



PLATFORMS
4CPS



Foundations of Cyber-Physical Systems

- a workshop organized by "Platforms4CPS"
www.platforms4cps.eu/

**Towards a longer term
effort on CPS foundations
- Summary from the World Café
discussions**



Co-arranged with CPSE-labs (www.cpse-labs.eu/) and
the ICES competence network (www.ices.kth.se)





Summary from the world café theme: how a longer-term discussion can be achieved





Towards a longer term effort on CPS foundations, Martin Törngren

Purpose: to elicit ideas and discuss how a longer-term discussion among experts to evolve our understanding of CPS foundations can be stimulated and maintained.

How would a community best be created?

Would there be enough momentum?

What would be suitable mechanisms?

Best previous practices?



How to establish the community?

The following suggestions were made:

- Aim internationally - Need to reach out to a wider community
- Go for co-located events
- Consider the Incose road-show type – consecutive workshop days in different geographical locations
 - 4 invited keynotes, each supported by a national chapter
 - Longer time slots for invited experts at workshops
- Two days would be suitable – keynote talks followed by a discussion day
- Ask **INCOSE** chapters if they can support a two-day workshop according to this scheme
 - **ARTEMIS-IA** local chapters could also be asked
- Another idea: Consider Dagstuhl inspired events – or directly Dagstuhl organized events (5 days)
 - Shonan is a corresponding type of event in Japan



Drawing inspiration from the CPS-VO in the US

Created by NSF (in beta release). Provisions: Repository; calendar; sponsors events

”Definitely place for a European CPS-VO”

Important considerations for establishing something in this direction:

- What are the pain points for the CPS community & where do we want to be?
 - Currently there is a lack of a coherent organization for this
- Stakeholders, ”whats in it for them”
- Purpose of forum; quick questions/responses
 - Consider something like the ”Stack overflow” community for CPS
- Clearly funding identity and Unique identify
- Clear scope and goals
 - ”Make CPS viable”
 - ”Communicate what CPS are and their implications”
- Publications/communications

The arena needs to be non-competitive, promote collaboration and sharing of experiences



A forum for a CPS community – in general and in particular for Foundations of CPS

What about LinkedIn as a forum?

- Rationale for no: Avoid commercials; keep control of data

The forum needs

- knowledgeable moderators for the discussion
- weekly updates

Who are the intended stakeholders?

- Industry to meet academia;
- cross-disciplinary
- Approval for joining

Writing position papers

Connecting to relevant Magazines – IEEE Spectrum; MIT Tech review



CPS-community – further suggestions

There are many EU-projects – and there is a potential to improve and build upon the momentum and contacts of projects beyond their life-time

There are also needs to provide an overview of projects

Special considerations will be required depending on what stakeholders are targetted, e.g. SMEs

LinkedIn groups set up for SME's – SME funding (EU)

There are many roadmaps – whom are they intended for and who follows-up on them?