CSA-Industry4.E

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Coordination & Support action for Lighthouse Initiative Industry4.E

Deliverable 4.4
Report on the outreach to related initiatives carried out in the project

Lead parties for Deliverable: AquaTT
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Table of Acronyms:

AquaTT	AquaTT UETP Ltd	I4.0	I4.0
CSA	Coordination and Support Action	JU	Joint Undertaking
GB	Governing Board	LIASE	Lighthouse Initiative Advisory Service
HE	Horizon Europe	MGEP	Mondragon Goi Eskola Politeknikoa
H2020	Horizon 2020	S2i	Steinbeis 2i GMBH
IMR	Irish Manufacturing Research Ltd	VTT	Teknologian tutkimuskeskus VTT Oy
I4.E	Industry4.E	R&I	Research and Innovation
ECSEL	Electronic Components and Systems for European Leadership		

History of Changes:

Version	Publication date	Change
V1	30.09.2020	D4.4 document structured, draft created (AquaTT)
V2	31.03.2021	D4.4 document edits from all partners
V3	15.04.2021	D4.4 document edits from (IMR)
V4	19.04.2021	Final harmonisation and peer review IMR

ECSEL
Joint Undertaking

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Summary

This deliverable *D4.4_Report on the outreach to related initiatives carried out in the project* has been prepared by AQUATT at M30. The report references other connected deliverables where possible to avoid duplication.

This is the final reporting output for *WP4: Develop and implement a public engagement and outreach strategy to raise the visibility of I4.E to the broader public and related initiatives* where we describe the interrelated engagement and outreach activities that have been completed in the CSA-I4.E project to promote the I4.E Lighthouse to all stakeholders within the Digital Industry domain and to the wider community.

Each task in the CSA-I4.E project has championed the I4.E Lighthouse initiative. In summary, WP4 supported CSA-I4.E activities to promote the I4.E Lighthouse through:

1. The development of initial *promotional materials, tools, and actions* to enable the I4.E team to communicate efficiently from the very start on the I4.E Lighthouse (D4.2), together with the I4.E engagement and outreach strategy (D4.1);

2. The *evolution of promotional materials, tools, and actions* as the I4.E Lighthouse evolved and grew, incorporating more projects, expanding the I4.E LIASE and I4.E community (D4.3 public engagement activities);

3. Specific communication support and expertise provided for I4.E activities contributing towards the *Electronic Components and Systems Strategic Research and Innovation Agenda* (ECS SRIA), engaging and consulting the I4.E community on the future Digital Industry roadmap WP1 workshops #1 and #2 (D1.3 Industrial digitalisation roadmap);

Figure 1: Project activities of the CSA-Industry4.E | 4 pillars

4. Specific communication support to promote interaction with other projects through the ECSEL-portal (D2.1 operational platform), initially at the _Productive4.0_ consortium meeting (M6), through the website (_https://industry4e.eu/activities/ecsel-portal/_), at the _ECSEL-JU Governing Board_ (M27), at the workshop _research priorities for digitalisation of industries_ at _EFECS 2020,_ and more recently through the workshop #2 of WP2 I4.E _Bringing Projects Together_ (M30) (D2.3), with the addition of a parallel linkages to related relevant projects and initiatives at events and through our social media presence;

5. Specific communication support successfully engaged the _I4.E Lighthouse projects_ through the WP2 workshop dedicated to the projects (D2.3), WP3 mentoring and success sharing workshops (D3.2 Guidelines for CDE), along with events, website (_https://industry4e.eu/activities/projects_) and social media promotion of the I4.E Lighthouse projects and related relevant initiatives for the community (D4.2 promotional material & D4.3 public engagement activities);

6. Specific communication support and expertise provided for I4.E engagement with SMEs (D2.4 involvements of SMEs) particularly through their preferred channels (e.g. a _new LinkedIn account_ for the community);

7. Promotion of I4.0 and the I4.E Lighthouse projects to citizens through delivery of specific citizen engagement events, materials for the promotion of _I4.0 careers_ and a social media campaign (D4.3 public engagement activities) promoting digital skills and linking to relevant initiatives through social media;

8. The development of the complete set of communications, dissemination, and exploitation guidelines for the I4.E community _Navigating EU Projects, CDE Tools for Success_ (D3.3 e-book); &

9. The promotion of activities of the I4.E LIASE (D5.2 secretariat support provided to the LIASE) including the implementation of the parallel activities to support their collective conversation calendar _#LighthouseKeepers_ and their related speaking opportunities from M01-M30.

Successful implementation of the I4.E Engagement and Outreach Strategy has reinforced the connection across the ECSEL-JU I4.E Lighthouse community, while highlighting the relevance and impact of manufacturing in Europe and how this connects to our daily lives.

The CSA-I4.E team together with the LIASE has provided considerable energy and insight to the community and promoted: the I4.E Lighthouse; the projects and their research impact; the ECS SRIA road mapping work on future digital industry; the newly created _ECSEL-portal_; SME participation through association with the complementary flagship initiatives (e.g. I4MS); project engagement in advancing and sharing success stories on their communications, dissemination and exploitation strategies adapted to the COVID pandemic; citizen engagement and the creation of resources for I4.0 stakeholders to promote careers to help fill the skills gap. The outcomes will pave the way for continued Lighthouse support for the projects in this sector and provide resources for projects to further promote their work to an engaged extended I4.E community, and the wider public, as we transition towards the Key Digital Technologies (KDT) Partnership _Industry 5.0 a sustainable, human-centred and resilient European industry,_ where no one is left behind.

Additionality has been achieved through our presence at several events which took place throughout RP2 and further enhanced by the project extension: the addition of members to the I4.E LIASE and the increase in the number of projects within the Lighthouse. This has been complemented by extra effort to consult with the community in relation to the _ECS-SRIA 2021_ and inform the I4.E 'position paper' driven by the activities of the I4.E LIASE supported by the CSA.

1. Introduction

Deep and sustainable connections were initiated and reinforced with our stakeholders to help ensure uptake and effectiveness of the I4.E Lighthouse activities and outcomes and of outputs developed for knowledge, networking, and interaction. This deliverable reports on the activities carried out by the CSA and LIASE in supporting the I4.E Lighthouse to reach out and interact with stakeholders and stakeholder groups to establish an extended community for successful interactions with I4.E Lighthouse activities.

Activities in *T4.5 Establish and reinforce links to related initiatives, hubs, clusters, and projects* supported stakeholder engagement activities across WP1-5. This task was instrumental in the realisation of the Industry4.E Lighthouse as a platform for interaction, networking into the community, establishing and reinforcing links to related initiatives, hubs, clusters, and between the projects. T4.5 activities used the public engagement and outreach strategy and tools from *Task 4.1: Develop an Industry4.E public engagement and outreach strategy (M1-4)* and *Task 4.2: Develop a suite of promotional material to help communicate Industry4.E (M1-8)* to connect with these stakeholders to help ensure uptake and user interaction, greatly aided by the introduction of the *ECSEL portal* for knowledge, networking and interaction, as well as stakeholder engagement with other I4.E Lighthouse activities (e.g. road mapping activities in WP1; SME awareness building and engagement, workshops in WP2; workshops in WP3; and I4.0 citizen engagement through careers promotion and related resources in WP4).

I4.E promotion activities to champion I4.E project accomplishments and discussed in detail in the updated *D4.3 Report on the public engagement activities carried out in the project* highlights include:

- **WP1:** I4.E of Digital Industry chapter in ECS SRA 2019 and 2020, and ECS SRIA 2021, the road mapping outputs from different related initiatives, and promotions including 'Shaping the future I4.E Lighthouse' (19.06.2019) involving community consultation (D1.1, D1.2, & D1.3);
- **WP2:** The collaboration platform *www.ECSEL-portal.eu* (D2.1) and related promotions including the I4.E "Bringing Projects Together" Workshop (11.03.2021) (D2.3) and related SME engagement activities (D2.4);
- **WP3:** I4.E Lighthouse community *#DigitalWorkshops* webinar series (Workshop2-5) including exploring best practice in adapting communications, dissemination, and exploitation to COVID19 situation (D3.2), including complimentary guidelines in e-book (D3.3);
- **WP4:** The success of the I4.E platform combining the success of the I4.E website: *www.industry4e.eu* and social media campaign via: Twitter: *@Industry4E,* LinkedIn: *I4.E,* Facebook: *I4.E,* Instagram: *I4.E* (D4.3) was additionally supported by *Event* booths, presentations, and participation including citizen engagement activities such as "The Future of Work" online *#DigitalWorkshop* amongst others reported in the connected deliverables (D4.3); and
- **WP5:** Secretariat services to the I4.E LIASE have reinforced the brand through: new media, high profile appearances at key EU events, and further fortified by a pre-planned conversation calendar for the new virtual networking environment *#LighhouseKeepers.*

End of Section 1

2. Promotional material, tools and outreach actions to related initiatives

I4.E promotional materials, tools, and actions to related initiatives are addressed in *D4.3 Report on the public engagement activities carried out in the project* under the following headings:

* academic/industrial engagements;
* citizen engagements;
* social media campaign; and
* I4.E lighthouse community support.

Please refer to that deliverable to avoid duplication here. A short summary has been provided below with summary details.

Figure 2: ECSEL-JU, CSA and LIASE at EFECS 2019

2.1. I4.E targeted events

The D4.3 report includes I4.E promotion, networking, and participation in relevant events including events with major ECSEL-JU involvement and EUREKA participation such as EFECS2018, EFECS2019, EFECS 2020, ECSEL-JU Symposium 2019, ECSEL-JU Symposium 2020. A selection of additional European and regional events targeted due to mix of different related initiatives attracted for I4.E promotion include but are not limited: the INDTech2018, Basque Industry 4.0 2018 (*Basque4.0 2018*), *ICT2018* (Dec 2018), *Irish Manufacturing Expo 2019* (Jan 2019), ARTEMIS IA Technology Conference 2019, Factories of the Future Community Days (May 2019), DiMaND Innovative Training Network (ITN) Kickoff and Recruitment Event (June 2019), Digitising European Industry Stakeholder Forum (November 2019), Basque Industry 4.0 The Meeting Point (*Basque4.0 2019* Nov), ECS Brokerage Event 2020, Digitalisation and digital platforms for manufacturing - EFFRA & ConnectedFactories2 (March 2020), *Open Innovation Kongress Baden-Württemberg 2020,* European Research & Innovation Days (September 2020), and the ConnectedFactories2 DMP workshop (February 2021).

Figure 3: the I4.E virtual booth at EFECS 2020 hosted by the CSA

2.1. Maximising impact

At these transnational, national and regional events the I4.E team worked to ensure that maximum coverage of relevant stakeholders and projects was achieved (e.g. from EFFRA and other PPPs, EUREKA, DIHs etc.). The team were present to interact with stakeholders and introduced them to the I4.E Lighthouse, promoting the development of a globally competitive European I4.0 position and the I4.E projects using the I4.E promotional materials (e.g. website and social media (_Twitter_, _LinkedIn_) promotion, the latest _I4.E flyer_, the _careers and skills promotion flye_r and where we had booths or stands the _I4.E poster_). Additional promotional activities covered by the I4.E LIASE are reported in D5.2. For more details on events where the I4.E Lighthouse was promoted visit: _I4.E events page_.
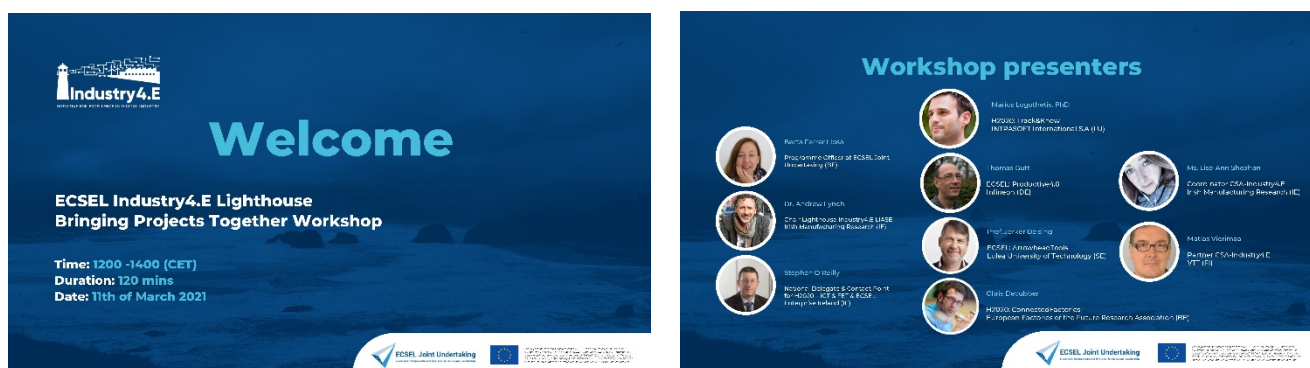

Figure 4: Example of the promotional material shared on-line

2.2. Fostering interactions

In terms of interactions with relevant links and initiatives, the social media followed, liked and reposted relevant posts (in T4.5) that would be relevant to the I4.E Lighthouse extended community, including from:

- Industry Associations (e.g. AENEAS @AENEAS_EU, ARTEMIS @ARTEMIS_IA, European Technology Platform on Smart Systems Integration EPoSS, EFFRA, ECSEL-JU, PPPs (5GPPP, BDVA ...);
- H2020 projects (e.g., CAPRI, Qu4lity, FELICE, SC3, PLATOON, DataBench, BlockStart);
- EUREKA, SMART EUREKA;
- EC initiatives (e.g. Blockchain Skills for Europe, Digital EU, DG-Grow (Internal Market, Industry, Entrepreneurship & SMEs), _European Digital Industry Alliance_, _European DIGITAL SME Alliance_, _Enterprise Europe Network_ (_EEN-Ireland_, _EEN-UK_), _European Institute of Innovation & Technology_ – EIT (_EIT Manufacturing_, _EIT Digital_), _Next Generation Internet of Things initiative_...);
- DIHs (e.g., DIHNET.eu, I4MS, SAE, DIH4CPS, AMable, RODIN network, agROBOfood);
- Interreg projects (e.g., _Machining4.0_);
- National and regional initiatives (e.g., _i-FORM_, _BIND 4.0 - Basque Open Innovation Platform_, _CONFIRM_);
- International initiatives (e.g., International Federation of Automatic Control _IFAC_, _the World Manufacturing Foundation_...); and
- Partners in the I4.E Lighthouse team, the Indutry4.E projects and project partners.

Figure 5: CSA and LIASE fostering interactions via social media

Please visit the I4.E social media accounts for full details and the associated report D4.3 which includes the social media campaign report.

End of Section 2

3. I4.E roadmapping and outreach to related initiatives

The I4.E roadmapping efforts and interactions with related initiatives, hubs, clusters, and projects included building on the selected roadmaps from different initiatives (as outlined in D1.1 and D1.2) culmination in recommendations on the future of the industrial digitalisation roadmap (D1.3).

3.1. Achieving major milestones

The project achieved two major milestones in the delivery of this WP1 effort: mapping and analysis of programmes' overlaps, and synergies have been completed; and recommendation for refinement of the major challenges have been formulated.

Examples of the documents mapped and analysed from related initiatives include the following:

1. EFFRA Roadmaps + Factories of the Future in Horizon Europe (2021-2027):
2. Preparing the next multi-annual roadmap for Framework Programme 9, FoF in Horizon Europe – confidential – (2018).
3. European Roadmap for Industrial Process Automation, 2nd version (2018).
4. Eureka Smart Advanced manufacturing Technology Roadmap (2018).
5. Manufuture Vision 2030.
6. CPS Roadmaps (Platforms4CPS, Road2CPS and CPSoS).
7. Big data: European Big Data Value Strategic Research and Innovation Agenda, BDVA, 2017 + "Big data challenges in smart manufacturing: BDVA and EFFRA R&I roadmaps alignment" (2018).
8. HiPEAC Vision.
9. The Industrie 4.0 Roadmap/Guidelines and the associated Working Group Documents.
10. 2018 World manufacturing forum report: Recommendations for the future of manufacturing.

Figure 6: I4.E interactive roadmapping workshops

3.2. *Fostering interactions*

Additional WP1 interactions with related initiatives include:

- I4.E activities contributing towards the ECS SRIA e.g., *LinkedIn post* (D1.1, D1.2, and D1.3); and
- I4.E interactive workshops that engaged and consulted the wider I4.E community on the future Digital Industry roadmap (described in D1.3):
    1. *Shaping the Future Roadmap in Digital Industry* (Jun 2020). Co-host event of ECSEL JU 2020 Symposium.
    2. Research priorities for digitalisation of industries (Nov 2020). Part of *EFECS 2020*.

End of Section 3

4. I4.E projects and outreach to related initiatives

4.1. A brighter I4.E Lighthouse

The I4.E projects have been promoted to related initiatives, hubs, clusters, and projects through the I4.E promotional material tools and channels as described in *D4.3 Report on the public engagement activities carried out in the project* as well as at events attended by the I4.E team attracting additional projects to the Lighthouse in 2020.
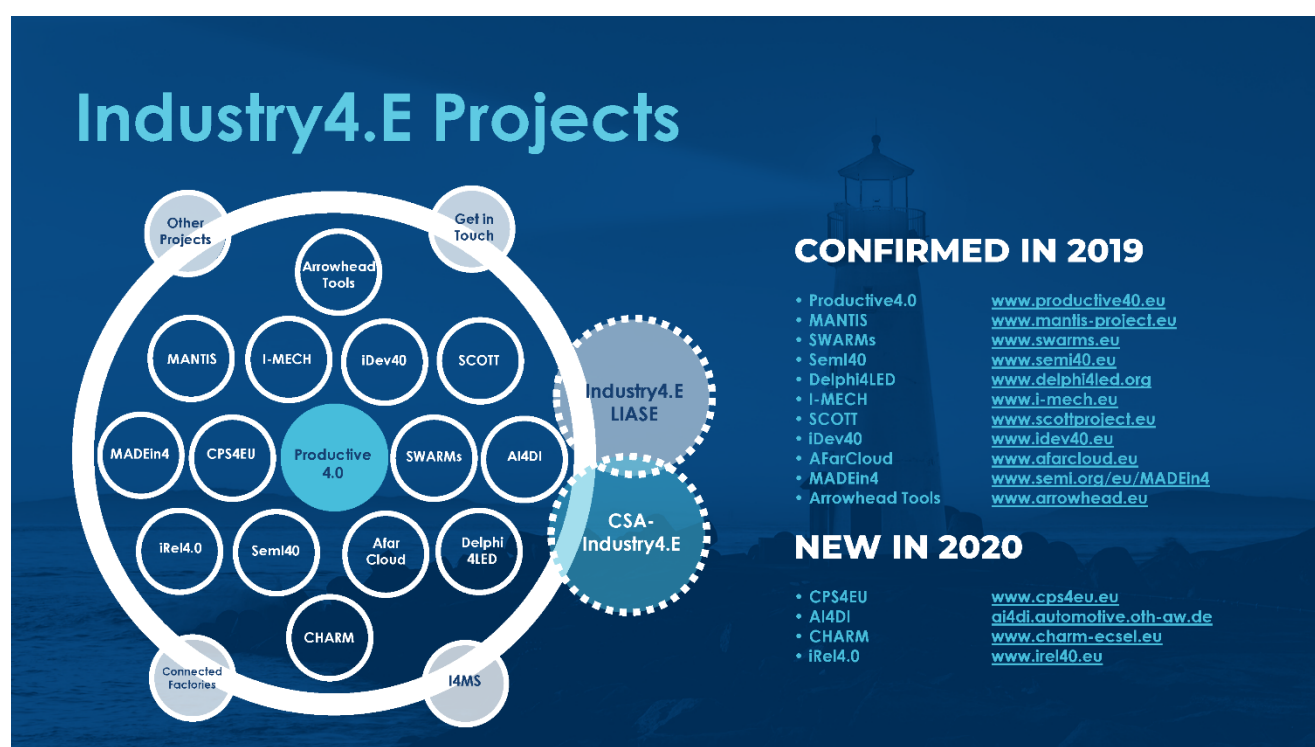
Figure 7: The growth of I4.E Lighthouse Initiative

4.2. Capitalising on interaction opportunities

The I4.E team have engaged with the I4.E projects through WP2 workshop (D2.3), WP3 mentoring and success sharing workshops (D3.2), interactions with the team at the Productive4.0 consortium meeting (Mar 2019), along with at events where the projects were also present (e.g. EFECS and ECSEL-JU Symposiums), through the *www.Industry4E.eu* website and social media promotion of topics relevant to the I4.E Lighthouse projects and extended community (D4.2 & D4.3).

The CSA-I4.E WP3 team have developed workshops and a comprehensive set of communications, dissemination and exploitation guidelines for the I4.E community (D3.3 e-book), to help the projects further communicate and disseminate (and exploit) their project results to related initiatives, hubs, clusters and projects. The WP3 *#DigitalWorkshops* webinar series was advertised to the extended I4.E community through the website, social media channels, Eventbrite, and through emails to I4.E project coordinators:

- WP3 workshop1: Creating Knowledge Impact through Knowledge Transfer for the I4.E Lighthouse Project Community (21.11.2019). At *EFECS 2019* (D3.2);

- WP3 workshop2: Tools for successful project dissemination /exploitation (and sharing best practices) (12.05.2020). Online WP3 workshop series (D3.2);
- WP3 workshop3: How best to fulfil communication and dissemination obligations solely using remote methods - A workshop to explore best practice in adapting to COVID19 situation (19.05.2020). Online WP3 workshop series (D3.2);
- WP3 workshop4: How best to carry out "Exploitation" activities using remote methods - A workshop to explore best practice in adapting to COVID19 situation (26.05.2020). Online WP3 workshop series. (D3.2); and
- WP3 workshop5: Sharing Success – Successful exploitation in I4.E Lighthouse projects (02.6.2020). Online WP3 workshop series (D3.2).
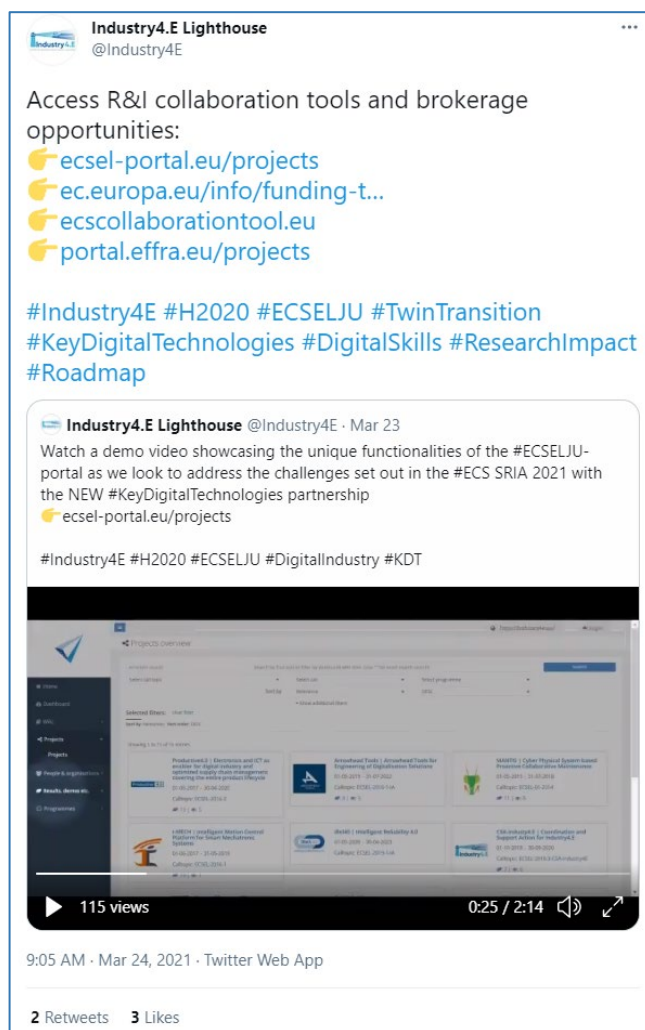
4.3.   Added impact

The I4.E collaboration platform or _ECSEL portal_ provides a tool for further interaction with other projects _D2.1 Report presenting the operational platform_ sharing news and providing a means of filtering through technical details of the projects to identify related topics. The portal has been the subject of extensive promotion to the I4.E community through:

- The Productive4.0 consortium meeting (Mar 2019);
- all channels available to the CSA (e.g. email, website, social media channels _Twitter_, _LinkedIn_);
- the workshop: Research priorities for digitalisation of industries on (Nov 2020) at _EFECS 2020_ (e.g., _tweet_); and
- the workshop on 11.03.2021 I4.E Bringing Projects Together Workshop (D2.3).

The new ECSEL-JU Communication platform is the online resource for stimulating the sharing of information about research and innovation projects and the results and demonstrators that these projects generate. The ECSEL portal was demonstrated to the participants to encourage its further use, this included a video made of the demonstration to enable further dissemination and exploitation of the CSA-Industry4.E asset. The portal supports community building and enhances the synergy of future activities. Extra video tutorials have also been made to aid this effort:

- ECSEL Portal Basics – Edit Projects and Results. Youtube video: _here_
- ECSEL Portal – Imports from the EU Open Data Portal. Youtube video: _here_

The collaboration platform supports the projects with their current and future R&I efforts working in complete harmony and providing additionality to the current offering as we transition to the new framework programme. Links as follows:

- *https://ec.europa.eu/info/funding-tenders/opportunities/portal/horizon-dashboard*
- *https://ecscollaborationtool.eu/*
- *https://portal.effra.eu/projects*
- *https://www.ecsel-portal.eu/projects*

Figure 8: ECSEL contribution to the R&I collaboration tools

End of Section 4

5. SME engagement and outreach to related initiatives

I4.E SME engagement and outreach to related initiatives is described in detail in *D2.4 Summary reports of involvements of SMEs*. This effort has been positively received and greatly enhanced by the extra commitment of the CSA with additional resources dedicated to the Lighthouse initiative to:

- **support an I4.E careers campaign** for the public (the workforce of the future) to positive effect, with additional outreach events considering for SME inclusion (D2.4)**.** These events carried out by the CSA addressed by an array of activities in WP2 and WP4;

- **design an I4.E public engagement and outreach strategy** was developed in RP1 **(T4.1)**, along with a series of public dissemination activities for citizen engagement across the CSA member states has taken place with positive testimonials **(T4.3)** (e.g. *#FutureOfWork* I4.E outreach events…);

- **surveying SMEs** to get a picture of their understanding of the opportunities available to them. The partners most closely connected to industry in RP2, particularly their *parallel efforts with the I4MS initiative and DIHs* informed this intelligence gathering exercise. A unique opportunity to interview a leading SME (involved in 3 of the I4.E Lighthouse projects: Productive4.0; AfarCloud; and Arrowhead Tools) was pursued in RP1 to better understand their success, following from their involvement in H2020/ECSEL can be further exploited, showcasing the added value of industry participation in the framework programme **(T2.3)**.

- **support the fight against COVID-19** using well integrated DIHs (e.g. IMR candidate EDIH) in medical technology ecosystem to help the national health systems and industry's research efforts to provide better treatments and advances towards beating the virus. IMR supplied PPE to front line workers, followed quickly by manufacturing face shields to hospitals in need, while at the same time taking a leadership role with international partners rapidly developing two prototype ventilators. IMR engaged actively with our network to help the supply chain which in certain sectors was in crisis. IMR helped 40 companies including SMEs with 100 different B2B opportunities, and played an important role helping 3 new companies successfully during this window. There were 3 distinct phases to the IMR Response to COVID-19, 1) Medical Containment, 2) Getting Industry Going, and 3) Building Resilience.

Figure 9: IMR helped 40 companies with different B2B opportunities in fight against COVID-19

5.1. Curated insight for SMEs

SME targeted content on I4.E Lighthouse website includes links to related initiatives on the *I4.E careers webpage* tab for I4.0 SMEs, including:

- **European Digital Innovation Hubs (EDIH)** – act as a one-stop-shop, providing access to digital technologies and competences, infrastructure to test digital innovations, training to develop digital skills, financing advice, market intelligence and networking opportunities. Search the catalogue of DIH. Read more on DIHs here.

- **ICT Innovation for Manufacturing SMEs (I4MS)** is a program promoted by the European Commission to expand the **digital innovation of manufacturing SMEs in Europe.** As an SME or a mid-cap you can apply for technological and financial support to experiment with different technologies and services to improve the innovation skills of your staff and the technologies and services your company provides. *www.i4ms.eu*

- **Smart Anything Everywhere (SAE)** – the SAE initiative has been dedicated to the creation of well-functioning ecosystems around regional DIHs in four technology areas: **Cyber-physical and embedded systems, Customised low energy computing powering CPS and the IoT, Advanced micro-electronics components and Smart System Integration, Organic and large area electronics**.

- **BIND 4.0** is a public private accelerator program located in the Basque Country (Spain) focusing on Industry 4.0 start-ups with solutions applied to **Advanced Manufacturing, Energy, Health and Food** sector. BIND4.0 part of *Basque4.0* DIH. *BIND4.0 Video clip* website: *www.bind40.com*

Figure 10: I4.E connects to support SMEs

5.2. Added impact

Additionality has been achieved by the project for SMEs through:

- the design and delivery of a unique targeted social media campaign and new media, a suite of promotional material including an *Industry4.E careers toolkit* with a dedicated resource webpage for teachers, guardians, and learners to continue to use the material after the life of the project. This has greatly enhanced the impact and reach of the initiative;

- the social media followed, liked and reposted relevant posts (in T4.5) that would be relevant to the I4.E Lighthouse SME community, or community members interested in SMEs: DIHs - Tweets are followed, liked and retweeted from a range of SME related accounts, examples include: @DihnetE *tweet example;* OPENDEI *tweet example;* DIH4CPS @DIH4CPS *tweet example;* European DIGITAL SME Alliance *@EUdigitalsme;* I4MS *@I4MS_Europe;* and SBS *@SBS_SME ;* and

- the appointment of an experienced and fully resources PC at M14 by IMR, ensuring the continued strategic positioning of the project within the community. The PC was and continues to be a key member of the *ICT Innovation for Manufacturing SMEs* (I4MS) community, hands-on securing competitive funding for manufacturing Industry (particularly SMEs on their #TwinTransition) and a thought leader in the evolution of the DIH concept, embedded in the community influencing the DEP 2021-2027 (particularly the EDIH initiative) and emerging policy related to Industry 5.0. This appointment has addressed gaps related to project leadership and SME involvement.

End of Section 5

6. Citizen engagement, digital skills, and outreach to related initiatives

In WP4, the scope taken for the citizen target audience for the events and social media campaign was **citizens who were not already strongly engaged in European Industry and/or the digital transformation of Industry**. The team decided to focus on the skills gap and the promotion of I4.0 careers opportunities as a hook on which to help us engage citizen communities to introduce and convey to the broader public the potential impact of I4.E on their daily lives and raise the visibility of I4.E projects to the wider stakeholder community.

This work from T4.3 and T4.4 has resulted in the following outputs and outcomes for citizen communities: Careers Opportunities resources including a *careers webpage*, *booklet*, and *poster*, 7 citizen engagement *events*, and a strategic social media citizen engagement campaign (*Twitter*, *Facebook*, *Instagram*) **addressing citizen communities** promoting digital skills and linking to relevant initiatives through social media. This careers material is also available to academic and industrial communities who are actively seeking to recruit public uptake to fill I4.0 careers and/or increase the potential future workers skill set to help alleviate the skills gap problems.

Skills initiatives linked to in social media include: Digital skills and jobs coalition Digital Skills EU @DigitalSkillsEU; EUDigitalEducation @EUDigitalEdu; and Technology Ireland Software Skillnet @TechSkillnet.

I4.0 careers and skills related initiatives linked to on the Industry4E.eu careers page include:

- *Skills for the future of manufacturing report 2019;*
- *I-WISH*
- **Links for exploring STEM ***
- **Links for exploring STEM careers ***
  - Smart Futures programme to help students discover STEM subjects and careers that might be right for them.
  - Careersportal.ie careers guidance tools for everyone
  - The German Official Industrie 4.0 Platform provides a great list of job and career possibilities.
  - The Fraunhofer Industry 4.0 site resources include: careers portal with research & job opportunities.
  - Industry 4.0 And The Career Opportunities It Presents
- **I4.0 Careers – Examples and Role Models**

Figure 111: I4.E outreach to boost I4.0 careers and DigitalSkills

- o VTT ProperTune – video example from VTT of I4.0 projects with strong element of Material Science
- o Industrial Renewal – VTT
- o New ways of working through robotics – VTT
- o Silicon photonics – VTT
- o What is Industry 4.0 and what does it mean for you? – University of Derby
- o Be the difference! – This is Engineering
- o How I got here ? – This is Engineering – shows why some people choose engineering careers

- **Links for reskilling and upskill ***
  - o **Women ReBOOT**
  - o **PEERS Solutions** –German personal skills development platform
  - o **Industrie 4.0 Summer School** at Aachen University of Applied Sciences.
  - o **Academy Cube** – a German e-learning platform for digital career
  - o **Industria Conectada 4.0** by the Spanish Government
  - o **Basque Industry 4.0** by the Basque Government.
  - o **EIT Digital Summer Schools** by EIT Digital including courses on Digital Industry, IoT platforms for I4.0, big data analytics, etc.
- **I4.0 job postings ***
- **I4.0 equipment and skills access for SMEs ***

*See _I4.E careers webpage_ for more details.

End of Section 6

7. Conclusions

This deliverable presented a report on the outreach to related initiatives carried out in the project. This work was instrumental in the realisation of the Industry4.E Lighthouse as a platform for interaction, networking into the community, establishing and reinforcing links to related initiatives, hubs, clusters, and between the projects.

The CSA, LIASE and ECSEL-JU have worked to ensure that maximum coverage of relevant stakeholders and projects was achieved as part of Industry4.E outreach to related initiatives across all WPs. Each task in the CSA-I4.E project has championed the I4.E Lighthouse initiative, employing the I4.E collaboration platform _ECSEL portal_ and I4.E Lighthouse promotional materials, tools and actions, which have evolved as the I4.E Lighthouse expanded (e.g., _website_, social media channels, _I4.E flyer_, _careers and skills promotion flyer_, _I4.E poster_, _eventbrite_). Successful implementation of the I4.E Engagement and Outreach Strategy has reinforced the connection across the ECSEL-JU I4.E Lighthouse community, while highlighting the relevance and impact of manufacturing in Europe and how this connects to our daily lives.

The outcomes will pave the way for continued Lighthouse support for the projects in this sector and provides a platform for projects to further promote their work to an engaged extended I4.E community, and the wider public, as we transition towards Key Digital Technologies (KDT) Partnership and _Industry 5.0 a sustainable, human-centred and resilient European industry_, where no one is left behind.

End of Section 7