EF ECS 2019 Lighthouse presentations
Helsinki, 21/11/2019

Industry4.E Team - Knut Hufeld, Infineon Technologies AG
Industry4.E Lighthouse

Enabling European industry to achieve digital transition and strong competitiveness

• operating across projects and funding programmes at European and national scale

• helping them to connect with each other and the end-user/stakeholder community.
Activities and Expected Outcomes

➢ Promoting European Digital Industry Leadership & Team Spirit
➢ Linking projects, national and regional activities, like Digital Innovation Hubs
➢ Reducing fragmentation among all stakeholders and relevant RDI projects
➢ Acceleration of uptake of project results, increasing industrial and social impact
➢ Recommendations on Industrial roadmaps
➢ Contributing to standardisation and policy
➢ Boosting cross-cutting activities
➢ Engaging specialists and the general public
Focus on Digital Industry Five Major Challenges

- Developing digital twins, simulation models for the evaluation of industrial assets at all factory levels, and over system or product life-cycles
- Developing digital platforms, application development frameworks that integrate sensors/actuators and systems
- AI-enabled cognitive, resilient, adaptable manufacturing
- Human-centred manufacturing
- Sustainable manufacturing in a circular economy
Electronics and ICT as enabler for digital industry and optimized supply chain management covering the entire product lifecycle

Power Semiconductor and Electronics Manufacturing 4.0

Secure COConnected Trustable Things

Networking UnderWAter Robots in Cooperation Meshes

Arrowhead Tools for Engineering of Digitalisation Solutions

 aggregate Farming in the Cloud

Integrated Development 4.0

Domain Compact Models of LEDs

Cyber Physical System based Proactive Collaborative Maintenance

Intelligent Motion Control Platform for Smart Mechatronic Systems

From Measurements to Standardised Multi-Domain Compact Models of LEDs

SWARMS

Delphi4LED

MANTIS
Industry4.E LIASE

Lighthouse Initiative Advisory Service (LIASE)

➢ Andrew Lynch (Chair), Irish Manufacturing Research (IE)
➢ Chris Decubber, EFFRA
➢ Eduardo Beltrán de Nanclares, Mondragon Corporation (ES)
➢ Knut Hufeld, Infineon Technologies AG (DE)
➢ Olli Ventä, VTT (FI)
➢ Max Lemke, European Commission DG CONNECT
CSA-INDUSTRY4.E
SUPPORTING SUCCESSFUL IMPLEMENTATION OF THE INDUSTRY4.E LIGHTHOUSE
CSA-Industry4.E Project

To support the Industry4.E LIASE in establishing and running the Industry4.E Lighthouse

Start date: 1st Oct 2018

Type: CSA

Duration: 24m

Budget: €499,928

Partners: 5

Coordinator: Maurice O’Connell (IMR)
Key Activities and Achievements
Industry4.E Events Participation

1. **IndTech2018** Vienna 30-31 Oct 2018
2. **EFEC52018** Lisbon Nov 2018
3. **DIH Annual Event** Nov 2018
4. **Basque industry 4.0** Nov 2018
5. **ICT2018** Vienna Dec 2018
6. **Irish Manufacturing Expo Dublin** Jan 2019
7. **Productive4.0 meeting Budapest** Mar 2019
8. **ECSEL Coordinator's Information Day** Mar 2019
9. **ARTEMIS IA Technology Conference** Apr 2019
10. **Factories of the Future Community Days** May 2019
11. **DIH Day** organised by the Smart4Europe Consortium May 2019
12. **Open Labs Day & Connected factories WS** May 2019
13. **ECSEL-JU Symposium Bucharest** June 2019
14. **Unicorn or Transformer** SME event Stuttgart July 2019
Arrowhead Tools and Productive4.0 Joint Workshop @Porto last week
Selected Roadmaps

➢ **EFFRA Roadmaps & Factories of the Future in Horizon Europe** (2021-2027): Preparing the next multi-annual roadmap for Framework Programme 9, FoF in Horizon Europe – confidential – 12/2018


➢ **Eureka Smart Advanced manufacturing Technology Roadmap** (2018)

➢ **Manufacture Vision 2030**

➢ **CPS Roadmaps** (Platforms4CPS, Road2CPS and CPSoS)

➢ **Big data**: European Big Data Value Strategic Research and Innovation Agenda, BDVA, 2017 + “Big data challenges in smart manufacturing: A discussion paper on big data challenges for BDVA and EFFRA Research & Innovation roadmaps alignment” (March 2018).

➢ **HiPEAC Vision**

➢ **The Industrie 4.0** (national/German) Roadmap/Guidelines and the associated Working Group Documents

➢ **2018 World manufacturing forum report**: Recommendations for the future of manufacturing
Identification of Gaps & Emerging Themes

✓ Artificial intelligence (AI) enabled resilient manufacturing
✓ ECS for Sustainable manufacturing and Circular Economy
✓ Modeling and Simulation of intelligent/cognitive/adaptive/resilient Factories at all levels and covering the full Life Cycle
Industry4.E Projects Promotion to Citizens

MANTIS: Cyber Physical System based Proactive Coll...

www.mantis-project.eu
Industry4.E Promotion to Citizens – Productive4.0

Productive4.0 videos

www.productive40.eu

Prediction, online analyzing, sensors – Norwegians taking control to reduce clumping of powder products in storage and transit.

@Industry4E www.Industry4E.eu
Industry4.E Projects
Promotion to Citizens

www.Industry4E.eu

www.afarcloud.eu
WP3 - Workshop 1: Creating Knowledge Impact through Knowledge Transfer for the Industry4.E Lighthouse Project Community

21 November 2019  Scandic Park Hotel Helsinki
- Directly after EFCS 2019: 14:00-17:45

This first training workshop is intended for members of the Industry4.E Lighthouse project community who are invested in achieving greater impact from their projects and programmes, including: researchers, managers, dissemination and exploitation workpackage leaders, and project coordinators.

Draft Agenda: 21 November 2019
Scandic Park Helsinki (8-minute walk from Finlandia Hall)

14:00 Welcome to the Industry4.E Lighthouse Projects by Berta Ferrer Llosá
14:10 COLUMBUS Background & Overview
14:25 Session 1: How to Collect & Validate Knowledge within Research Projects
15:40 Afternoon Coffee
15:55 Session 2: Options on how to Analyse Knowledge Outputs from Research Projects
16:50 Session 3: How to Map a Pathway to Impact & Customised Knowledge Transfer Plans
17:15 Concluding group discussion and Participant Debrief
Thank you for your kind attention!

Industry4.E Lighthouse Team

CONTACT US:
info@Industry4E.eu
@Industr4E
www.Industry4E.eu