



## Factories of the Future for the Automotive Sector

28 February 2018

Brussels, FEBIAC, Woluwedal 46

Organised by EFFRA & ERTRAC/EGVIA

This workshop will focus on the results of projects that address manufacturing in the automotive sector and will provide opportunities for networking between project presenters and participants.

### Agenda

9:00 Registration

9:30 – 10:15 Opening Session

- Željko Pazin (EFFRA), Executive Director
- Stefan Neugebauer (BMW), Chairman ERTRAC and EGVIA
- Jürgen Tiedje (DG RTD) Head of Unit D2 Advanced Manufacturing Systems and Biotechnologies
- Jean-François Aguinaga (DG RTD) Head of Unit H2 Surface Transport

10:15 – 12:30 Projects/Results Session-Part 1: Advanced Materials Processing & Robotics

- Introduction to the Factories of the Future (FoF) PPP and manufacturing for the automotive sector: Chris Decubber (EFFRA), Technical Director

FLEXHYJOIN	Flexible production cell for hybrid joining.	Fernando Liebana (Tecnalia)
COMMUNION	Net-shape joining technology to manufacture 3D multi-materials components based on metal alloys and thermoplastic composites.	Fernando Sanchez (AIMEN)
KRAKEN	Hybrid automated machine integrating concurrent manufacturing processes, increasing the production volume of functional on-demand using high multi-material deposition rates.	José Antonio Dieste (AITIIP)
BARBARA	Biopolymers with advanced functionalities for building and automotive parts processed through additive manufacturing.	José Antonio Dieste (AITIIP)
MEGAROB	Development of flexible, sustainable and automated platform for high accuracy manufacturing operations in medium and large complex components using spherical robot and laser tracker on overhead crane.	José Antonio Dieste (AITIIP)
CAXMAN	Computer aided technologies for additive manufacturing surface treatment.	Tor Dokken (SINTEF)

HEF	Surface treatment.	Christophe Pupier (HEF)
FORTAPE	Research on efficient integrated systems for the manufacturing of complex parts based on unidirectional tapes for the automotive and aeronautical sectors.	Vanessa Ventosinos (CTAG)
RECOTRANS	Integrated manufacturing of recyclable hybrid metalthermoplastic composites for the transport sector.	Ferrán Martí Ferrer (AIMPLAS)
YVES, OPERATORINFO	Augmented workers using smart robots in a manufacturing cell. Bi-directional context-sensitive information sharing for operators.	Jeroen De Maeyer (Ghent University)
COLROBOT	Collaborative robotics for assembly and kitting in smart manufacturing.	Asmaa Messaoudi (ENSAM)

12:30 – 13:30 Lunch break

13:30 – 15:20 Projects/Results Session – Part 2: Digitisation & Humans in Manufacturing

Z-BREAK	Strategies and predictive maintenance models wrapped around physical systems for zero-unexpected-breakdowns and increased operating life of factories.	Enrico Callegati (CRIT)
TWIN-CONTROL	Twin-model based virtual manufacturing for machine tool-process simulation and control.	Idoia Echave (IK4 Tekniker)
MEMAN	Integral Material and Energy flow management in manufacturing metal mechanic sector.	Joseba Bilbatua (Mondragon)
SIMQRI - PRIMAQ	Simulative optimisation of industry processes to decrease risks.	Jean-Christophe Deprez (CETIC)
PREVIEW	Predictive system to recommend Injection mold setup in wireless sensor networks.	Liceth Rebolledo (EURECAT)
MASHES	Multimodal spectral control of laser processing with cognitive abilities.	Fernando Sanchez (AIMEN)
PreCOM	Predictive cognitive maintenance decision support system.	Bernard Strée (CEA)
Clear5G	Investigate and demonstrate some of the key enablers necessary to support machine type communications (MTC) traffic in 5G networks, in particular in the Factories-of-the-Future (FoF) environment.	Bernard Strée (CEA)
Connected Factories CSA	Industrial scenarios for connected factories.	Chris Decubber (EFFRA)

15:20 – 15:45 Coffee Break

15:45 – 16:45

- Overview of manufacturing-related EGVI projects, Thilo Bein (Fraunhofer LBF) co-chair ERTRAC Global Competitiveness WG
- Discussion: Future automotive manufacturing challenges and outlook towards FP9 – Facilitated by David Storer (CRF), co-chair ERTRAC Global Competitiveness WG

16.45 Cocktail reception