The European Factories of the Future Research Association (EFFRA) is the representative of the manufacturing research community engaged in the European Union’s ‘Factories of the Future’ partnership.

EFFRA is a strong and growing network of industrial, university, research and related stakeholders with a shared interest in transforming production technologies in Europe.

EFFRA was established to shape, promote and support the implementation of the ‘Factories of the Future’ partnership and the Factories of the Future community.

EFFRA’s main aims are to:

- Define the strategic research agenda and industrial deployment framework for the Partnership
- Define annual call topics and ensure transparent competition of project ideas in collaboration with the European Commission
- Provide support to the Partnership and to its projects through dissemination and events
- Monitor and shape the implementation of the strategic research agenda and the progress of the Partnership
- Strengthen and maintain the diverse Factories of the Future community

Manufacturing is at the heart of Europe’s economy. It supports 35 million jobs and provides 83% of Europe’s exports. Furthermore, the manufacturing sector is responsible for 64% of private sector investment in research and innovation.

Securing the future of manufacturing in Europe will not only retain and create skilled jobs but will also enable society to meet major ongoing and future challenges through new technologies in a sustainable manner.

Factories of the Future is the European Union’s €1.15 billion research and innovation partnership which supports applied research in production technologies and related fields to ensure that manufacturing in Europe remains competitive and sustainable.

A Horizon 2020 programme, the Factories of the Future partnership launches annual calls for proposals for pre-competitive projects. Following independent evaluation, successful proposals receive funding and join an experienced research and innovation network of existing and past project participants.
The annual Factories of the Future call topics throughout Horizon 2020 have been based upon the partnership’s strategic research agenda, or roadmap, Factories of the Future 2020, complemented by the ‘Factories 4.0 and Beyond’ strategic document. These strategic publications were developed by EFFRA through open consultations in close collaboration with the European Commission. Factories of the Future priorities continue to evolve. Looking forward, the partnership will address:

**Priorities**

- Integration of new technologies
- Skills & training
- New technologies = clean technologies
- Digital
- Sectors specific activities
- Start ups/scale up
- SMEs
- Excellence
- Link to national activities
- Links to other PPPs at European level
- SME’s Excellence
- Link to national activities
- Links to other PPPs at European level

**Impact**

To date, the implementation of Factories of the Future 2020 (and previous strategic agenda under FP7) has resulted in:

- 1,000+ results and demonstrators
- 260+ projects launched to date
- 270+ new types of jobs
- 32% of all participants are SMEs
- 190+ new curricula

The establishment of a large and experienced community across Europe.
The success of projects has led to close project to project collaboration and the development of clusters around common themes. Such clusters amplify the impact of projects on sectors.

**SUCCES STORIES**

Factories of the Future projects deliver industry-relevant results – Factories of the Future success stories. Examples:

**Modular Exoskeleton for Manual Handling**

Sectors: Assembly, automotive, aviation, construction, medical

Robo-Mate is a user-friendly intelligent wearable human-robotic exoskeleton for manual handling work in different industries. Developed by the Robo-Mate project, this full exoskeleton prototype has been tested in the lab and in industrial settings with a view to commercialisation. Comprising three modules, the exoskeleton will assist workers with manual tasks with heavy machinery, picking-up and placing objects, and repetitive physical tasks.

**Table-top Laser-3D Printer**

Sectors: Electronics, IT, medical devices, optical

The FEMOTPRINT project has developed a table-top printer which allows designers and engineers to make their own 3D structures. The printer has been commercialised and is available on the market through a spin-off company FEMTOprint.

**VR/AR Software Platform for Training Manufacturing Personnel**

Sectors: Aeronautical, AR/VR, digital, maintenance, ship building

Satisfactory project spin-off FAREXTRA will provide 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. FAREXTRA offers a VR/AR based software platform for training personnel on manufacturing, maintenance, process operations and support.

**On-demand Advanced Simulation, Modelling & Data Analytics Resources for SMEs**

Sectors: Aerospace, automotive, mechanical-engineering, naval

The Fortissimo project developed the Fortissimo Marketplace spin-off which provides one-stop, pay-per-use, on-demand access to advanced simulation, modelling and data analytics resources including software, hardware and expertise.

Discover more: portal.effra.eu/projects
COMMUNITY | NATIONAL & REGIONAL INITIATIVES

Successful projects and collaboration have resulted in the gathering of diverse manufacturing and research stakeholders into a large community – the Factories of the Future community.

The Factories of the Future community comprises EFFRA members and non-members who share a common interest in securing the future of manufacturing in Europe through research and innovation.

This community is a vital bridge to similar national and regional initiatives.

National & Regional Initiatives
EU member and non-member states have launched initiatives to support advanced manufacturing and the realisation of industry 4.0. Inspired by the success of the Factories of the Future partnership, many of these initiatives have defined their own challenges and enablers which complement efforts at European level.

JOIN EFFRA

The best way to access the world of Factories of the Future research and innovation is to participate. The best place to start is EFFRA!

Members of EFFRA are at the very heart of the Factories of the Future community.

EFFRA is composed of small, medium and large industrial enterprises, research organisations, universities, associations and related stakeholders from across Europe.

EFFRA members are provided with an evolving array of services. Through membership they:

- Set the agenda: Shape future research priorities and related policies,
- Access the EFFRA network: Meet and exchange ideas with an experienced community in exclusive events,
- Enhance their profile: A raised profile through direct promotion of their events & project activities,
- Get support: EFFRA maintains a highly motivated and professional team, providing a first point of contact for all enquiries, dissemination of key information & support at events.

Discover more: effra.eu/membership
Contact us: info@effra.eu
EFFRA INNOVATION PORTAL

EFFRA’s Innovation Portal is a unique resource which hosts several resources to support the implementation of the Factories of the Future partnership.

The Portal was developed and deployed from the early days of the current partnership and it will continue to evolve to meet the needs of the Factories of the Future community for years to come.

In keeping with the openness of the Partnership, access to the Portal is free and open to all.

Project Database
Our Innovation Portal includes a complete database containing key information on all Factories of the Future projects launched to date (including their results and their demonstrators).

**Monitoring Progress & Impact**

The Innovation Portal helps EFFRA to monitor the progress being achieved by the Partnership. Project consortia use the Portal to report their results while our partners in the European Commission pool its data to measure the progress and impact of the Partnership.

Reporting project developments helps projects too. By regularly updating information on their results, demonstrators & spin-offs, project consortia can monitor their own achievements in one place.

If you are involved in a project and would like advice on how to get the most for your project from the Portal, contact EFFRA directly.

**Brokerage**
To assist potential Factories of the Future participants, the Innovation Portal hosts online brokerage which enables interested stakeholders to express their interest in a call topic and to identify potential project partners.

Online brokerage is further empowered by the Portal’s “people” search feature which assists potential project partners to identify one another on the Portal.

**Supporting Collaboration**
Our Portal supports collaboration between projects and the clustering of projects by enabling project consortia to identify projects addressing similar challenges.

Through collaboration and clustering, projects share knowledge, exploit results and create new business-to-business contacts across Europe.

Discover the portal: portal.effra.eu