Business Experiments in Cyber-Physical Production Systems

IOT Week Industry Day
Belgrad, 01/06/2016
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ICT Innovation for Manufacturing SMEs

• EC initiative supporting SMEs and mid-caps in digital value creation
• Launched in July 2013 in the context of the Factories of the Future cPPP
• Targets process innovation through digital technologies such as robotics, CPS and IoT
• € 77M budget, 150 participating companies
I4MS
ICT Innovation for Manufacturing SMEs

Support technology suppliers in “crossing the chasm”
Support users in early adoption

Stimulate the replication potential
IoT@BEinCPPS

Business Experiments in Cyber-Physical Prod. Systems

• H2020 Innovation Action (FoF-11-2015)
• 23 partners from 9 countries, started in 2015
• Promotes CPSization of manufacturing
• Delivers an Open Platform for CPPS
• Industrial pilots in five S3 Vanguard regions first (regional champions), and then across all Europe through Open Calls
Business Experiments in Cyber-Physical Prod. Systems

Rhone-Alps
- Plastic Components for Automotive Ind.
- Footwear

Euskadi
- Plastic Components for Automotive Ind.

Baden-Wuerttemberg
- Industrial Vehicles & Equipment for Agriculture

Lombardia
- White Goods

IoT@BEinCPPS

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Business Experiments in Cyber-Physical Prod. Systems
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Convergence of Open CPS-IoT-Cloud Platforms
Business Experiments in Cyber-Physical Prod. Systems

IoT@BEinCPPS
Rhone-Alps

Injection Moulds for Thermoplastic Parts

CPPS Information Bus

FIWARE
Orion Context Broker

NGSI

AMQP

OpenIoT
Middleware

FIWARE
IDAS

FAST Lane – Protocol Interop

OASIS
MQTT

OMA
LUHMENT

OPC
UA

SMART Lane – Semantic Interop

OPC
UA

OASIS
MQTT

OpenIoT
Wrappers

HOMARD

Device Management

CoAP

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IoT@BEinCPPS

Cloud

CPPS Information Bus

FIWARE Orion Context Broker

AMQP

OpenIoT Middleware

Factory

FAST Lane – Protocol Interop

OASIS MQTT

OMA LWM2M

OPC UA

SMART Lane – Semantic Interop

OPC UA

OASIS MQTT

Device Management

Field

MACHINE: Injection Process Optimization

Real-Time Ethernet

IoT Week 01/06/2016
• PERNoud: Global Mould Maintenance
• Factory: Manufacturing Process Optim.
• Factory: Dashboards
Thank You!

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