A network of design centers boosting and initiating synergies between Innovative companies, major CPS-platforms and CPS-competency providers

ICT1-clustering and communication event
Ph. Bonnot, Vienna April 14 2016
Smart Anything Everywhere Initiative

GateOne
Innovation Services for European Smartization by SMEs
Coordinator: Blumorpho

SMARTER - SI
Smart Access to Manufacturing for Systems Integration
Coordinator: Hahn-Schickard Ges.

CPSE Labs
CPS Engineering Labs
Coordinator: Fortiss

EuroCPS
Industrial access to CPS technologies and competencies
Coordinator: CEA-Leti

>25M€ of funding invested by the European Commission to catch the CPS market
EuroCPS in a nutshell

- Call: ICT-01-2014
- Launched: Feb 1st, 2015
- Duration: 3 years
- 9 Countries
- 15 Partners
- 8 Technology Platforms
- Budget: 9,178,641€
- EC funding: 8,186,835€

Industrial Experiment support: 76% of the EuroCPS funding
EuroCPS objectives

Industrial experiments

Innovative company’s needs from any sectors

New innovative CPS products with long-term differentiator

Better EU competitiveness

Technology innovations & Export revenues

Sustained demand for local manufacturing

European available Platforms & Competencies
EuroCPS mission

• Provide an easy path to build innovative CPS systems to SMEs from any sector
  ➢ Leverage the existing regional ecosystem across the full value chain and range of competencies

• Facilitates user-supplier partnerships across value chains and regions
  ➢ One-stop-shop providing a critical mass of technologies and competencies

• Enable a new cooperation model linking software, system and nano-electronic industries along the full CPS value chain
  ➢ Industrial experiments initiated and led by SMEs

 altında

Reduce development time and certification efforts
EuroCPS structure

Innovative embedded ICT users across regions: Industrial experiments

Objective 1: Bring innovative CPS to businesses from any sectors

Objective 2: linking user-supplier across value-chains and regions

Outcome: Innovative EU CPS products + Sustained demand for EU manufacturing

Supported, manage and monitor by cascade funding partners

IE definition
IE selection
IE Services
IE coaching
IE dev plan
Provide access and support to techno

Needs

Final innovative product

Beneficiaries (CA)

Networking partners
Competence partners
Platform partners

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EuroCPS Industrial Experiments

- **SW intensive project**
  - Solution using existing prog. platforms
  - USER (SW intensive project)
  - CPS specifications
  - SW
  - HW/SW integration
  - CPS platforms

- **System integration project**
  - Solution using existing SW & HW components
  - USER (System integration project)
  - CPS specifications
  - SW
  - HW
  - HW/SW integration
  - CPS platforms
  - Comp. platforms

- **CPS w/ innovative component project**
  - Solution using specific SW & HW components
  - USER (Innovative device project)
  - CPS specifications
  - HW
  - HW/SW integration
  - Comp. platforms

- **SW prototype demonstrator**
- **Integrated system prototype demonstrator**
- **System architecture virtual prototype demonstrator**

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The 8 EuroCPS platforms

Software

Avionics Platform
Processing board & real time SW solutions provided by Thales

Integrated and Open Development Platform
Simulation methods and tools for development provided by AVL

Connectivity Platform
Solution for digitalization application provided by Schneider

STM32 Microcontroller Platform
32-bit product range provided by STMicroelectronics

iNEMO Inertial Platform
A sensor platform provided by STMicroelectronics

Quark System on Chip Platform
Low-power platform provided by Intel

Power management Platform
Component platform provided by Infineon

Integration system

Silicon Process and Package Technology
Leading-edge silicon processes and package technologies provided by STMicroelectronics

Hardware
Cascade funding (70% of the budget): Support R&D work of 3rd parties
+ Platform funding: Support the technology access
+ Competence funding: Support the expertise, know-how access
EuroCPS industrial experiments

From Industrial experiments to Industrial products

Ideas → prototype → CPS-enabled product

EuroCPS: Help SME submitting Ideas, open calls, CPS specification and coaching

SME: R&D and product design

TRL 4 → 5 → 6 → 7 → 8 → 9

⇒ Project criteria: Excellence, Impact, Quality
⇒ Fast track experiments (18 months maximum)
EuroCPS open calls

Dates:

Apr’15  Oct’15  May’16
1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27  28  29  30  31  32  33  34  35  36

1st IE batch
2nd IE batch
3rd IE batch

Basic principal:

Open call

Open call opened → Selection → Evaluation reporting → PO review

Open call closed
Selection of IEs
Evaluation report
Start of IEs
EuroCPS 1st and 2nd call IEs

72 proposals, 24 granted IEs
Thank you

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