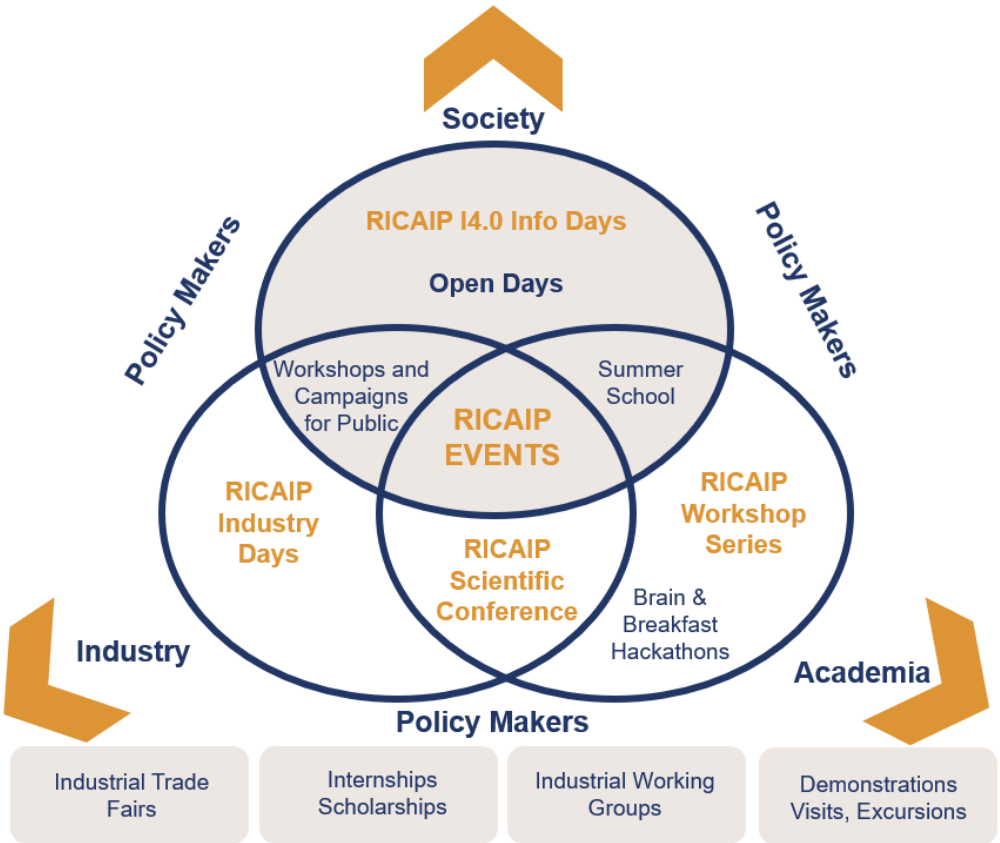
6.2 Events

Events and workshops are effective way for targeted dissemination. As a well elaborated system of events can naturally contribute to building of the corporate identity and thus enhance the brand, a RICAIP concept of regular **"RICAIP Branded Events"** is created to establish own dissemination channels.

Among others, **four main RICAIP event series** build the concept. It shall cover both communication and dissemination objectives in respect to the particular target groups and domains of interest. Regular events shall be clearly positioned in terms of focus and audiences – these parameters shall determine the design of the programme, extend and frequency of the events.

The Plan for interdisciplinary workshops, seminars and conferences is a subject of Deliverable 4.5 and will present a concept of main events in the upcoming years.

An indicative concept of the RICAIP Branded Events in context of other actions:



RICAIP Scientific Conference

Top annual scientific event will comprise actual research topics and focus of RICAIP. It will be a high-level meeting presenting:

- research progress, outcomes and findings of RICAIP as for the past period
- open discussion for new Industry 4.0 challenges
- outline of new innovation trends for the upcoming period
- reports and best practices for direct sharing with experts at the conference
- findings concerning the impacts on society and society-oriented presentations

The event will be attended mainly by the leaders of research organizations as well as industry leaders and other stakeholders, including policy makers. Invited prominent speakers from either partner or foreign institutions as well as industry will contribute to the know-how exchange and discussion from various perspectives.

The RICAIP Scientific Conference has the ambition to become one of the excellence meeting of stakeholders and professionals contributing to the social-economic dialogue and formulating R&D priority topics. Subject-related RICAIP Workshop Series will draw inspiration from the RICAIP Scientific Conference and will constitute a complementary system of application-oriented events.

In early stages of the project, the RICAIP Conference will be organized at the occasion of re-opening or refurbishment of RICAIP Testbed facilities.

RICAIP Workshop Series

Regular **scientific interdisciplinary workshops** and seminars on highly specified expert topics will be tightly linked to the RICAIP Scientific Conference.

The implementation of these meetings will be enabled through the mobility programme and will contribute to deeper scientific knowledge exchange between junior and senior researches.

The RICAIP Workshop Series shall

- introduce top RICAIP technologies and expertise available
- offer opportunities for joint research collaboration and projects
- be accompanied with the visits to the testbed facilities.

Invited speakers are welcome and will underline the networking and personal dimension of these events. Outcomes and recommendations will be presented at the RICAIP Scientific Conference. Usually, at least two workshops shall be co-located with the RICAIP Scientific Conference.

First RICAIP Workshop will be held at CEITEC BUT in Brno at the occasion of festive opening of refurbished RICAIP Brno Testbed facility.

RICAIP Industry Days

Industry-oriented and related topics and activities will be presented at these **match-making events**. RICAIP Industry Days serve as an opportunity for transfer of ideas concepts and results related to Industry 4.0 advances.

The programme may – according to actual demand and developments - consist of:

- open doors and guided tours in RICAIP testbed facilities
- introduction of the top RICAIP technologies and industry-relevant
- open opportunities for joint research collaboration and projects
- demonstrators and use case presentations
- social-economic topics related to business and industry, incl. HR and workforce transformation
- face-to-face meetings and interactive sessions designed according to companies' particular level of reached knowledge and digitalization

In later stages of the project, the RICAIP Industry Days will serve as a showcase to exhibit the near-market solutions. Moreover, a broad set of services provided by RICAIP towards industry will be presented, including tailor-made trainings and staff education. RICAIP Industry Days will be organized in close cooperation with industrial associations and platforms, namely the Czech National Centre of Industry 4.0. Spotlight given by the RICAIP Industrial Chair is expected.

RICAIP Industry 4.0 Information Days

This event will become one of the major actions **for general public** supporting public interest, and contributing to the public awareness of the Industry 4.0 major impacts (on manufacturing, economy, energetics, environment, and society).

The programme of the RICAIP I4.0 Info Days may be enriched with:

- open doors,
- guided tours through testbed facilities,

- thematic workshops, i.e. Impact of I4.0 on employment, Gender shift of I4.0, Future of industrial workers,
- discussion on I4.0 impacts on education, personal and skills development and new competences requirements, labour, company organization, gender issues, and other challenges,
- co-creation activities and citizen science actions.

Within the programme and also as a follow-up activity, children will become their own event / workshop where they get the information on Industry 4.0 in an easy-to-understand form. Also, it will provide smart training of ICT skills (for example “No child left behind” workshop for max. 10 children in years 6-10).

Other Events and Actions

- **RICAIP Brain & Breakfast**

  Informal business breakfast in form of round table will be organized on ad-hoc basis decentralized by individual RICAIP partners. It will serve as open meetings for representatives of industrial companies with young or senior researchers providing unmediated two-way feedback or opportunity to brainstorm and get a direct consultancy on given topic.

- **Regular Excursions into RICAIP’s Industrial Testbed Demo-site**

  RICAIP testbeds will be open not only at special events, but also to all visitors who may be interested. Each visit to the testbed will include a demonstrative launch of the testbed and a demonstration of its features and capabilities and an explanation of the basic principles of Industry 4.0

- **Awareness Raising Programme Targeting School Children**

  RICAIP will also investigate the opportunity to establish an awareness raising programme targeting school children ”Computer-aided industry: This is interesting!”.

Industrial Trade Fairs

RICAIP partners will attend several tradeshows, fairs and exhibitions related to transducer and to show project demonstrators setups with enhancement of their features and parameters. Search for suitable national and international events for dissemination of the RICAIP results will be performed by all partners within each participating country of the project consortium (Czech Republic and Germany). The indicative list of most important thematic for a and other networking opportunities for scientists can be found at attachment.

Establishment of synergies in form of joint presentations and exhibition booth of both RICAIP partners and initiatives or other projects where RICAIP is involved is expected.

Participation at Events of 3rd Parties

RICAIP can be engaged with or support or participate at events organized by 3rd parties. The participation may vary from presentation of RICAIP staff members as invited speakers to various kinds of contribution incl. financial. Multiplication effect on outreach and further synergies can be reached in cooperation at such events. While assessing the eventual involvement at these events, following parametres shall be assessed case by case at individual basis:

- reputation of the organiser
- target audience that shall be reached (can be also untouched by RICAIP area of interest so far)
- quality of programme and speakers
- possibilities of promotion of RICAIP to the audience (i.e. as partner to the conference)
- other benefits that may arise
- funds and budget for promotion available

6.3 RICAIP Showroom

The initial idea of the Industry 4.0 / RICAIP Showroom was delivered in Phase 1 and is a subject of further elaboration within Deliverable D7.11.

Main purposes of the RICAIP Showroom:

- Industry 4.0 popularisation among the wide range of target groups
- Industry 4.0 impacts on society (horizontal issues – gender, diversity, environment etc.)
- Presentation of RICAIP, its partners, goals and outcomes
- Presentation of the RICAIP Industrial Testbed Core
- Demonstration of new concept of advanced manufacturing in near-real environment
- Education and training tool (also linked to the Young Talent Incubator)
- Point for knowledge sharing, networking, and open discussion

In terms of dissemination, RICAIP showroom will be created as an effective tool to reach out different audiences and will stand side by side the RICAIP branded events.

Recently, fast and flexible information sharing, intensive interactions and connectivity are crucial for dissemination of research results and processing of further scientific development.

Physical form of the RICAIP showroom will be located in the RICAIP testbeds, mainly in Prague. It is important to note that due to the budget cuts in the complementary financing from the side of the Ministry of Education of the Czech Republic, the showroom cannot be realized as a physical place in the Testbed for Industry 4.0 in the intended scope. Therefore, the RICAIP showroom will be created also through off-site presentations, online communication and virtual scenarios. This is in line to latest trends.

The RICAIP showroom will be a complex system of virtual and physical educational and publicizing scenarios for interactive presentation of the RICAIP Centre and Industry 4.0 implications that will guide the visitor individually through particular area of interest.

The RICAIP showroom, either virtually or physically (as RICAIP Industrial Testbed) will serve as a research and communication hub at the same time.

6.4 Online Tools

Contacts database and mailing lists (according to the GDPR) per stakeholder type and geographic area shall be continuously built.

Website

Official RICAIP website (www.ricaip.eu) is one of the main communication and dissemination tools of the project. The clear structure of the website will make it possible to create a tool for disseminating information to audiences who will be interested not only in the project itself, but also in topics related to Industry 4.0, robotics, artificial intelligence or for example digitization itself. Furthermore, the website will advertise the project to relevant stakeholders.

Indicative proposal of website structure for its update:

Menu item	Content	Description	Target Groups	Level of expertise	Access
About	Mission		all	low	public
	Vision		all	low	
	Project	Phase 1, Phase 2, Financing	all	low	
	Organisational structure	Team Executive Board Steering Committee	all	low	public

Menu item	Content	Description	Target Groups	Level of expertise	Access
		International Advisory Board			
	Partners	CIIRC CTU CEITEC BUT DFKI ZeMA	all	low	public
	Official documents	Deliverable – reports Annual reports Strategies and internal processes Studies and surveys Press kits	all	middle	list – public downloads – partially registered access or restricted
	Ethics	incl. GDPR	all	low	public
	Contact	incl. social media profiles	all	low	public
News	Press releases	incl. interview and articles	all	low	public
	Media appearance		all	low	public
	Media library (audio/video/photo)	Photo gallery: official, events Video incl. broadcasted Audio incl. podcasts	all	low	public
	Testimonials	Selected researchers and experts	all	low	public
Events	Calendar	incl. past events	all	low	public
	RICAIP Events	RICAIP Scientific Conference RICAIP I4.0 Info Days RICAIP Open Days Brain & Breakfast	Academia Industry all Industry	low / middle	public
	Online Events	Webinars Past events	Industry Academia	middle / high	public

Menu item	Content	Description	Target Groups	Level of expertise	Access
	Invited lectures	Presentations at 3rd party events	all	middle / high	public
	Internal Events	Partner lectures and seminars	Partners	high	priority access
Research	Research areas	AI Robotics	all	low / middle	public
	Groups	RG 1 (SIM) RG 2 (AVC) RG 3 (APS)	Academia Industry	middle / high	public
	Projects	Running projects Past projects Call for partnerships	Academia Industry	low / middle	public
	Use Case	Use Case 1: Distributed production Use Case 2: Production as a service Demonstrators	Academia Industry	middle / high	public
	Networks	Cooperation with networks and initiatives	Academia Industry	low / middle	public
	Results	Publications Studies Awards	Academia Industry	middle / high	public
Services	Industrial Testbed Core	Prague Brno Saarbrücken	all	low / middle	public
	Technology	Selected technology equipment and expertise	Industry Academia	middle / high	public
	Open access	Terms and conditions	Industry	middle / high	public
	Industry	Complete introduction of services for industrial companies Collaborative research Industrial chair	Industry	middle / high	public

Menu item	Content	Description	Target Groups	Level of expertise	Access
	Grant Lab	Services / cooperation on joint project proposals, successful submitted projects	Academia Industry	low	public
	Living Lab	Services on joint labs with industry	Industry	low / middle	public
	Showroom	Complet concept, virtual tour, videos, scenarios	all	low / middle	public
	Tech Transfer	Terms and conditions Proof of concepts	Industry	middle / high	public
Training	Online webinars	Future and past	Academia Industry	middle / high	public
	Scientific internships	Open and past positions	Academia	middle / high	public
	Summer Schools	Open and past	Students	middle / high	public
	Excursions and visits	Thematic, regular and on-demand	Industry Academia	middle / high	public
	On-demand courses		Industry	middle / high	public
HR	Welcome office	Important information for newcomers incl. administrative procedures for foreigners (“survival kit”)	Academia	low	public
	Career	Job positions Carrer development Recruitment procedures	Academia Students	low	public
	Tenure track	Policy	Academia Industry	low	public
	Mobility	Scientific internships Industrial PhD positions	Academia Industry	low / middle	public

Menu item	Content	Description	Target Groups	Level of expertise	Access
	Gender	Gender Action Plan	all	low	public
	Talent Incubator	Industry driven thesis Young Investigator Award	Students Academia Industry	middle / high	public
	HR Award	Documentation	Academia	low	public
Industry 4.0	History	4 Industrial revolutions	all	low	public
	Principles	Introduction Trends	Industry Academia	low / middle	public
	Impacts	on industry on society on environment	all	low / middle	public
	FAQs		all	low	public

Social media

Social media is currently one of the most important tools of real-time communication. In the beginning, the most important thing is to choose the right social networks on which to base the profile with regard to the stage of the project and the target group that the content should address. To make social networks as effective as possible in relation to the dissemination of results, it is necessary to build a community of followers, which is only possible through the regular publication of relevant information. The presentation of the results on social networks includes photos, videos or for example animations. It is mostly about sharing short stories with a maximally informative value. The first step to building a community is the active monitoring of other institutions and share relevant content.

Since early stages of the RICAIP project, focus on the interactive dialogue with industrial stakeholders has been supported and we are trying to raise awareness of RICAIP as such.

The project social media are open to all project partners who participate in the content.

RICAIP social media profile		Main target group	Project stage
Twitter	Main social media channel already from the early stages because of a wide professional community. Twitter not only allows you to share short posts, but also share related content	• Industry • Institutions • Scientific community	Early stage of the project

	from other profiles. The first step in building a community is to actively monitor other institutions and share relevant content with respect to the communication strategy of the RICAIP project.		
LinkedIn	Recruiting new people We use it not only to share job offers, but also to share RICAIP-related content. It is possible that during the project with the increase of promotable content, other social networks will be established, aimed more at the general public.	• Professionals • Industry • Business	Early stage of the project
Facebook	For shareing, in particular, achievements, results, information about events or, for example, to share photo galleries.	• General public	During the project
Instagram	Aimed at a very general public and a rather younger generation. In the later stage of the project, it could be used mainly for presentation, especially to younger talents and students.	• Young general public	During the project

e-Newsletter

All news and current announcements will be gathered also in the newsletter branded as “Meet RICAIP”, “RICIAP Close-Up”, “RICAIP Insight”, “RICAIPot” etc.. It will have a concise, informative character with professional graphics. The purpose of the newsletter is mainly to maintain regular contact with the interested community, which subscribes to it.

It should contain as up-to-date RICAIP-related information as possible from the project stage. We assume that as the project progresses, the frequency and content of relevant information that will appear in the newsletter will increase. The newsletter will be more general in style and will contain information as relevant as possible to the all target groups, if the situation requires it, newsletters will be targeted at individual ones.

To maintain a community approach, the newsletter could include for example a Directors' or "Face of the RICAIP" Message. Links to articles focusing on interviews, opinions, achievements, press releases or general news should also be presented. An important part of the newsletter should be also information on past and future events which RICAIP will organize or be part of. In order to present tangible results, we will also present top publications.

Due to the educational part of the project the content of the newsletter can focus, for example, on general trends in the field of Industry 4.0. In the later phase of the project, the offer of the research infrastructure service and information on partnerships will certainly be added.

6.5 Offline Tools

Printed materials are an important part of the dissemination of the results of the project and its presentation. The advantage of this type of presentation like flyer or brochure could be distributed on any suitable occasion (events, institutions, personal distribution etc.).

Each graphic material should be processed clearly and strictly follow the visual identity of RICAIP. Outside general graphic materials, materials for individual target groups should be gradually created. Each of the partners has the opportunity to customize these materials for their purposes. However, the rules outlined in RICAIP's communication strategy and visual identity must follow.

The advantage remains that even these leaflets can be presented for download online.

An interesting way of presentation is also a roll up or pop up wall, which can be used to easily identify the project, for example at trade fairs, conferences or events organized by RICAIP.

The following printed materials will be produced during the RICAIP project:

- **General brochure on RICAIP**
  General brochure summarizing information about the mission and vision of RICAIP, including all partners and institutions cooperating in the project.
- **Testbed facilities profile cards**
  With the launch of the testbed, we will put together profile cards that will summarize the offer of service, equipment and a general description of what the testbed is used for.

7 Overview of Disseminations Actions

7.1 Dissemination KPIs

The joint communication and dissemination KPIs are stated in the Communication Strategy. Nevertheless, the following KPIs on scientific excellence have strong link to the dissemination activities too.

Nr.	KPIs – related to Dissemination *(cumulatively)*	2019	2020	2021	2022	2023	2024	2025 (Total)
	Scientific excellence							
6	Number of peer reviewed publications	0	8	20	60	125	200	280
7	Number of presentations at scientific conferences	2	12	35	88	130	190	260
9	Number of scientific awards	0	1	3	3	4	4	5
	Innovation performance							
11	Multi-site demonstrators / use cases performed	0	1	4	5	7	8	10
	Human Capital and HR development							
20	Joint educational & training programmes	1	3	5	7	9	15	20A

7.2 Indicative Schedule of RICAIP Branded Events

Timeline - Stages of Dissemination Activities:

- **Early in the Project RICAIP**
  Needs and requirements of the industrial stakeholders – interactive dialogue, participation in international events.
- **During the Project RICAIP**
  Sharing results, demonstrations, interactions with the research community – publishing of results, presentation in high ranked scientific conferences, online communication
- **By the end of the Project RICAIP**
  Final conference, project outputs, lessons learnt, benefits to civil society, follow-up actions
- **Beyond the end of the Project RICAIP**
  Sustainability, adoption of the results

Event	Comment	Q1	Q2	Q3	Q4
RICAIP Branded Events	Regularly organized				
RICAIP Scientific Conference	Annual top event – past results and future challenges 2021: The first conference will be held at the occasion of re-opening of Prague testbed				
RICAIP Workshop Series	Scientific workshop on various subjects 2 worshops on selected topic will be always co-located with RICAIP Scientific Conference				
RICAIP Industry Days	Main B2B and match-making event with industry 2021: First will be organized in autumn				
RICAIP I4.0 Info Days	Large popularization event, co-located with Open days and Researchers' Night				
RICAIP Brain & Breakfast	Ad-hoc meetings and business breakfast promoted under one brand and umbrella				
Other events	On demand or ad-hoc organized Prospective start: from 20212				
Thematic workshops for public	„No child left behind" (10 children of 6-10 year old) "Computer-aided Industry: This is Interesting!"				
Events for students: Hackathon	"Hackathon on smart manufacturing: group of 10 students				
External and internal trainings	On-demand and tailored partnering workshops in cooperation with 3rd parties				
Visits and guided tours	Universities, industry, young students and pupils (either individual or groups)				

Dissemination Matrix – Tools / Target Groups:

Channel	Measures	Target Audiences			
		Industry	Scientific Community	Students	General public
Scientific publications	Number of the articles in journals		X	X	
Website	Number of the visits per month (year)	X	X	X	X

e-Newsletter	Number of subscriptions	X	X	X	
Press Releases and Press conferences	Media monitoring	X	X	X	X
Showroom	Number of visitors	X	X		
Events attendance	Number of events	X	X		X
Events organization	Number of visitors	X	X	X	X
Twitter	Number of followers	X	X	X	X
LinkedIn	Number of followers	X	X	X	

Examples highlighting the content of dissemination actions:

Subject	Headline example	Possible channel of the dissemination
Publications	• Publication of the week • TOP selected publication • Most cited paper	– Press release – Social media post – Website – Newsletter
People	• New job position • New member of the team • Face of the new invention • Award holder • New grant holder • Event participant	– Interview – Article – Social media post – Press release – Website Newsletter
Infrastructure	• New instruments • Users of the infrastructure • Services offer	– Article – Social media post – Website – Newsletter – Flyer
Numbers	• Employees • Users of the infrastructure • Publications • Instruments • Events	– Annual report – Website – Social media – Printed brochure – Newsletter

	• Women / Men	
Events	• RICAIP project participation • Organization of seminar, workshop, conference etc. • Public events • Event speaker • Open days • Testbed visits	– Article – Social media post – Press release – Website – Newsletter

8 Principles of Dissemination and Knowledge Sharing

8.1 Open Access Policy

In general, according to „Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020“ by the European Commission, the „Open access (OA)“ refers to the practice of providing online access to scientific information that is free of charge to the end-user and reusable. 'Scientific' refers to all academic disciplines. In the context of research and innovation, 'scientific information' can mean:

- **Peer-reviewed scientific research articles** (published in scholarly journals) or
- **Research data** (data underlying publications, curated data and/or raw data).

Open access to scientific publications means free online access for any user. Although there are no legally binding definitions of 'access' or 'open access' in this context, authoritative definitions of open access appear in key political declarations including the 2002 Budapest Declaration and 2003 Berlin Declaration.

- **Build on previous research results** (improved quality of results)
- **Encourage collaboration and avoid duplication of effort** (greater efficiency)
- **Speed up innovation** (faster progress to market means faster growth)
- **Involve citizens and society** (improved transparency of the scientific process).

The RICAIP is committed to providing results in open access in the following several options:

- **Publishing in highly prestigious open access journals.**
- **Publication of the results on the official website of the RICAIP project.**
- **RICAIP will use the already established mechanisms of the participating universities for open access archive (ie eg the BUT Digital Library and the CTU Digital Library, already indexed by OpenAIRE).**

9 Organisation of Dissemination Actions

The leader and coordinator of the dissemination action is CEITEC BUT. Tasks are distributed among the partners and the team according to the work plan and the planned event, publication, etc. Each partner has at least one responsible person for support and work on the dissemination.

The internal dissemination architecture and tools between the project partners is enabled by CIIRC. To create a common workspace and platform for the RICAIP partners and to strengthen identification with work and project the following tools are implemented respectively will be set up in time:

- Mail distributor.
- Continuous report from project management and minutes.
- Internal share point with partner access.
- Wiki platform and database.
- SWOT, R&D capacities, use case scenario

The same dissemination rules apply to each of the project partners. Each of the partners planning to disseminate RICAIP must therefore comply with the following regulations:

All project partners undertake to work together to ensure the smooth running and publication of the results within the deadline specified, for example, by the publisher of the journal.

If partner plans to disseminate the result of the RICAIP project, it will notify each of the partners and provide them with a copy of the planned publication before the submission.

The RICAIP Director, supported by the PR department, will plan public dissemination on an annual basis and coordinate the planned implementation. The RICAIP Director focuses on the dissemination to the research community, whereas the Executive Board is directly responsible for planning and supervising the industry-focused dissemination activities.

The internal organisation of RICAIP will be adjusted to stimulate all of RICAIP's research staff to actively contribute to this kind of dissemination (through e.g. system of incentives).

It is not possible to publish the results without the consent of all partners.

9.1 Acknowledgement

The acknowledgement is defined in the Communication Strategy and it follows the requirements for promoting EU funding in line with the Grant Agreement. For the purposes of the scientific acknowledgement, following cases have been identified:

- **For scientific and other result** (i.e. as a part of the publication when registered or submitted) following acknowledgement must be used and can be (but not necessarily) modified according to the type of the result / outcome:

This scientific result (scientific article / conference abstract / patent / SW / technology / report / study / design / utility model / prototype / event...) is part of the RICAIP project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 857306.

- **When using the RICAIP infrastructure** within collaborative / grant projects, following acknowledgement in terms of providing the equipment or measurements must be stated:

The RICAIP Centre supported by the EU, European Structural and Investment Funds, and the Operational Program Research, Development and Education (based on GA No. 857306 and Project CZ.02.1.01/0.0/0.0/17_043/0010085) is gratefully acknowledged for providing its infrastructure to obtain the scientific data presented in this paper.

9.2 Evaluation and Updates

Analysis and description of procedures for feedback and evaluation in respect to the particular target groups will be assessed and revised according to the indicators, targets and means of verification.

Following questions shall be answered:

- Have goals and objectives been reached?
- What lessons have been learned?
- What improvements should be made?

Conducting dissemination without evaluation is insufficient. Ongoing, successful dissemination efforts are shaped not only by what happens now but also by what is learned from previous efforts. Therefore, RICAIP evaluation of dissemination efforts is critical to identifying how and why certain activities work better than others. Evaluation should focus on processes and short-

term outcomes that can be measured easily, are sensitive to change, and are tailored to suit the particular context and circumstances. Evaluation of dissemination activities include active participation by stakeholders. Evaluation shall be designed individually prior to the activity and incorporate the measurement of target audiences-centered outcomes, identify potential long-term outcomes, and include a plan to provide ongoing feedback to inform future efforts.

Annex

Indicative list of selected prestigious international conferences

Event name	Short description	Venue
IEEE IECON	Conference of the IEE Industrial Electronics Society (IES), focusing on contemporary industry topics ranging from electronics, controls, manufacturing, to communications and computational intelligence.	Worldwide
IROS Conference	The IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) is one of the largest and most impacting robotics research conferences worldwide.	Worldwide
ICRA	The IEEE International Conference on Robotics and Automation (ICRA) is an annual academic conference covering advances in robotics. It is one of the premier conferences in its field.	Worldwide
IJCAI	Founded in California, in 1969 for scientific and educational purposes, including dissemination of information on Artificial Intelligence at conferences in which cutting-edge scientific results are presented and through dissemination of materials presented at these meetings in form of Proceedings, books, video recordings, and other educational materials.	Worldwide
NeurIPS	Exchange of research on neural information processing systems in their biological, technological, mathematical, and theoretical aspects. The core focus is peer-reviewed novel research which is presented and discussed in the general session, along with invited talks by leaders in their field.	Worldwide
ECCV / ICCV	Top-tier computer vision conferences, with the latter generally recognized as the international version in the same area of research	Europe
IEEE / ACM International Symposium	WQoS has established itself as a highly reputable forum to present novel ideas on all QoS-related subjects.	Worldwide
Hannover Messe	Brings the core industrial sectors together at one location – from drive engineering, automation, energy, R&D and industrial IT to subcontracting. This is the place where exhibitors cross the boundaries of technology and industry.	Germany

BIM World Congress	Leading platform in digital solutions for the construction, real estate and urban planning industries.	Germany
Industry 4.0 Summit	The Industry 4.0 Summit is the UK's premier gathering of senior level manufacturing executives interested in developing their own digital strategies.	UK
Laval Virtual	One of the main European Events on VR and AR essentially applied to Industry 4.0 and Entertainment	Europe
GSMA MWC	World's largest exhibition for the mobile industry, and incorporates a thought-leadership conference featuring prominent executives representing global mobile operators, device manufacturers, technology providers, vendors, and content owners.	Spain
EuCNC	One of the most prominent communications and networking conferences in Europe on H2020 projects, which efficiently brings together cutting-edge research and world-renown industries and businesses.	Europe
International Engineering Fair	The most important industrial expo in Central Europe. All key areas of mechanical and electrical engineering are represented.	Czech Republic

Non-exhaustive list of other scientific conferences:

- International Conference on Production Research (organized every 2 years by the International Foundation of Production Research);
- IFAC Conference on Manufacturing Modelling, Management and Control (also known as IFAC MIM);
- International Conference on Production Economics;
- IoT World Congress Forum;

  APMS (Advances in Production Management Systems), organized by IFIP (International Federation of Information Processing).