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Industry4.E Public Engagement and Outreach Strategy

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Summary

The Industry4.E Public Engagement and Outreach Strategy describes the activities to be performed and the channels to be used to promote and communicate Industry4.E to help increase the social impact and uptake of digital innovation. The strategy and the processes described within will help ensure that appropriate activities (tools, channels and metrics) are carried out to reach different audiences with defined messages specific to them. The project will design strategic activities to communicate the value of the digitalisation of industry to European citizens. To do this it will intensively use social media as well as events that target the general public. Where possible, synergies with other initiatives will be sought.

The strategy identifies how the public target groups for the project outreach will be identified; defines the main communications and engagement channels; it describes the means of outreach and engagement and details the type of targeted public events that will be selected. In addition, the strategy outlines the process to generate guidelines for the Industry4.E Lighthouse projects to help them in communicating their story to the general public.

Successful implementation of the Industry4.E Public Engagement and Outreach Strategy will reinforce the high importance of the European manufacturing sector to the public. It will promote the huge effort Europe is putting behind Industry4.0 through the associated projects and transnational, national and regional initiatives and the resulting strong societal impacts this will have in our future. The outcomes will pave the way for projects in this sector to further promote their work to an engaged public.

The strategy contains a set of protocols to ensure that all relevant public communications, engagement and outreach is carefully managed. Also, that the knowledge gained from this will be transferred to Industry4.E Lighthouse projects in the form of guidelines to help them in communicating their story to the general public. The protocols are set up for:

- **Communications** – to raise public awareness of Industry4.0 and EU manufacturing in the first instance and then awareness of the Industry4.E Lighthouse, its objectives, the partnership, the associated projects, Lighthouse and Lighthouse Projects' progress and success.

The strategy has been constructed using the **WHY, WHAT, WHO, HOW, WHEN** principles.

CSA-Industry4.E will develop and make use of the latest tools, resources and communication channels resulting in cost effectiveness and maximum impact.

This strategy has been developed by the CSA-Industry4.E WP4 leader, in collaboration with the CSA-Industry4.E partners. The WP4 leader is responsible for coordination of the Public Engagement and Outreach activities. However, all CSA-Industry4.E project partners are involved in Public Engagement and Outreach to foster awareness and generate impact, especially in their own countries and networks. This strategy will be revised when necessary following regular strategy reviews.

Team involved in deliverable writing: WP4 Lead, AquaTT

1 Introduction

The digitalisation of industry – Industry 4.0 – is rapidly transforming all stages of the production value chain of goods globally. Advances in robotics, data collection, cybersecurity and other technologies are creating increasingly efficient, flexible and tailored manufacturing processes. If exploited, these technologies could create huge growth in European industries.

ECSEL Joint Undertaking (ECSEL-JU) is an EU-driven public-private partnership, funding innovation in electronic components and systems (www.ecsel.eu). Through the ECSEL-JU, European industry, SMEs and Research and Technology Organisations are supported and co-financed by ECSEL participating states and the European Union. ECSEL-JU has created “Lighthouse initiatives” as they identified the need to better coordinate and link Research, Development and Innovation (RDI) activities taking place in order to help European industry achieve digital transition and strengthen Europe’s competitiveness and leadership. Three Lighthouses have been launched to date; **Industry4.E**, Mobility.E and Health.E.

The **Industry4.E Lighthouse** has a special focus on all means of microelectronics and ICT for Digital Industry. Operating across project, funding, and national boundaries, Industry4.E is expected to bring together relevant RDI projects funded across various funding programmes helping them to connect with each other and the end-user/stakeholder community.

To support the implementation of activities in relation to the Industry4.E Lighthouse, ECSEL JU via Horizon 2020 have funded a Coordination and Support Action (CSA) for 24 months starting in October 2018. CSA-Industry4.E intends to:

- ✓ Support the LIASE in establishing the Lighthouse
- ✓ Actively assist in enabling successful execution of the Digital Industry roadmap
- ✓ Engage research communities - coordinate the relevant stakeholders, project consortia and policy-makers
- ✓ Facilitate, support and assist Industry4.E projects in effectively exploiting project results
- ✓ Promote the Lighthouse visibility
- ✓ **Develop and implement a public engagement and outreach strategy to raise the visibility of Industry4.E to the broader public and related initiatives**

The Industry4.E public engagement and outreach strategy

The objective of the public engagement and outreach strategy is to raise the visibility of Industry4.E to the widest stakeholder community and to help projects communicate their impacts via success stories in such a manner as to introduce and convey to the broader public the potential impact of Industry4.E on their daily lives.

The aim is to **prepare Europeans for the digital future** – so that they appreciate the value of the digitalisation of industry and the impact it will have on society. At the end of the project, public audiences should understand why Europe is prioritising the development of Industry4.0 and should be familiar with the Industry4.E Lighthouse leading-edge projects, researchers’ roles, and their innovations and potential applications of their project results, including resulting societal impacts. The public should also be made aware of the range of highly-sought-after skillsets required to sustain

strong European manufacturing competitiveness: both for students considering future careers (and their influencers; parents, teachers, career guidance councillors, main media, role models), and for existing workforce (and their influencers) who are considering upskilling.

Communications of the Industry4.E Lighthouse topics, projects and their results is key to achieving these goals. The EC H2020 Programme Guidance - Social media guide for EU funded R&I projects clearly distinguishes between communications and dissemination (http://ec.europa.eu/research/participants/data/ref/h2020/other/grants_manual/amga/soc-med-guide_en.pdf):

- **Communication** is about communicating the whole project including the results to multiple audiences beyond the project's own community. Communication includes the mass media and general public to inform and engage with citizens and society showing the benefit and potential social impacts of leading-edge research projects (possibly engaging in a two-way exchange).
- **Dissemination** is about sharing the project results, once they are available, with specialist audiences. Dissemination can be through any appropriate means including scientific publications in any medium, to transfer knowledge and results to enable others to use and take up results, including peer groups, industry, professional organisations, policymakers.

Dissemination and exploitation for Industry4.E Lighthouse projects is covered in WP3, Titled: Support for I4.E research projects internal needs.

The Industry4.E Public Engagement and Outreach Strategy (D4.1), contained herein, will help ensure effective communications, engagement and outreach during the CSA-Industry4.E project and beyond. The strategy will be reviewed and updated periodically throughout the project lifetime to ensure that it remains fit-for-purpose.

The WP4 leader, together with all the CSA-Industry4.E project partners, will carry out efficient and effective public engagement and outreach activities. To do this we will look to use examples of Research and Innovation results, from the Industry4.E Lighthouse projects, that can be used to demonstrate the type of innovations being developed and its potential effect on citizens daily lives. In doing so, we will be promoting EC investments and supporting the Industry4.E Lighthouse projects in their outreach efforts.

Metrics and impacts of the campaign will be carefully monitored and good practice will be transferred to other existing and future projects via a set of guidelines.

2 Specific objectives of the Industry4.E Public Engagement and Outreach Strategy (WHY)

Specific objectives of the Industry4.E Public Engagement and Outreach Strategy are to:

- To ensure maximum visibility of Industry4.E both within the public consciousness, as well as the wider stakeholder community, by pursuing a strategy emphasising outreach, accessibility, connectedness and tangible, beneficial impacts.
- Engage with citizens (face to face and/or via social media) introducing and discussing potential impact of Industry4.E on their daily lives.
- Implement a strategic social media campaign to hit a wide public audience.
- To communicate the value of the digitalisation of industry to European citizens.
- To promote the Industry4.E Lighthouse, the Lighthouse projects' aims, progress and results beyond the consortium and the projects to society (including through the education community, industrial stakeholders, and policy actors who all have a role to play).
- Help projects to communicate their impact success stories to wider society in a non-technical manner.
- Monitor and evaluate the implementation of the Industry4.E Public Engagement and Outreach Strategy regularly, and review and revise the strategy when necessary.

3 Industry4.E Messages and Results (WHAT)

The following section highlights some of what will be communicated in terms of messages and results.

3.1 Messages

There are several messages which the Industry4.E Lighthouse wants to portray, and the message may vary depending on the particular audience being targeted. The message needs to be relevant to the audience and link back to the project's public engagement and outreach objectives. Some of the overall messages the Industry4.E Lighthouse wants to communicate to the general public are:

- The manufacturing sector is changing due to an increasingly digital, circular economy and knowledge driven economy.
- The manufacturing sector has a high-tech future – reaping advantage from recent huge advances in key technologies including 5G, IoT (Internet-of-things), big data analytics, High Performance Computing (HPC), cybersecurity, photonics, robotics and electronic components and systems.
- Europe is prioritising the development of a globally competitive European Industry4.0 position. The aim is to keep or bring manufacturing back to Europe by strongly engaging with all stakeholders in the value chain (including industry, SMEs, research institutes, universities, policymakers, end users) and encouraging cooperation to achieve this.
- As part of its Digitising European Industry Initiative the European Commission (EC) has supported the setting up of partnerships and EU-wide collaborations in which the EU, Member States, regions and private sector can cooperate and co-invest with the common goal of advancing European uptake and competitiveness of Industry4.0.

- The Industry4.E Lighthouse has a special focus on all means of microelectronics and ICT for Digital Industry to help European industry achieve digital transition and strengthen Europe's competitiveness and leadership. Operating across project, funding, and national boundaries, Industry4.E is expected to bring together relevant Research, Development and Innovation (RDI) projects funded across various funding programmes helping them to connect with each other and the end-user/stakeholder community.
- Industry4.E Lighthouse projects are leading-edge European Industry4.0 projects run by expert researchers, while training new researchers, and addressing significant challenges in the field of Digital Industry. These projects will lead to many key innovations, and potential applications of these project results will have substantial societal impacts. Industry4.E Lighthouse has a key role to play in communicating this message, helping the Lighthouse projects in communicating their story to the general public, and linking to other relevant initiatives.
- Careers in manufacturing are attractive both for young talent and upskilled/re-skilled professionals.
- The manufacturing sector has and will have skills shortages, and these need to be addressed for the sector to succeed. There is a range of highly-sought-after skillsets required to sustain strong European manufacturing competitiveness. This should be of interest both for students considering future careers (and their influencers; parents, teachers, career guidance councillors, main media, role models), and for existing workforce (and their influencers) who are considering upskilling or re-skilling. Industry4.E Lighthouse has a key role to play in communicating this message and helping the Lighthouse projects to communicate it also, and in linking to relevant skills development initiatives, such as the "Digital skills and jobs coalition" launched by the European Commission.

3.2 Results

Expected results including both outputs and expected outcomes are outlined below.

Industry4.E Public Engagement and Outreach Outputs include:

- **Industry4.E Public Engagement and Outreach Strategy Document**
- **A suite of promotional material for public engagement/outreach** for both online and face to face engagement. The suite includes:
 - Branding (PowerPoints, flyer, and promotional material templates) and guidelines on the deployment of public-facing materials, communication and activities;
 - Press releases and newsletters;
 - A website (to include links to relevant Industry4.E projects, initiatives and events);
 - A generic email address for contacting the CSA-Industry4.E (info@industry4E.eu)
 - An Industry4.E Lighthouse twitter account (@Industry4E)
 - A number of other active social media channels will be considered per audience group based on their efficiency of use – as part of the public social media campaign
 - The design of a mobile exhibition stand that can be cost effectively replicated and used for public outreach in various settings.
- **A series of public outreach activities for citizen engagement** related to Industry4.E. The project will be represented at a number of high-profile events, providing project visibility to stakeholders, SMEs, and members of the public. These may be attended by any of the CSA-

Industry4.E consortium partners, who will employ the public engagement and outreach strategy and tools at each of these events to:

- ✓ introduce Industry4.E;
- ✓ explain why Europe is prioritising its development;
- ✓ present the researchers and projects;
- ✓ present the innovations and potential applications of the results; and
- ✓ explain the impact it will have on society.

In addition, in order to maximise cost-efficiency and impact, the WP4 Leader, will identify and coordinate the attendance at suitable events to promote Industry4.E to the general public (e.g. science festivals, young scientist competitions etc.). The project will aim to have a presence at a **minimum of five public events**. The level of dissemination activity will be scaled to the particular event, and may range from running an exhibition stand to participating in or leading discussion forums. The project's participation in such events will be advertised through the active social media campaign and the project website.

- **A strategic social media campaign to engage citizens in relation to Industry4.0 topics**
The social media campaign will be carried out in order to actively educate, intrigue and engage citizens in relation to Industry4.0. This campaign will use various channels to approach different target audiences. Beyond acting merely as dissemination tools for events and publications, these channels will be used to facilitate dialogue with the public, answer questions and encourage knowledge uptake (such as regarding education, career paths, upskilling for existing workers, etc.). Each partner will be encouraged to conduct similar (albeit not necessarily as robust) activities via their respective social media channels.
- **A final report on the public engagement activities carried out in the project** - will assess and quantifiably measure the impact of the campaign using objective statistics such as web traffic, followers, online dialogue sessions, retweets, comments, etc.
- **Guidelines for Industry4.E Lighthouse projects to help them in communicating their story to the general public.** Guidelines will be provided to help the projects increase the social impact and uptake of their results. These guidelines will enable the projects to build success stories addressing communication towards wide non-technical audiences.

Industry4.E Public Engagement and Outreach Outcomes will include:

- Europeans who are prepared for the digital future – with an appreciation of the value of the digitalisation of industry and the impact it will have on society.
- Public audiences who understand why Europe is prioritising the development of Industry4.0 and are familiar with the Industry4.E leading-edge projects, researchers' roles, and their innovations and potential applications of their project results, including resulting societal impacts.
- A general public audience who is aware of the Industry4.E Lighthouse topics, some of the Industry4.E Lighthouse projects and some of their results and potential applications and the resulting impacts that they will have on society. An engaged public audience who understands and support the Industry4.E Lighthouse concept and look forward to the potential societal benefits.

- European citizens who have an increased awareness of the range of highly-sought-after skillsets required to sustain strong European manufacturing competitiveness, at different levels including teenagers choosing STEM subjects, school leavers, graduate and postgraduate level, as well as professionals and existing workforce who are considering upskilling/re-skilling.
- An increased uptake in manufacturing careers – leading to increased innovation performance in future European industry.
- Experience gained by Industry4.E Lighthouse projects’ participants in building success stories addressing communication towards wide non-technical audiences.
- Sharing of public engagement and outreach experiences across the Industry4.E Lighthouse projects and CSA-Industry4.E team, and other relevant initiatives.
- Established links between the Industry4.E Lighthouse and skills development initiatives, such as the EC Digital skills and jobs coalition ESCO (European classification of Skills, Competences, Occupations and Qualifications) and others. Highlighting and engaging the public to consider the skills shortage and these initiatives, should result in reducing identified skill gaps.

4 Industry4.E Target Public Audience (WHO)

A social media campaign will be carried out in order to actively educate, intrigue and engage citizens in relation to Industry4.E Lighthouse activities. This campaign will use various channels to approach different target audiences.

Industry4.E Lighthouse's target audience for public engagement and outreach activities will include:

- General public: taxpayers, end-users of Industry4.0 products and services, workforce of the future (including cohorts considering upskilling or re-skilling)
- Media: journalists, newspapers
- Second level education: students, teachers, parents
- Higher education: universities, teachers/trainers, students
- Vocational Education and Training: providers/centres, teachers/trainers, students
- Informal, co-curricular and extra-curricular programmes: Coderdojo, Makerspace, Lego clubs, competitions (BT Young Scientist, Lego-League)
- Public sector bodies: education bodies
- Authorities and policy makers; in education, employment, innovation
- Industry4.E Lighthouse projects: projects, partners, advocates of the importance and potential impacts of strong EU investment in leading Industry4.0 research and innovation projects
- Research community: researchers, research centres, advocates of the importance and potential impacts of innovative research with high stakeholder engagement, role-models for careers in research and education
- Industry: Industry organisations, MNCs (multinational corporations), SMEs, advocates of the importance and potential impacts of Industry4.0 on future EU manufacturing leadership and competitiveness, role-models for future workforce

As well as targeting various sectors of the public, the Industry4.E Lighthouse will aim to involve audiences from different geographic origins, positions and age groups as well as encouraging gender balance to ensure a well-balanced audience is engaged. The preparations for the Industry4.E Lighthouse public engagement social media campaign will further identify the specific target audience profiles in finer detail (e.g. demographics such as: location, age, income, family status (e.g. parents of teenagers), etc.). The two key elements of social media are great content, and knowing your audience, so campaign posts need to be very tailored to specific groups for best impact. The Industry4.E projects and their partners (research community, industry) will be involved in engaging the public, which will enhance the interactions between the general public and business, industry and the research community.

Furthermore, a detailed audience database will be developed. The database will facilitate communication with all audience types involved, by centralising their contact details (or details of key communication channels for reaching them) and classifying them according to their level of engagement with the project. Depending on their level of engagement, different outreach mechanisms will be employed.

The database aims to facilitate dialogue and relationship building between the Industry4.E Lighthouse team, Industry4.E Lighthouse projects, and other organisations involved or interested in the public outreach part of the project. It will be maintained and updated throughout the duration of the project.

PROTOCOL – Industry4.E Lighthouse Public Outreach database

For the purpose of developing an Industry4.E Lighthouse Public Outreach communications target mail-list, CSA-Industry4.E partners will be requested to send out invitations through their networks with links to the Industry4.E Lighthouse website where interested individuals can subscribe to mail-lists for further information. In accordance with EU Privacy Law, the database will only be used as described in the subscription link. Only CSA-Industry4.E project partners will have authorised access to the database for sending Industry4.E Lighthouse related mails.

5 Industry4.E Lighthouse Public Outreach Channels (HOW)

There are multiple channels which the CSA-Industry4.E project partners can avail of:

- **Public engagement through promotion at suitable external general public events:** to network with public audiences and try to engage them in understanding the importance of Industry4.E Lighthouse topics and associated projects' results and potential societal impacts; to bring their awareness to the Industry4.E Lighthouse; to amplify Industry4.E Lighthouse messages to a broader audience
- **Industry4.E Lighthouse Social Media Campaign:** the campaign media will be used to facilitate dialogue with the public, answer questions and encourage knowledge uptake (such as regarding education, career paths, upskilling for existing workers, etc.); to network with public audiences and try to engage them in understanding the importance of Industry4.E Lighthouse topics and associated projects' results and potential societal impacts; to bring their awareness to the Industry4.E Lighthouse; to amplify Industry4.E Lighthouse messages to a broader audience
- **Public engagement through high profile events:** providing project visibility to stakeholders, SMEs, and members of the public; to amplify Industry4.E Lighthouse messages to a broader audience
- **Development of links with Industry4.E Lighthouse projects and key individuals/organisations:** to keep them updated on the project's activities; involve them in the processes; link into their activities; provide best practice; to amplify Industry4.E Lighthouse messages to a broader audience
- **Development of links with other relevant projects and initiatives, and key individuals/organisations:** to keep them updated on the project's activities; link into their relevant activities; to amplify Industry4.E Lighthouse messages to a broader audience
- **Project website:** online dissemination of the project objectives, activities, resources and results to a broad audience
- **Social media such as Twitter:** online dissemination of the project objectives, activities and results to a broad audience

- **CSA-Industry4.E Partners' own channels:** to disseminate to a broader audience and try to engage them in Industry4.E Lighthouse topics to act as multipliers.
- **Industry4.E Lighthouse Projects Partners' own channels:** to disseminate to a broader audience and try to engage them in Industry4.E Lighthouse topics, and particularly their own projects, to act as multipliers.

5.1 Industry4.E Lighthouse Public Engagement Events

The CSA-Industry4.E partners will engage the public through their participation in high profile external events aimed to attract a broader audience. In order to maximise cost-efficiency and impact, the WP4 leader will identify and coordinate the attendance of suitable events to promote Industry4.E to the general public (e.g. science festivals, young scientist competitions etc.). The project will aim to have a presence at a **minimum of five public events**. The level of dissemination activity will be scaled to the particular event, and may range from running an exhibition stand to participating in or leading discussion forums. These events provide opportunities for face-to-face communication with target audiences. These may be attended by any of the CSA-Industry4.E consortium partners, who will employ the public engagement and outreach strategy and tools at each of these events to:

- ✓ introduce Industry4.E;
- ✓ explain why Europe is prioritising its development;
- ✓ present the researchers and projects;
- ✓ present the innovations and potential applications of the results; and
- ✓ explain the impact it will have on society.

The project's participation in such events will be advertised through the active social media campaign and the project website.

When organising and hosting events, CSA-Industry4.E partners are encouraged to distribute Industry4.E Lighthouse flyers, use promotional resources (poster, pull-up banner, etc.) where relevant, and use the designed Industry4.E PowerPoint when giving presentations. The WP4 Leader can also provide further resources and these can be discussed and agreed upon as and when required throughout the project (e.g. info-graphics, specific posters etc.).

Quantitative statistics will be recorded for events, such as number of attendees, gender, audience type, type of organisation, as well as their country of origin. Quantitative and qualitative feedback will also be obtained from event participants to evaluate the efficacy of the event organisation as well as the quality of materials and means used.

PROTOCOL – Industry4.E Lighthouse Public Outreach Events

A minimum of five public outreach events will be selected in agreement with the CSA-Industry4.E partners as the target public outreach events. WP4 Lead will support the local hosts for each of these events.

For additional public outreach events:

- CSA-Industry4.E partners should inform WP4 Lead so that the event will be included in the website calendar, informing other CSA-Industry4.E partners, Industry4.E Lighthouse project partners, and other stakeholders about the event and Industry4.E participation.
- CSA-Industry4.E partners should contact WP4 Lead in advance for support and specific design requests.
- CSA-Industry4.E partners should record all public engagement and outreach events in the public tab of your own copy of the communications and dissemination log, and make sure you return a copy of your log to WP4 Lead at all reporting stages.

5.2 Industry4.E Lighthouse Social Media Campaign

A strategic social media campaign will be carried out in order to actively educate, intrigue and engage citizens in relation to Industry4.0. This campaign will use the various channels to approach different target audiences.

Beyond acting merely as dissemination tools, these channels will be used to facilitate dialogue with the public, answer questions and encourage knowledge uptake (such as regarding education, career paths, upskilling for existing workers, etc.). Each partner will be encouraged to conduct similar (albeit not necessarily as robust) activities via their respective social media channels.

A final report will assess and quantifiably measure the impact of the campaign using objective statistics such as web traffic, followers, online dialogue sessions, retweets, comments, etc.

PROTOCOL – Industry4.E Lighthouse Social Media Campaign

- The WP4 leader will lead, with support from a specialised social media agency as a third-party subcontractor, the design, development and implementation of a social media campaign.
- CSA-Industry4.E partners are invited to share, (re)tweet and forward relevant information. CSA-Industry4.E partners should aim to contribute to other social media channels, setup for the social media campaign where possible. Additional social media platforms, such as LinkedIn, will be considered as the project progresses. Information for the social media campaign can be sent to WP4 leader.

5.3 Public engagement through high-profile external technical events

The CSA-Industry4.E partners will engage the public through their participation in high profile external technical events that also attract a broader audience. An example of this type of event is the European Commission flagship event ICT2018, where citizens were invited to join science community members, policymakers, and fellow ICT-enthusiasts to discuss the future in a digital Europe. In addition to appealing to the main specialist audiences, ICT2018 booths and demos were encouraged to be suitable to engage the broader public. The Next Generation Internet (NGI) initiative also ran an ICT2018 workshop for teenagers (14-year-old students from two local high schools in Vienna).

The Industry4.E Lighthouse will be represented at a number of high-profile technical events throughout the CSA-Industry4.E project, providing project visibility to stakeholders, SMEs, and members of the public. These may be attended by any of the CSA-Industry4.E consortium partners, who will employ the public engagement and outreach strategy and tools at each of these events to:

- ✓ introduce Industry4.E;
- ✓ explain why Europe is prioritising its development;
- ✓ present the researchers and projects;
- ✓ present the innovations and potential applications of the results; and
- ✓ explain the impact it will have on society.

Industry4.E Lighthouse results and associated projects will be promoted through oral presentations, project booths, poster sessions, etc. at relevant external meetings and conferences. Details of events which were attended, and will be attended in the future, are tracked in the Communications and Dissemination Log maintained by CSA-Industry4.E WP4 lead. Such events are valuable forums to consult and network with Industry4.E target public audiences face-to-face. All CSA-Industry4.E partners are encouraged to actively engage with members of the public, as well as technologists and specialists at external events.

When attending events, CSA-Industry4.E partners are encouraged to distribute Industry4.E Lighthouse flyers, use promotional resources (poster, pull-up banner, etc.) where relevant, and use the designed Industry4.E Lighthouse PowerPoint when giving presentations. The WP4 Leader can also provide further resources and these can be discussed and agreed upon as and when required throughout the project (e.g. agenda templates, specific posters etc.).

PROTOCOL – External High-Profile Technical Events

In case a CSA-Industry4.E partner is attending an external event that is of relevance to Industry4.E public outreach:

- Inform WP4 lead so that the event will be included in the website calendar, informing other CSA-Industry4.E partners, Industry4.E Lighthouse project partners, and other stakeholders about the event and Industry4.E participation.
- Contact WP4 lead in advance for support and specific design requests.
- Record all public engagement and outreach events in the public tab of your own copy of the communications and dissemination log, and make sure you return a copy of your log to WP4 lead at all reporting stages.

5.4 Links with Industry4.E Lighthouse Projects and key individuals/organisations

As part of the public engagement and outreach strategy, the CSA-Industry4.E will link with the Industry4.E Lighthouse projects and the key individuals and organisations needing support in public engagement and outreach, as well as linking with those already involved in public outreach. From these interactions, and our work in WP4 creating material for the Industry4.E Lighthouse, public outreach events and the social media campaign, CSA-Industry4.E will provide guidelines for lighthouse

projects to help them in communicating their story to the general public. These guidelines should help the projects to increase the social impact and uptake of project results.

Industry4.E Lighthouse endeavours to establish links with the Industry4.E Lighthouse Projects and initiatives to collaborate on common goals, promote complementarity and to avoid overlap. Industry4.E Lighthouse recognises the potential for knowledge sharing and will engage with international partners. For the purposes of public engagement and outreach, Industry4.E Lighthouse will specifically interact with:

- **Productive4.0 – Electronics and ICT as an enabler for digital industry and optimised supply chain management covering the entire product lifecycle:** *Productive4.0 is Europe’s biggest research project in the field of Digital Industry. It is an ECSEL-JU project, with 108 partners, and is the cornerstone project of the Industry4.E Lighthouse. The project addresses all domains of the Digital Industry, thus comprising the complete range of Industry 4.0. The Productive4.0 consortium will work to make production more predictable and flexible, and to change business models resulting in the creation of key skills, tools and know-how necessary to transform the potentials of the upcoming digital revolution into business success. www.productive40.eu*
- **MANTIS – Cyber Physical System based Proactive Collaborative Maintenance:** *a 47 partner strong consortium funded by ECSEL-JU. The overall concept of MANTIS is to provide a **proactive maintenance service platform architecture** based on **Cyber Physical Systems** that allows estimation of future performance, prediction and prevention of imminent failures and scheduling of proactive maintenance. Maintenance is no longer a necessary evil that costs what it costs, but an important function that creates additional value in the business process as well as new business models with a stronger service orientation. The research addressed in MANTIS will contribute to companies’ assets availability, competitiveness, growth and sustainability. Results of MANTIS can be utilised directly in several industry areas and different fields of maintenance. www.mantis-project.eu*
- **SWARMS -Smart and Networking Underwater Robots in Cooperation Meshes:** *SWARMS is an industry-led ECSEL-JU project, where large technology companies collaborate with SMEs specialised in the subsea, robotics and communication sectors, and universities together with research institutions ensure that the state-of-the-art innovations in these domains will rapidly make their way into market. SWARMS designed, developed and successfully demonstrated a platform for a new generation of autonomous maritime and underwater operations. The project results in reduced operational costs, increased safety of tasks assigned to divers and contributed to dealing with factors that threaten the offshore sector’s expansion. www.swarms.eu*
- **Semi40 - Power Semiconductor and Electronics Manufacturing 4.0** *Semi40 brings together an international 37 partner team of leading industry partners with small- and medium sized companies as well as research institutes and well established universities. Semi40 will further pave the way for serving highly innovative electronic markets with products powered by microelectronics “Made in Europe”. The project ambition is to implement technical solutions into the pilot lines of the industry partners. They are complemented by challenging use cases representing real supply chains, and take into account their technical, social and economic impact on society, and future working conditions and skills needed. Applying Industry 4.0, CPS,*

Big Data and Industrial Internet technologies in the electronics field requires holistic, complex and challenging approaches. www.semi40.eu

- **Delphi4LED - From Measurements to Standardized Multi-Domain Compact Models of LEDs:** *Europe is leading thermal research world-wide in terms of thermal measurement and modelling techniques. The aim of the H2020 Delphi4LED project is to help maintain this leadership in the specific field of LEDs. The European lighting industry aims at reducing cost, at continuously improving product performance while reducing time to market and enlarging the product. The main challenge for the design of LED components into lighting systems is the temperature and current dependence of their performance. The 15 Delphi4LED partners are working on developing a standardised method to create multi-domain (thermal-optical-electrical) LED based design and simulation tools for the solid-state lighting industry. www.delphi4led.eu*
- **I-MECH - Intelligent Motion Control Platform for Smart Mechatronic:** *The challenge of the 31 partner ECSEL-JU I-MECH project is to bridge the gap between the latest research results and best industrial practice in intelligent motion control for smart mechatronic systems. Software and hardware building blocks, featuring standardised interfaces, will be developed to deliver a complete I-MECH reference motion control platform. The importance to society lies in the developed technologies in industrial printing, semiconductor production, high speed packaging, smart machining tools and high precision CNC milling machines, and healthcare robotics. The project aims to establish the I-MECH Centre, a European solution desk for advanced motion control in cyber-physical systems, which shall ensure sustainable cooperation between consortium partners after the project termination. This centre will be open also for new interested parties www.i-mech.eu*
- **SCOTT– Secure COnnected Trustable Things:** *an ECSEL-JU project with 57 key partners from 12 countries (EU and Brazil), that will provide comprehensive cost-efficient solutions for wireless, end-to-end secure, trustworthy connectivity and interoperability (Technology Readiness Level 6-7) to bridge the last mile to market implementation. SCOTT will not just deal with ‘things that are connected’, but with ‘trustable things that securely communicate’, i.e. things interconnected by dependable wireless technology and valuing the end-users’ privacy rules. www.scottproject.eu*
- **iDev40 – Integrated Development 4.0:** *a 38 partner ECSEL-JU project, with a main objective to achieve a disruptive or “breakthrough change” step towards speedup in time-to-market by digitalising European industry, closely interlinking development processes, logistics and manufacturing. Ultimately, the project aims at suitable digital technology advancements to strengthen the electronic components and systems industry in Europe. It addresses various industrial domains with one and the same approach of digitalisation towards competitive and innovative solutions. The overall impact of iDev40 will lead to a new role of Europe in digital culture, leadership, skill sets and capabilities of the human workforce to implement the digital change. www.idev40.eu.*
- **AFarCloud - Aggregate Farming in the Cloud:** *an ECSEL-JU project with 60 partners, AFarCloud, will provide a distributed platform for autonomous farming that will allow the integration and cooperation of **agriculture Cyber Physical Systems** in real-time in order to increase efficiency, productivity, animal health, food quality and reduce farm labour costs. This platform will be integrated with farm management software and will support monitoring and decision-making solutions based on big data and real time data mining techniques. The AFarCloud project also*

*aims to make farming robots accessible to more users by enabling farming vehicles to work in a **cooperative mesh**, thus opening up new applications and ensuring re-usability, as heterogeneous standard vehicles can combine their capabilities in order to lift farmer revenue and reduce labour costs. The consortium represents the whole ICT-based farming solutions' value chain, including all key actors needed for the development, demonstration and future market uptake of the precision farming framework targeted in the project. www.afarcloud.eu*

- **Further Industry4.E Lighthouse projects** – a number of other projects will join the Industry4.E Lighthouse as it evolves. These projects will all have access to the guidelines to help them to increase the social impact and uptake of their results. These guidelines should guide newly associated projects in building success stories addressing communication towards wide non-technical audience.

In addition, WP4 will interact with complimentary projects to Industry4.E, including:

- **ConnectedFactories - Industrial scenarios for connected factories:** *a H2020 17 partner project which establishes a structured overview of available and upcoming technological approaches and best practices. The ConnectedFactories project identifies present and future needs, as well as challenges, of the manufacturing industries. The project explores pathways to the digital integration and interoperability of manufacturing systems and processes and the benefits this will bring. www.connectedfactories.eu*
- **I4MS - ICT Innovation for Manufacturing SMEs:** *is a H2020 funded European initiative supporting manufacturing SMEs and mid-caps in the widespread use of information and communication technologies (ICT) in their business operations. The I4MS project is now in its third phase, which was launched in September 2017, and aims at reinforcing the I4MS ecosystem. During this phase, European SMEs and mid-caps will be exposed to new approaches and methodologies on business models, access to financing, and training opportunities to re-skill staff. The main focus in Phase 3 is on four key technology areas for the digital transformation of companies in the manufacturing sector: (i) additive manufacturing, (ii) CPS and IoT, (iii) robotics and, (iv) HPC. www.i4ms.eu*

The WP4 Leader will engage and network with key individuals and organisations within Industry4.E Lighthouse projects who are tasked with carrying out public outreach and engagement. We will ensure our efforts are complementary to other projects' planned outreach activities and where possible either side can leverage or build upon each other's efforts. These projects and/or individual partners may also be important multipliers for raising further awareness of the Industry4.E Lighthouse project. Initial communications will be arranged through the coordinator, Irish Manufacturing Research (IMR), as there are already interactions with the Industry4.E projects for other work packages in CSA-Industry4.E to avoid any cross-postings.

5.5 *Links with other relevant projects and initiatives, and key individuals/organisations*

In terms of public engagement and outreach, Industry4.E Lighthouse endeavours to establish links with other relevant projects and initiatives to collaborate on common goals, promote complementarity and to avoid overlap. Industry4.E Lighthouse recognises the potential for knowledge sharing and will engage with international partners. CSA-Industry4.E will specifically interact with:

- **Skills development initiatives** - such as the **EC Digital skills and jobs coalition ESCO** (European classification of Skills, Competences, Occupations and Qualifications). ESCO facilitates the dialogue between labour market and the education/training sector and is part of the New Skills Agenda for Europe, a set of 10 actions to make the right training, skills and support available to people in the EU. The actions also include **Upskilling Pathways: New opportunities for Adults, Vocational education and training (VET) and European Qualifications Framework**.
- **Fit4FoF CSA (FoF1-2018)** – a H2020 project **focused** on reducing identified skill gaps which will result in the upskilling of the existing workforce in Europe and increased innovation performance in future European industry.
- **Other EU projects** - other relevant European projects under any of the programmes
- **EUREKA projects** - CSA-Industry4.E will reach out to relevant clusters – in particular, the SMART advanced manufacturing cluster (EUREKA cluster).
- **National, Transnational and Regional Initiatives related to CSA-Industry4.E**
- **Communities working on relevant topics for Industry 4.0** - Most of these communities are related to the key technologies and PPPs (5G, big data, High Performance Computing (HPC), cybersecurity, photonics, robotics and electronic components & systems) and many are also related to standardisation efforts.

5.6 Industry4.E Lighthouse Website

The Industry4.E Lighthouse website www.industry4e.eu will play multiple roles:

- As a communication resource to promote the project, its objectives, activities, partnership and the Industry4.E Lighthouse projects
- As a communication resource to update interested parties on progress, results and events
- As a repository for public deliverables
- As a repository for resources for public engagement and outreach

The website is being professionally designed. New resources will be uploaded to the website as they become available (e.g. infographics, videos). Key features of the website will include:

- **About section** – will introduce the project, the consortium, the Lighthouse Initiative Advisory Service (LIASE) Members and the work-package overview.
- **Activities section** – will introduce the Industry4.E Lighthouse activities with subtabs for each of the activities: the Industry4.E Lighthouse projects, a communication platform for sharing specific technical details among all the project partners, roadmap details for Industry4.E topics and challenges, Workshops - a series of three internal workshops organised by Industry4.E Lighthouse for the partners in the Lighthouse projects around exploitation, SME involvement and Citizen Outreach.
- **Citizen Outreach sub-section** - This would be the main page with details for the Industry4.E Citizen Outreach Campaign. Will link to any project resources tailored for citizen involvement – posters, flyers, videos etc. Will be used for advertising specific events that are targeted at Citizens by the Industry4.E Lighthouse project and potentially by the Industry4.E Lighthouse projects. More items will be included as the project progresses, including for example links to EU resources for Citizen involvement also.

- **Results and Resources section** – will house all dissemination products and activities including press releases, the project flyer, and posters. A results tab will link to a list of project results including deliverables and the resources part of the page will have a filter button to allow different stakeholders to easily find relevant resources/results dependent on their interests /group type. More items will be included as the project progresses.
- **News section** – will be regularly updated throughout the project’s lifetime with news on the project.
- **Twitter feed** - the feed will be live and included on the news section and linked to the Twitter account providing in-the-moment updates.
- **Events section** - will include a calendar with all the events organised by the Industry4.E Lighthouse consortium which are open to stakeholders, as well as events where Industry4.E partners or Industry4.E Lighthouse Projects are going to be represented and any other events of interest to the partnership.
- **Email subscription** - an email subscription button is available. This will enable those interested to subscribe to an Industry4.E listing to ensure they are on the mailing list to receive project updates and news.

PROTOCOL – Industry4.E Lighthouse Website

The WP4 Leader is setting up and will manage the Industry4.E website. Any CSA-Industry4.E partners who wish to upload materials, news or events to the website should contact the WP4 Leader. CSA-Industry4.E partners are requested to include a link to the Industry4.E Lighthouse website on their own institution websites.

IMR manages the Industry4.E sharepoint and any questions and queries should be directed to IMR (info@Industry4E.eu).

5.7 Social media such as Twitter

Social media, particularly Twitter, will enhance the visibility of the project by providing in-the-moment updates and will provide more of an online presence by reaching different audiences. The WP4 Leader has setup a Twitter account (<https://twitter.com/Industry4E>) to tweet relevant information. The Twitter feed will be prominent on the Industry4.E Lighthouse website homepage and accessible from every website page.



PROTOCOL – Twitter Social Media

CSA-Industry4.E partners are invited to share, (re)tweet and forward relevant information. CSA-Industry4.E partners are invited to share the Twitter link on project related emails with external individuals/organisations to help increase the number of followers. Additional social media platforms, such as LinkedIn, will be considered as the project progresses. Information for tweeting can be sent to WP4 Lead.

5.8 CSA-Industry4.E Partners' own channels

All CSA-Industry4.E partners have several existing networks for communicating public outreach news which will ensure a broad awareness of the project across the spectrum of relevant European stakeholders. In addition, to the Industry4.E channels all CSA-Industry4.E partners are encouraged to use their own channels and networks to actively communicate to the broader public the project objectives, activities and results. Examples include:

- Social Media channels (retweeting and liking Industry4.E material on e.g., Twitter, LinkedIn)
- Partners' websites (adding information on the industry4.E Lighthouse encouraging traffic to I)
- Partners' networks through involvement in other relevant EC projects and initiatives
- Partners' contact databases
- Other channels which CSA-Industry4.E partners may subscribe to

The table below shows the Industry4.E relevant committees, communities and networks that CSA-Industry4.E partners are involved in and that can be used as communications channels for Industry4.E Lighthouse also.

Table 1: Relevant committees, communities and networks that CSA-Industry4.E partners are involved in.

Committees, communities, networks	Partner involved
National initiatives on digitising industry	<ul style="list-style-type: none"> - S2i is linked to the Industry 4.0 platform and its various working groups. Moreover, the head of S2i is the Commissioner for Europe of the state of Baden-Württemberg, also linking to the Alliance I4.0 BW - VTT is the official body for the industrial digitalisation policy in Finland - MGEP is participating in the Basque industrial digitalisation (Basque Industry 4.0) - IMR is part of the Irish National Initiative on digitising industry
Digital innovations for all: DIHs	<ul style="list-style-type: none"> - VTT and S2i are DIHs and are active in the DIH working groups while they are also participants or coordinators of I4MS and SAE (Smart Anything Everywhere) projects. - IMR is part of the MIDIH (Manufacturing Industry Digital Innovation Hubs) which aims to support and link national and local initiatives - IMR is part of the I4MS regional manufacturing Digital Innovation Hubs
PPPs Platforms Standards	<ul style="list-style-type: none"> - VTT, MGEP, IMR and S2i are members of EFFRA - VTT and S2i are partners in the ConnectedFactories CSA as well as other related FoF projects. - S2i, MGEP and VTT are members of ARTEMIS-IA and involved in the ECSEL / ECS / ARTEMIS-IA roadmaps.

	<ul style="list-style-type: none"> - MGEP is partner of BDVA - VTT and MGEP are in ECSEL projects associated with the Industry4.E Lighthouse. Both are partners of Productive4.0. MGEP is leading the MANTIS project (VTT also partner) and is participating in SCOTT. Both VTT and MGEP were partners in Arrowhead project. - S2i is involved in an ongoing H2020 Platforms project (Platforms4CPS) as a road-mapping lead, and has led recent CPS roadmaps (Road2CPS, Road4FAME, Road2SoS) in ICT and FoF programmes.
Regulatory Framework fit for the digital age	<ul style="list-style-type: none"> - All partners are involved in their national debates with regards to the regulatory framework development and its impacts on Industry 4.0. - -S2i are involved in the IA CPSELabs, in which SMEs are supported with cascade funding to build 'trustworthy CPS', which also includes work on cybersecurity. - -S2i road-mapping projects all have cybersecurity highlighted as an important theme e.g. Platforms4CPS
Preparing Europeans for the digital future	<ul style="list-style-type: none"> - IMR is part of MIDIH, which is coordinated by EIT Digital - S2i is involved in the Fit4FoF CSA (FoF1-2018) – on reducing identified skill gaps which will result in the upskilling of the existing workforce in Europe and increased innovation performance in future European industry.
EFFRA, AVM-KIC, AM Platform, Manufuture, euRobotics and EARTO.	IMR is the main point of contact in Ireland for EU platforms and associations including EFFRA, AVM-KIC, AM Platform, Manufuture, euRobotics and EARTO.
Allianz Industrie 4.0	S2i is a member of the Allianz Industrie 4.0 in Baden-Württemberg since 2015
Digitizing the European Industry Initiative	S2i has closes links to the Digitizing the European Industry Initiative (active in working groups)
Enterprise Europe Network (EEN)	S2i membership since 2008
Steinbeis Foundation for Economic Promotion; a network of more than 1.000 Technology Transfer Centres worldwide	S2i is a member

Ministry of Economic Affairs of the State of Baden-Württemberg (head of SEZ is the Ministries' Commissioner for Europe)	S2i is in close contact to SMEs through Ministry of Economic Affairs of the State of Baden-Württemberg (head of SEZ is the Ministries' Commissioner for Europe)
Vanguard Initiative	S2i is the regional support point for Baden-Württemberg Vanguard Initiative ; new growth through smart specialisation
Enterprise Europe Network (EEN)	S2i membership since 2008
MC-SUITE - ICT Powered Machining Software Suite	MGEP is a partner in the MC-SUITE project on ICT Powered Machining Software Suite
PROPHECY - Platform for rapid deployment of self-configuring and optimized predictive maintenance services	MGEP is a partner in PROPHECY
FoF Serena - VerSatIIE plug-and-play platform enabling remote pREdictive mainteNance	VTT is a partner in Factories of Future Serena
FIMECC S-STEP - Smart technologies for lifecycle performance	VTT is a partner in FIMECC S-STEP
BEinCPPS (www.beincpps.eu)	IMR is a partner in BEinCPPS - an I4MS Phase II Innovation Action
Industrial Data Analytics Framework (IDAF) Initiative	IMR project funded by Enterprise Ireland
FoF cPPP	IMR is a partner in Factories of Future cPPP
IMRAM (Irish Manufacturing Research Additive Manufacturing) is multi-industrial (MNC and SME) Innovation Partnership funded by Enterprise Ireland and the Industrial sector focused on Additive Manufacturing Innovation.	IMR are leading the IMRAM project with Industrial partners

5.9 Industry4.E Lighthouse Project Partners' own channels

All partners of the Industry4.E Lighthouse projects are encouraged to use their own channels and networks to actively communicate to the broader public the project objectives, activities and results of their projects, and also to point interested citizens to the relevant public outreach resources on the Industry4.E Lighthouse website.

Examples of the channels the Industry4.E projects could use include:

- Social Media channels (Twitter, LinkedIn)
- Partners' websites

- Partners' networks through involvement in other relevant EC projects and initiatives
- Partners' contact databases
- Other channels which Industry4.E Lighthouse project partners may subscribe to

6 Industry4.E Resources and Tools for Communication (HOW)

6.1 Industry4.E Events

Industry4.E Lighthouse logo

The branding is an integral part of the project visibility. The **Industry4.E Lighthouse** logo is constructed using bold lettering, harmonious colour choices and illustration. The concept of the illustration is based on the light cast from the lighthouse initiative on how the digitalisation of factories should be the way forward. The light is being cast towards the right representing a move in the right direction. The logo is included in all project promotional material.

Brand Guidelines have been developed to provide CSA-Industry4.E partners with guidelines including how to use the logo in any format, the recommended type face to use, the colour palette and best use of the logo on different backgrounds. The logo, in various formats, can be obtained by contacting the WP4 leader or downloaded from the project sharepoint folders.

Industry4.E Lighthouse PowerPoint Template

A standard Industry4.E Lighthouse PowerPoint template was developed to use at internal and external events when presenting the Industry4.E Lighthouse project and/or its outcomes. The WP4 lead partner has developed schematics, based on diagrams in the project application, which can be used also.

Industry4.E Lighthouse Poster

Two generic A0 posters have been developed; one on the Industry4.E Lighthouse and another on the CSA Industry4.E. Both can be used for promotional purposes at events. The posters are available in the sharepoint folders.

PROTOCOL – Industry4.E Lighthouse branding

CSA-Industry4.E partners should avail of the developed branding material when communicating in relation to Industry4.E Lighthouse. All material is available in the project sharepoint folders.

6.2 Industry4.E Lighthouse Flyer

A four-page A5 Industry4.E Lighthouse flyer has been developed to raise general awareness of the project. It will be distributed over the course of the project. The flyer describes the project, main objectives, methodology, partnership, funding and expected impact. Translated versions of the factsheet can be produced if CSA-Industry4.E partners provide the translated text to the WP4 Leader.

PROTOCOL – Industry4.E Lighthouse Flyer

The flyer is available for download from the project sharepoint folders and will be publicly accessible from the project website. CSA-Industry4.E partners are encouraged to distribute the factsheet (print and/or electronic version) through their networks, at Industry4.E Lighthouse events and workshops, and when attending external events.

Translated versions of the factsheet can be produced if CSA-Industry4.E partners provide the translated text to the WP4 Leader.

6.3 Press Releases/Articles

Project news will be disseminated regularly at key milestones, making use of a range of channels to ensure that target audiences and the wider community are aware of the project, its objectives and, later in the project, its outcomes. Distribution of press releases and articles will help ensure that there is publicity and media coverage at local, regional and European levels. The WP4 leader has several existing channels and networks for disseminating news which will ensure a broad awareness of the project. All CSA-Industry4.E partners are encouraged to publish press releases and articles at regional, national and international levels, making use of their own communication networks and channels.

PROTOCOL – Press Releases/Articles

The WP4 leader will take the lead in writing press releases and articles based on the project's activities. Once approved, they will be disseminated using the channels mentioned above, and any other relevant means and will also be uploaded to the project website, sharepoint and Twitter. CSA-Industry4.E partners are encouraged to distribute the press releases and articles through their own channels. Where necessary the CSA-Industry4.E partners can customise/translate the press releases and articles for their audience. CSA-Industry4.E partners who publish should send a copy to the WP4 leader. CSA-Industry4.E partners writing press releases and articles can contact the WP4 Leader, if they wish for support in writing/editing.

6.4 Industry4.E Lighthouse Website

As detailed in section 5.4, the Industry4.E Lighthouse website www.industry4E.eu is being set up. The website plays multiple roles and can be used as a resource for further information.

6.5 Other Promotional Material

Other promotional material will be developed if, and when, required and depending on budget available. Other material developed to date includes:

- 3D print of the project name – printed in the IMR (Irish Manufacturing Research) facilities on an EOS EOS P396 SLS Additive Manufacturing Polymer printer. This piece is a great attraction for getting people to stop at the Industry4.E Lighthouse booth/stand/display and getting an initial conversation started

PROTOCOL – Other Promotional Material

The WP4 leader will develop additional promotional material. All promotional material will be uploaded to the sharepoint folder, and also to the project website if appropriate.

7 Schedule of Activities (WHEN)

It is important for CSA-Industry4.E partners to schedule public communication activities throughout the Industry4.E Lighthouse project. Promotion of the Industry4.E Lighthouse has already started from the end of month 1 of the project. The project flyers have been distributed from the end of month 1 of the project (at IndTech2018, EF ECS2018, ICT2018, Basque industry 4.0, IOT and Industry 4.0 Expo 2019 (Citywest, Ireland)) and the generic posters were already used to promote the Industry4.E Lighthouse in month 2 at EF ECS2018. The strategy is to keep up with this strong promotion of the Industry4.E throughout the rest of the project.

The social media campaign will be timed to ensure as much prior engagement with the public as possible leading up to, and advertising, the public engagement events. The public engagement events will be timed to run at suitable general public events to allow the best impact and engagement with the identified target audiences for Industry4.E.

The CSA-Industry4.E team will engage with the Industry4.E Lighthouse projects throughout the duration of the project.

8 Reporting and Visibility of EU Funding

8.1 Recording and reporting dissemination activities

All CSA-Industry4.E partners are required to record their dissemination activities. For reporting, the WP4 Leader has developed a Communications and Dissemination Log (Excel file) with a tab specifically for public engagement and outreach activities. The WP4 leader will distribute this to CSA-Industry4.E partners regularly, to record communications and dissemination activities, and also to track planned upcoming activities. The log will also help determine statistics for reporting purposes.

PROTOCOL – Reporting on Industry4.E Lighthouse Public Outreach Activities

CSA-Industry4.E partners should keep track of all their communications and dissemination activities, including public outreach and engagement activities, during the CSA-Industry4.E project implementation as it is required for EC reporting.

The WP4 leader will distribute a 'Communications and Dissemination Log' for completion by all CSA-Industry4.E partners. Going forward, the WP4 Leader will circulate the file for completion every six months for partners to update. The WP4 leader will maintain a master version.

8.2 Visibility of EU funding

Any dissemination of results must display the EU emblem and include the following text:



This project has received funding from the ECSEL Joint Undertaking (JU) under grant agreement No 830845. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Ireland, Finland Spain, Germany.

Versions of this are available for download from the sharepoint Folders.

9 Monitoring and Evaluation

Potential indicators for communication, engagement and outreach activities include (but not limited to):

- Number of Industry4.E Lighthouse presentations given to general public audiences
- Number of flyers distributed given to general public audiences
- Size of audience at public events where Industry4.E was presented
- Number of synergies with other projects and initiatives
- Website statistics to general public resources page; visits, downloads etc.
- Twitter statistics
- Media coverage
- Quantifiable measures of the impact of the social media campaign using objective statistics such as web traffic, followers, online dialogue sessions, retweets, comments, etc.
- Positive feedback on the Industry4.E Public Engagement and Outreach guidelines produced
- Increased number of members of the public engaged in the topic of Industry4.0
- Increased number of members of the public engaged in Industry4.E Lighthouse projects
- Experience gained by Industry4.E Lighthouse projects' participants in building success stories addressing communication towards wide non-technical audiences.
- Sharing of public engagement and outreach experiences across the Industry4.E Lighthouse projects and CSA-Industry4.E team, and other relevant initiatives.
- Established links between the Industry4.E Lighthouse and skills development initiatives, such as the EC Digital skills and jobs coalition ESCO (European classification of Skills, Competences, Occupations and Qualifications) and others.

PROTOCOL – Indicators of Public Outreach and Engagement Activities

Some of this information will be recorded in the Communications and Dissemination Log and the WP4 leader will develop overall statistics based on the record.

Website and relevant social media statistics will be tracked by the WP4 leader.

10 Public Engagement and Outreach Guidelines and Sustainability of Industry4.E

- CSA-Industry4.E will provide guidelines for current and future Industry4.E Lighthouse projects to help them in communicating their story to the general public. These guidelines will help the projects to increase the social impact and uptake of project results, through building success stories that can be communicated towards wide non-technical audiences. The CSA-Industry4.E project should help pave the way for receptive public audiences, having demonstrated the impacts and benefits of strong EU support of Industry4.0 projects to EU citizens, during the project. Resources for public engagement and outreach will also remain available on the Industry4.E Lighthouse website.
- The guidelines will provide advice and recommendations for communication targeted at non-technical audiences and end-users, promoting success stories and societal benefits to increase the social impact and uptake of project results. The guidelines will incorporate best practices adapted from the consortium’s expertise, and insights gained from implementing this public engagement and outreach strategy. All developed guidelines will be brought together into a comprehensive Guideline document tailored to Industry4.E, to be submitted as D3.3 in M24.
- With Industry4.E Lighthouse Projects, industry bodies, research institutes and SMEs as partners, there are key channels of communication which are independent of the CSA-Industry4.E project, allowing the continuation of public outreach and engagement for Industry4.0.
- Access to CSA-Industry4.E project results and resources post-project will be assured via the project website which will remain live for at least five years after the project finishes and will contain all public deliverables.

11 Strategy Validation and Recommendations

As part of the revision process of the Industry4.E Public Engagement and Outreach Strategy, each subsequent version of this deliverable will be validated by the partnership. The current version will function as the operational manual and will be revised at regular intervals.

Industry4.E Public Engagement and Outreach Strategy	
Version - Date	Comments & Recommendations
V1 – 30.01.2019	D4.1 draft author Olga Ormond (AquaTT) provided to coordinator Ann O’Connell (IMR)
V2 – 31.01.2019	D4.1 with updates from coordinator ready for upload
V3 – 14.01.2020	D4.1 with updates following RP1 review comments
	<i>Subsequent revisions possible following regular strategy reviews</i>