



COLLABORATION WORKSHOP
Advanced Computing and Cyber-Physical Systems 2016
Brussels, 14 June 2016
Hotel and Congress Centre Bedford, 135 Rue du Midi 1000 Brussels

The context:

The “Components and Systems” directorate of DG Connect – European Commission supports the digitisation of European industry through policy actions and through research and innovation funding. The reference markets are mainly industrial (manufacturing, automotive, aerospace, safety critical applications) including also the traditional “low-tech” industries like agriculture or construction. In this context, research and innovation projects in the “Computing” and “CPS” areas are meant to contribute to two main pillars of the “Leadership in Digital Industry” strategy, which are (1) digital platforms for industry and (2) innovation hubs for the widespread adoption of digital technologies.

The workshop:

This Collaboration workshop will bring together the "Cyber-Physical Systems", "Advanced Computing" and the “Mixed Criticality Systems” project clusters financed by the European Commission under FP7 ICT Call 10 (2013), H2020 ICT Call 1 (2014) and Call 4 (2015).

The workshop will be held on **Tuesday 14 June** from 9.00 to 17.30 **at the Bedford hotel in Brussels** back to back with the Smart Anything Everywhere 2016 Event. It is organized by HIPEAC (<http://www.hipeac.net/>) in collaboration with the European Commission.

The objectives of the workshop are:

Networking and synergies:

Identify synergies and possibilities for cooperation between projects/participants, either within the context of the project or for exploitation of results; allowing partners in different projects to meet each other and being aware of what is going on.

Assessment and best practices:

Better overall understanding, for both Commission staff and project partners, of what is happening in this area of research and innovation, with possibility for PO and project partners

to informally assess the global progress. Identification and exchange of **best practices**, especially in the areas **of standardization, exploitation, platform and ecosystem building**.

Future plans:

Projects will have the opportunity to explain the most promising areas of research and innovation they foresee. Commission staff will discuss the overall strategy of European Commission in digital technologies, the overall directions for the next workprogramme, and the forthcoming funding opportunities including other instruments for supporting innovation e.g. in the context of the "innovation radar". The concepts of digital platform and ecosystem building will be explained in detail.

The workshop will be held back-to-back with the Smart Anything Everywhere 2016 Event (SAE 2016) that will explore the progress achieved by the SAE initiative so far and the impact participation has had on SMEs. The concept of the initiative to facilitate access to SMEs and midcaps to latest technologies in the areas of systems and components and first results will be presented together with best practices and lessons learnt. The future of the initiative will be discussed and the corresponding forthcoming call ICT-4-2017 "Smart Anything Everywhere Initiative" will be presented.

Draft agenda:

08:30 – 09:00 Registration and welcome coffee

EC Introduction

09:00 – 09:15 Introduction, aim of the workshop (European Commission)

Projects Pitches (1'30" highlight per project)

Next gen servers

09:15 – 09:25 EUROSERVER, M2DC, UNISERVER, OPERA, DREDBOX

09:25 – 09:30 Q&As

Exploiting Synergies from advanced computing and CPS

09:30 – 09:40 Heterogeneous computing: ADEPT, REPARA, SAVE, NANOSTREAMS

09:40 – 09:50 Realtime / Reliability: P-SOCRATES, HARPA, CLERECO, EXCESS

09:50 – 10:00 Cloud / HPC: DREAMCLOUD, FIPS, POLCA

10:00 – 10:10 New Cross-layer programming: TANGO, ARGO, PHANTOM

10:10 – 10:20 Q&As

Systems of systems

10:20 – 10:25 AMADEOS, DYMASOS, LOCAL4GLOBAL

10:25 – 10:30 Q&As

10:30 – 11:00 *Coffee and networking*

Modelling, toolchains and methods for smart CPS

11:00 – 11:15 COSSIM, U-TEST, SAFURE, IMMORTAL,
UNCOVERCPS, AXIOM, TAPPS, INTOCPS
11:15 – 11:20 Q&As

Mixed-criticalities

11:20 – 11:25 DREAMS, PROXIMA, CONTREX
11:25 – 11:30 Q&As

Towards platform and ecosystems

11:30 – 11:45 EoT, CP-SETIS, HERCULES,
LPGPU2, SAFEPOWER, TULIPP
11:45 – 11:50 Q&As

Connection innovators across value chains

11:50 – 12:00 Main findings of SAE 2016 event
12:00 – 12:10 TETRACOM, EUROCCPS, CPSELABS
12:10 – 12:20 Q&As

Road mapping and community building

12:20 – 12:35 HIPEAC, CYPHERS, CPSOS,
ROAD2CPS, TAMS4CPS, CPS-SUMMIT
12:35 – 12:40 Q&As

12:40 – 13:30 *Lunch and networking*

13:30 – 13:40 IPR management: what can we do for your project? (Joerg Scherer,
IPR helpdesk <https://www.iprhelpdesk.eu/>)
13:40 – 13:50 The Innovation Radar: what can we do for you? (EC, Eoghan O'Neill)
13:50 – 13:55 Sneak preview ICT-5-2017: Customised and low-energy computing (EC)
13:55 – 14:10 Platforms and ecosystems building (EC, Max Lemke)

14:10 – 15:40 4 Breakout sessions to share best practices and lessons learnt on
1. Architectures (Leandro Indrusiak, DREAMCLOUD)
2. Programming (Dimitrios Nikolopoulos, NANOSTREAMS)
3. Modelling (Roberto Giorgi, AXIOM)
4. Ecosystems and Interoperability (Harald Ruess, CPSELABS)

Projects to cluster mixing the 3 calls (FP7 ICT-10- 2013, H2020 ICT-01-2014, H2020 ICT-04-2015)

1 coordinator per session responsible for running the session and producing a short session report.

15:40 – 16:00 *Coffee and networking*

16:00 – 16:15 Plenary conclusions of the 4 breakout sessions

Código de campo cambiado

Discussions on directions for the future work programme 2018-2020 and emerging topics

16:15 – 16:25	ARTEMIS-IA strategic research agenda	(Laila Gide, Thales)
16:25 – 16:30	Computing consultation workshop findings	(Marc Duranton, HIPEAC)
16:30 – 16:35	Vienna CPS week findings	(Haydn Thompson, Think)
16:35 – 16:50	Position statements	
16:50 – 17:15	Discussions	
17:15 – 17:20	Wrap-up (EC)	

Workshop report (HiPEAC):

The workshop report will be made of 4 main sections:

1. A short high level introduction presenting the achievements and impact of the cluster in a journalistic style for the layperson including a short presentation of the most promising exploitation plans (new products and services, development of existing products, spin-offs, growing SMEs ...).
2. An aggregated presentation of the achievements of all the projects.
3. Main findings of the 4 breakout sessions on architectures, programming, modelling and ecosystems & interoperability.
4. Summary of the discussion on directions for the future WP18-20 and emerging topics.

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