Factories of the Future
Horizon 2020: LEIT – ICT
WP2016-17

FoF-12-2017: ICT Innovation for Manufacturing SMEs (I4MS)

Complex Systems and Advanced Computing unit
Directorate General for Communication Networks, Content and Technology
FOF 12 - ICT Innovation for Manufacturing SMEs (I4MS) – Phase 3

Scope:
• To take-up advances in ICT in manufacturing
• Strengthen SMEs by adopting new business models and/or service models

• Call deadline: 19 January 2017

www.i4ms.eu
Objective:
Enhancing digital transformation in manufacturing SMEs and mid-caps

- Phase 1 + 2: 75 + 35 M€ of EU funding
- 7 + 4 large projects
- 40 + 30 competence centres
- 140 + 80 experiments
- 22 Members States and Ass. Countries
- Focus on 4 areas of ICT adoption in the FoF:
  - HPC cloud-based modelling, simulation and analytics services
  - Industrial robotics systems
  - Laser-based manufacturing
  - Smart sensors systems, CPS and IoT

I4MS is part of the Factories of the Future PPP
EU-wide network of Competence Centres  
Acting as the heart of Digital Innovation Hubs  

**Competence Centres**  
- Access to technology through marketplaces  
- Service for developing products  
- Brokers between suppliers and users  
- Builds on regional strengths/smart specialisation  
- Flexible and scalable  
- H2020 funding can be augmented with regional/structural funds, e.g. ESIF  

www.i4ms.eu
Develop novel products or services with digital technologies.

Bring together actors along value chain.

Suppliers to assist new users in customising and applying digital technologies in their environment.

Financial support to third parties may be used for flexibility.
Innovation Action Proposals should address 3 aspects

1. Establish a **network of competence centres offering marketplaces for companies** that want to experiment with digital technologies in manufacturing of discrete or continuous goods. Link with regional innovation hubs.

2. Carrying out a critical mass of **cross-border experiments** bringing together key actors across the full value chain to customise the technologies according to the requirements of new users.

3. Activities to achieve **long-term sustainability** of one-stop shop/market place services by competence centres and the ecosystem. Investors should be attracted to support business development of SMEs and mid-caps.

- collaborate on reinforcing I4MS ecosystem,
- establish links to related activities, e.g. in the IoT Focus Area, ECSEL, SPARC, Big Data PPPs.
Existing and emerging EU networks of competence centres can be complemented by Satellite Nodes / Digital Innovation Hubs

Regional Satellite Nodes/Projects

- Feasibility studies
- Best practice experiments
- Local dissemination
- Skills development
- Infrastructure provisioning

- Funded through regional/structural funds, e.g. ESIF
- Focus on regional strengths/smart specialisation
- Support actions complementary to H2020 actions
- Flexibility/little synchronisation needs
Mechanism used in I4MS to link to new regions

- Bootstrap innovation hubs in "non-I4MS regions"
  - RTOs, academia

- Mechanisms:
  1. Call for expression of interest (EoI) for new hubs
  2. I4MS competence centres as mentors each launch 5 sponsoring contracts (30-50k€)

- Role of Mentoring & Sponsorship actions
  - Investigate digital needs of regional smart specialisation
  - Link needs to I4MS projects and competences
  - 3 feasibility studies for Best Practice experiments
  - Establish links with local funding bodies

www.i4ms.eu
What we ask for: Innovation Actions in one or more of the following areas of technologies

- **Integration of CPS and IoT concepts** in smart production environments
- **Robotics systems** cost effective at lower lot sizes
- **HPC Cloud**-based modelling, simulation and analytics services focusing on sustained service models and real-time support
- **Digital design for additive Manufacturing** focusing on link between design tools and production

Large projects (5-8 M€)

**Budget 32 M€**
Scope: To advance the I4MS Ecosystem

- Single portal for newcomers
- Sharing of best practices
- Dissemination
- Brokering between users and suppliers
- Identifying new ICT technologies that can benefit from I4MS scheme
- Levering further investment
  - mapping and matching competences in and between regions
  - linking up with regional/national initiatives

Coordination and Support Actions

Budget 1 M€

Close cooperation with European Factories of the Future Association (EFFRA)
Address all of the following impact criteria providing metrics to measure success when appropriate.

- Exploration of new application areas for advanced ICT in manufacturing at large, a significant number of new users, in particular SMEs and Mid-caps
- More innovative and competitive technology suppliers, in particular SMEs
- More competitive European service providers through provisioning of new types of services and strengthening the presence on local markets
- Creation of a self-sustainable ecosystem of competence centers, users and suppliers covering a large number of regions and their smart specialisation
- A critical mass of pan European experiments covering the whole value chain to demonstrate innovative and sustainable business models
I4MS workshop in Amsterdam 22 and 23 June 2016: *Fostering digital industrial innovation in Europe*
http://i4ms.eu/events/event_amsterdam_agenda.php

Digitising European Industry:  

Factories of the Future (FoF) on the web:  
Additional information
Open call: Part K of the General Annexes & Article 15 of MGA

- Proposals shall clearly detail the objectives and results to be obtained from the financial support to third parties, and include at least:
  - A closed list of the different types of activities supported
  - Persons or categories of persons supported
  - Criteria for award of support
  - How to calculate the exact amount of support (for instance 70% of total costs)
  - Maximum amount of support for each party (typically 20-100K€ per party. If more than 60K€ is necessary, this needs to be explained in the proposal).

Winners of the open call will become third parties, and not beneficiaries of the project!