

Welcome to the sixth edition of Impact, the newsletter from the European Factories of the Future Research Association (EFFRA) focusing on the work of projects launched under the EU’s research and innovation programme for advanced manufacturing – ‘Factories of the Future’.

In this edition, we invite you to save the date for this year’s Industry Innovation Days on 3 and 4 October. This major event will centre on upcoming opportunities in the Factories of the Future programme and related other NMPB programmes in Horizon 2020. We’re pleased to announce that our new, free Innovation Portal is online. Our Portal is a repository of information on every Factories of the Future project.

This quarter’s project news includes a ramping up of ConnectedFactories activities, the launch of a spin-off by Satisfactory, the successful review of Facts4Workers and exoskeletons from the HuMan project.

If you have project news you wish to share you can submit it to: info@effra.eu.

Contents

Save the Date: Industry Innovation Days (3 & 4 October)	2
New Innovation Portal Online	3
Annual Impact Workshop Focuses on Impact and Leverage	3
ConnectedFactories & FoF-11-2016 Projects Ramp Up Activities	4
Satisfactory Launches Spin-Off FAREXTRA	5
Facts4Workers Receives Positive Second Review	5
Presentations Available from Projects Seminar on Continuous Adaptation of Work Environments	6
HuMan Project Tests Exoskeletons	7

Subscribing to Impact

Impact is available to anyone with an interest in factories of the future and is registered on the EFFRA Innovation Portal.



If you have colleagues/contacts who are interested in receiving this newsletter direct them to the EFFRA Innovation Portal and they will receive our next edition direct into their mailbox.

Access to the EFFRA Innovation Portal and subscription to this newsletter is free.

[Innovation Portal](#)

Save the Date: Industry Innovation Days (3 & 4 October)

The "Industrial Innovation" Info Days 2017 will take place in Brussels on 3 and 4 October.

Formerly known as the PPP Info Days, the aim of the event is to:

- Build the basis for the future of Industrial Research in Europe.
- Inform relevant Industrial Technologies providers and users about EU activities in the field.
- Enhance the cooperation among Industrial stakeholders.

The morning sessions on both days will comprise of plenary sessions with speeches by high level speakers on the future of the industrial pillar under Horizon 2020. The afternoon panel sessions on both days will focus on the main upcoming challenges for the next work programme on nanotechnologies, advanced materials, advanced manufacturing and processing, and biotechnology (NMPB).

Brokerage will take place on both days, in the afternoon. The brokerage session on day one is expected to concern the Factories of the Future call for 2018 while that of day two will be concerned with 2019. This will be confirmed by the Commission when plans are finalised. These brokerage sessions will facilitate short pitches by organisations interested in the topics.

EFFRA will launch online brokerage on the Innovation Portal in September.

The full programme and registration will be published on the event's website soon.

[Industrial Innovation Days](#)

New Innovation Portal Online

EFFRA is pleased to announce that it has deployed a new Innovation Portal online. This new Portal features a more accessible layout, easier access to project information and an advanced search function (currently being fine-tuned). As with the old the portal, the majority of information is accessible without logging in.

[View New Portal](#)

Registered users of the old portal must request a new password to login to access member features. Use the ['forgot password'](#) option to do this.

If you are not already registered, you can create an account [via this link](#).

Annual Impact Workshop Focuses on Impact and Leverage

On 17 May representatives of Factories of the Future projects and projects from the SPIRE and E2B gathered for the annual impact workshop, organised by the European Commission.

This year's workshop explored approaches to increase the impact of the projects after the end of the EU funding, and the leverage and impact generated by these projects. As the largest partnership, there were significant contributions from the Factories of the Future projects and EFFRA members.

A live-stream of the event can be re-watched via the link below.

[Re-watch Event](#)

ConnectedFactories & FoF-11-2016 Projects Ramp Up Activities

The activities of ConnectedFactories and its fellow FoF-11-2016 projects have increased during the last quarter. All of the projects are now running at full steam.

Launched in 2016, ConnectedFactories aims to establish a structured overview of available and upcoming technological approaches and best practices. The project identifies present and future needs, as well as challenges, of the manufacturing industries.

ConnectedFactories is undertaking a number of analysis activities and events and has published a Digital Mapping Framework. The main goal of the Digital Mapping Framework is to establish a solid approach for describing and analysing what is present on the market in terms of technologies that support the deployment of digital manufacturing platform (i.e. platforms support the interaction between manufacturing systems, devices, workers and different software-based tools and services).

Facilitated by ConnectedFactories, the cluster comprises ten projects. Under the overall theme of digital automation - collaborative manufacturing and logistics, six projects are focussing on digital platforms for factory automation:

- [AUTOWARE](#)
Wireless, autonomous, reliable and resilient production operation architecture for cognitive manufacturing
- [DISRUPT](#)
Decentralised architectures for optimised operations via virtualised processes and manufacturing ecosystem collaboration
- [Daedalus](#)
Distributed control and simulation platform to support an ecosystem of digital automation developers
- [FAR-EDGE](#)
Factory automation edge computing operating system reference implementation
- [SAFIRE](#)
Cloud-based situational analysis for factories providing real-time reconfiguration services
- [SCALABLE4.0](#)
Scalable automation for flexible production systems

Four projects are focused on supply chains and logistics:

- [COMPOSITION](#)
Ecosystem for collaborative manufacturing processes
- [DIGICOR](#)
Decentralised agile coordination across supply chains
- [NIMBLE](#)
Collaboration network for industry, manufacturing, business & logistics in Europe
- [vf-OS](#)
Virtual factory open operating system

Within its activities to stimulate synergies and cross-fertilisation, ConnectedFactories also developed links to further projects within and outside the Factories of the Future partnership.

[ConnectedFactories](#) | [Mapping Framework](#)

Satisfactory Launches Spin-Off FAREXTRA

Two partners of the SatisFactory project team recently established an innovative spin-off company, Farextra. Through their collaboration on VR/AR, operative procedure definition and on-the-job training components of the Satisfactory project, CERTH/ITI and Regola Srl identified their complementary expertise and potential for synergies and created a spin-off company.

Farextra aims to specialize in providing end-to-end software solutions, as well as consulting services, in the fields of on-the-job training, real-time emergency event response and augmented assistance, 3D object detection and recognition, as well as localization and real-time data overlay. The main product to be offered by Farextra is a VR/AR based software platform for training personnel on manufacturing, maintenance, process operations and support.

[More Information](#)

Facts4Workers Receives Positive Second Review

Facts4Workers received a positive review at the conclusion of its recent second technical review meeting. The project reviewer stated that the progress achieved to date is considerable and that there has been a visible improvement since the first technical review meeting.

The review meeting focused on showcasing the prototype solution for the Hidria Dieseltec industrial use case: application of a modern IT interface that can be applied to the diesel glow plug assembly lines – developed by one of the project partners

Hidria Technology Centre. The application provides maintenance workers with the necessary data on stoppages, breakages and other problems that might occur 24/7 as well as providing them with the necessary instructions and tips on solving the issue in a fast and rational manner.

The FACTS4WORKERS project's implementation scope ranges from automotive, industrial appliance and plastics to tooling and steel industries. All of the use cases will receive their first prototype solutions by early autumn this year.

Facts4Workers also recently published an introductory video providing an overview of the aims of the project.

[Further Information](#) | [Introductory Video](#)

Presentations Available from Projects Seminar on Continuous Adaptation of Work Environments

Presentations from the recent seminar on continuous adaptation of work environments with changing levels of automation in evolving production systems are now online.

[View Presentations](#)

During the seminar project specialists presented and discussed the following topics:

- Continuous adaptation of work environments: The Industrial Context
- Adaptive automation in assembly for BLUE collar workers' satisfaction in evolvable context
- Empowering and participatory adaptation of factory automation
- Contextualised interventions to support the operator: The HUMAN approach
- Towards a system for balancing human and automation levels in the manufacturing workplaces of the future
- Adapting automation to humans: the INCLUSIVE concept

The seminar was organised and co-hosted by the INCLUSIVE, A4BLUE, Factory2Fit, HuMan and MANUWORK Factories of the Future projects and took place during the SPS IPC Drives Fair on 24 May.

Earlier in May the INCLUSIVE project signed clustering agreements with the A4BLUE and Factory2Fit projects with the aim of collaborating more closely on dissemination and workshop activities.

HuMan Project Tests Exoskeletons

For the first time, the Factories of the Future project HuMan has started the testing of one of its main research activities lines, the exoskeletons, developed and utilized to enhance the physical and operational capabilities of the workers. These wearable devices eventually will be equipped with sensors in order to achieve one of the project's main objectives: integrating human workers with their workplace and tasks.

Two prototypes were tested. The first was an active exoskeleton used as a test-bench for providing lower back assistance when picking boxes with the final aim of reducing the usual back pain workers have to face during these tasks. The other one being tested was a passive upper limb exoskeleton which provides assistance for shoulder related tasks as arm-involved activities where workers have to maintain the arms in an elevated position for long times.

The overall goal of HuMan is to increase the well-being of workers, preventing and avoiding possible injuries, thus resulting in a positive effect in the productivity and workplace well-being.

[Further Information](#)

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Contact

If you have suggestions, questions or comments concerning this newsletter, contact info@effra.eu.

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