FED4SAE

Accelerating EUROPEAN CPS Solutions to Market
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FED4SAE in a Nutshell

- SAE phase II; ICT-04-2017
- Launched: Sep 1st, 2017
- Duration: 3 years

- 10 Countries
- 14 Partners
- 5 Industrial Platforms
- 8 R&D Advanced Platforms
- 1 IM SME

- Budget: 7,644,785€
- EC contribution: 6,995,196€

- 3 open calls
- Cascade funding (FSTP)

75,3 % of the budget to support Third parties

Concept and Approach

- We offer a one-stop-shop to accelerate CPS development, Funded by the European Commission
- Our missions are

#1

Bring innovative Cyber-Physical System technologies to business from any sectors and any companies

#2

Link third parties to suppliers across value-chains and regions in order to create innovative CPS solutions

#3

Link third parties to investors across value-chains and regions in order to accelerate CPS solutions development and industrialization

#4

Reach the sustainability of the pan-European Digital Innovation Hub (DIH) network

Concept and Approach

We help accelerate European CPS solutions to Market

We Provide

- Access to leading-edge CPS platforms, Advanced Technologies, and Testbeds from Industrials and R&D centers

- Technical coaching from domain experts

- Innovation Management support

- Up to €60k in initial financial support, plus access to further VC funding

- Access to potential users and suppliers across value chains throughout Europe

The challenge is to combat the valley of death, when companies struggle to finalise their product development with no or low revenue generation and limited resources to reach the market

70%

FUNDING

To support R&D of EU SMEs and Mid-caps

18

MONTH MAX DURATION

Maximum duration for funded projects

3

OPEN CALLS

applications selected every six months

32

SELECTED

Proposals that we support in bringing CPS solutions to market

4

Outcomes

3 open calls
Nov'17 & May'18
Dec'18

165 registrations

32 granted AEs
from 13 countries

116 proposals
submitted from
26 countries

3 evaluation &
selection meetings

M18 review meeting – Brussels, Belgium

Outcomes more in depth
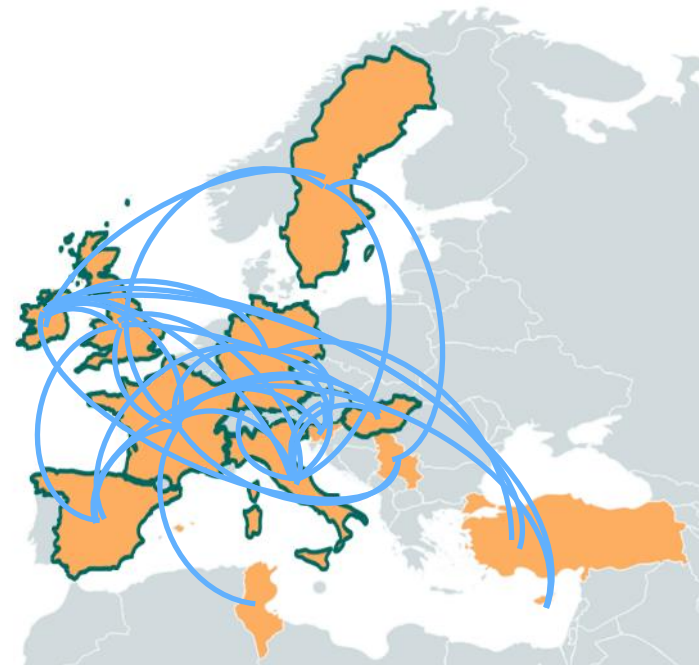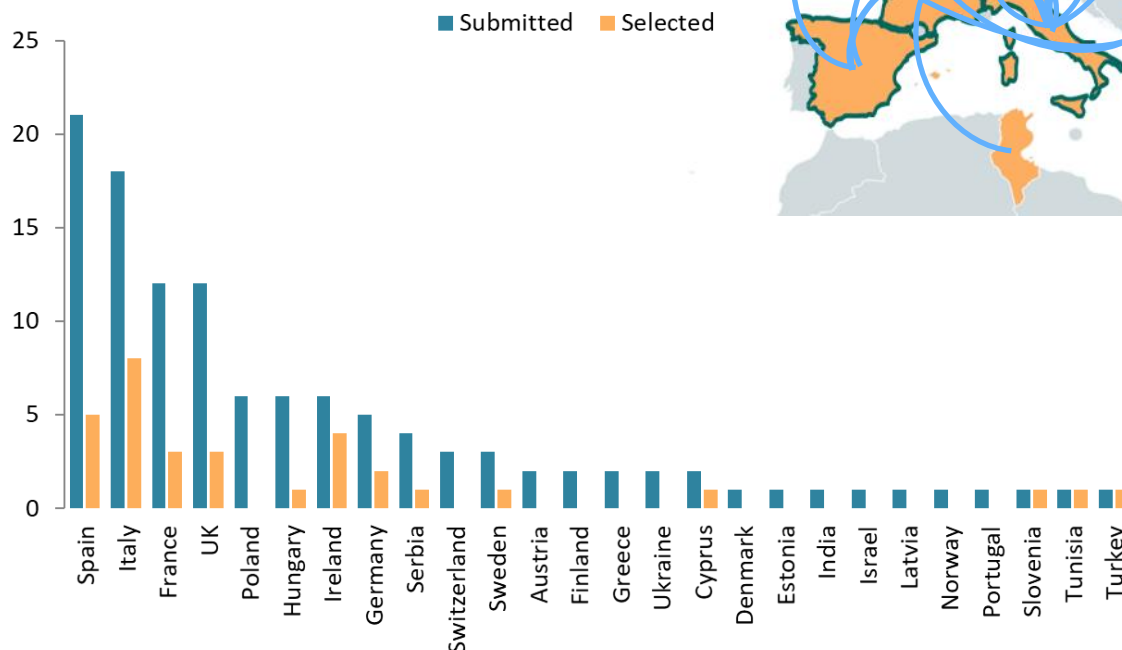
Granted Application Experiments

- 32 Experiment from 13 different countries

    - 10 EU member states
    - 3 associated countries

    - 84% from countries with FED4SAE partners
    - 16 % from other countries

Strong cross border collaborations
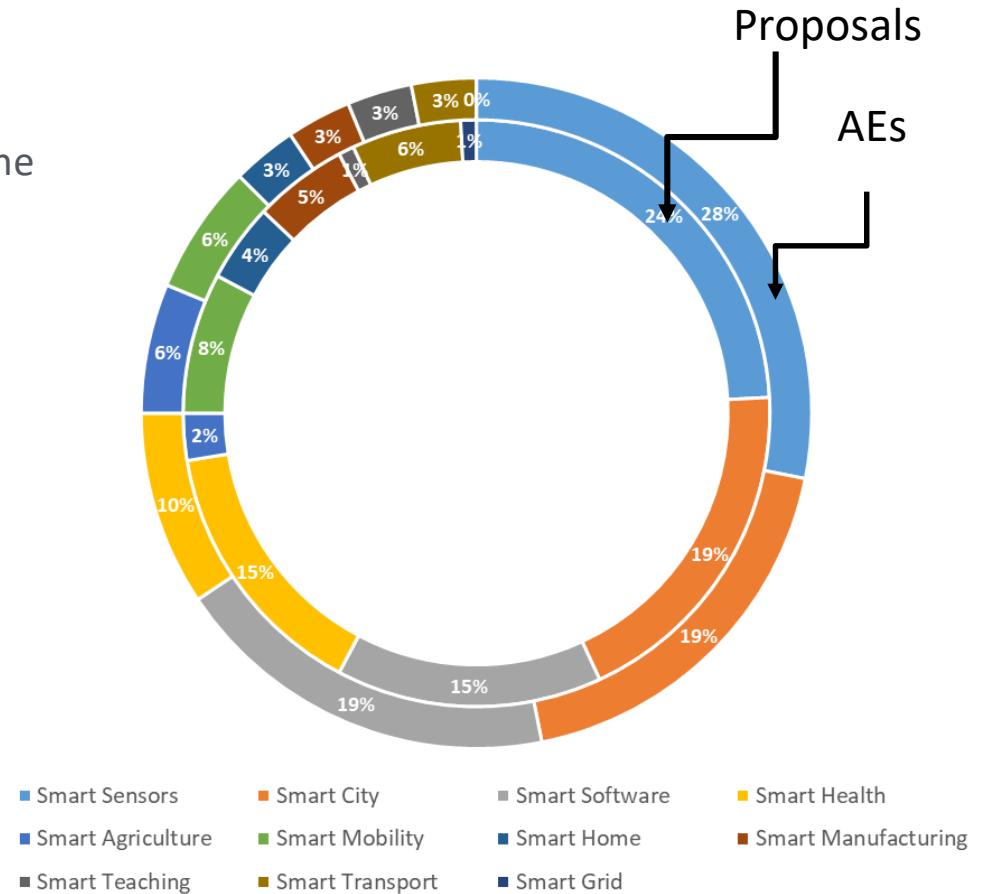
Outcomes more in depth

Targeted Application Domains

Wide range of domains and applications covered by the submitted proposals and the selected Experiments

- Smart Sensors
- Smart City
- Smart Software
- Smart Health
- Smart Agriculture
- Smart Mobility

Distribution for selected Experiments proportional to the submitted proposals

Proposals

AEs

Legend:
- Smart Sensors
- Smart City
- Smart Software
- Smart Health
- Smart Agriculture
- Smart Mobility
- Smart Home
- Smart Manufacturing
- Smart Teaching
- Smart Transport
- Smart Grid

Outer ring (Proposals): 28%, 19%, 15%, 10%, 8%, 6%, 4%, 5%, 3%, 6%, 1%
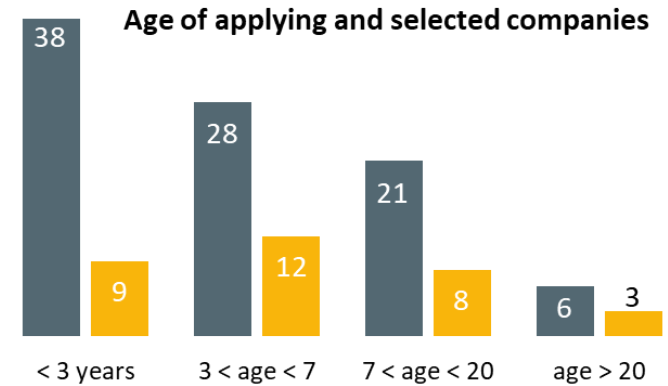Inner ring (AEs): 27%, 19%, 19%, 15%, 2%, 6%, 3%, 1%, 3%, 3%, 0%

Outcomes more in depth
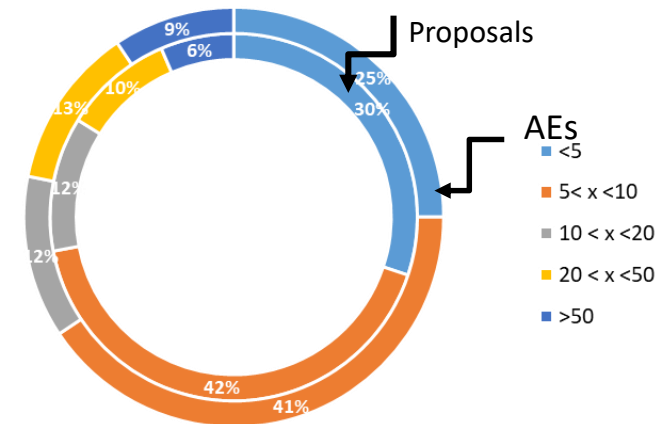
Applying Company Profile

- 94 companies submitted proposals
    - 56 startups
    - 35 SMEs
    - 2 MidCaps

- A majority of companies are younger – 70% are younger than 7 years and 30% younger than 3 years – and small – 72% have less then 10 employees

- Only few larger SMEs and two MidCaps applied

Awarded Company Profile

- 32 companies awarded

- Majority – 65% - are young, but the evaluation process successfully eliminated the very high risk, early stage projects

- Slight shift to older and larger companies in the selection to mitigate the risk of failure of experiments

Age of applying and selected companies

	< 3 years	3 < age < 7	7 < age < 20	age > 20
38	28	21	6
9	12	8	3

Headcount of applying and selected companies

Proposals
AEs

- <5
- 5< x <10
- 10 < x <20
- 20 < x <50
- >50

9% / 6% / 10% / 13% / 12% / 12% / 42% / 41% / 25% / 30%

Lessons learnt

Increasing number of applications through the calls
- Funding opportunity becomes better known
- Implemented improvements in the process are taking effect.

Proposals from many different European and also some Asian and African countries
- International dissemination strategy does work
- FED4SAE reaches outside of the local ecosystem of the partners
- Ratio of selected AEs from non-FED4SAE countries proportional, but slightly lower compared to ratio of submitted proposals: support mechanisms does not necessarily seem to depend on physical availability to produce "strong" proposals

Pan-European collaboration
- Wide "network" of collaborations through all countries instead of localized collaboration between "main" countries
- Vast majority of submitted and selected proposals represent at least a direct collaboration between two European countries and in all cases, a clear pan-European dimension is visible.
- Strategy to boost Pan-European collaboration through the Application Experiments does work
- FED4SAE connects SMEs to partners outside of their local ecosystems and broadens their potential network

Lessons learnt

Company Profile
- FED4SAE is attractive for smaller and younger companies, mostly start-ups with a significant number seeking for the first investor to kick start their activity and reach the status of "scale-ups".
- Business Case Evaluation is successful in eliminating the very high risk companies with a great chance of failure
- Companies have potential to generate a significant number of jobs and revenue if successful.

Engagement of Non-tech companies
- The implemented open call structure as well as the evaluation and selection process does make it difficult to engage and support non-tech companies directly via Application Experiments – however, partners engaged with non-tech companies to discuss potential proposals.
- Non-tech companies can be supported indirectly through the companies involved in selected experiments.

No correlation between technical and business case scoring
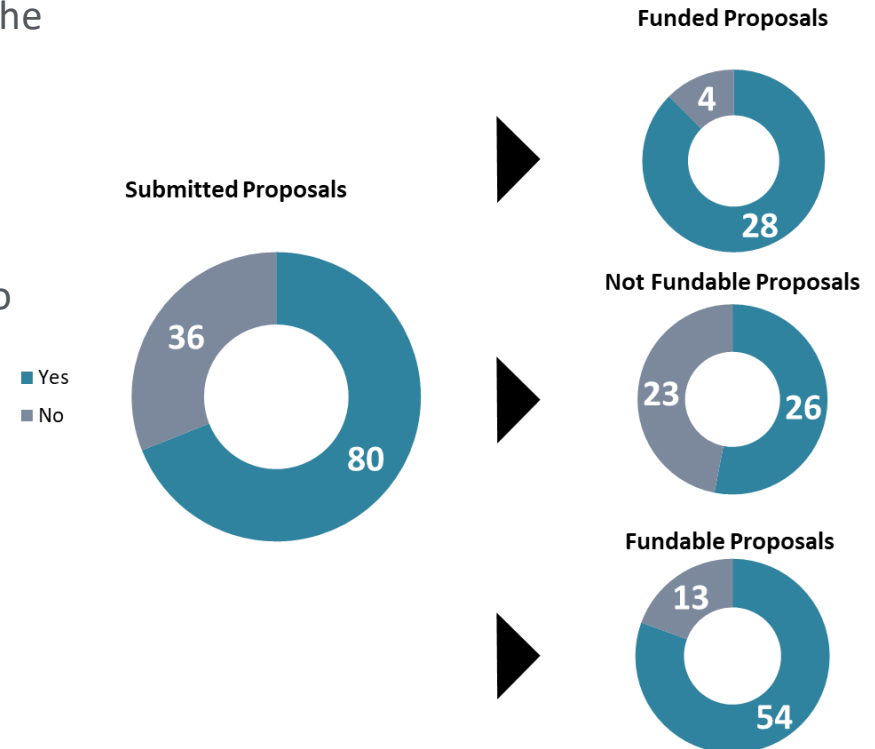
Technical Showstopper
- Feasibility Assessment together with pre-engagement is important as several applicants misjudge the ability of technologies, platforms or the necessary work to adept them. A more formalized of feasibility assessment in the evaluation process could be a way to mitigate this

Lessons learnt

Pre-Engagement & Feedback Reports

- Applying companies clearly benefitted from the implemented feedback mechanisms, the implemented strategy to provide feedback works.

- Vast majority of selected experiments benefitted from the provided support prior to submission

- The provided feedback to initially rejected applicants has value to them and helps to improve their proposition: 6 out of 17 were eventually selected on the second try.

- More required engagement could help avoid formal mistakes (no advanced technology or testbed targeted for example) – while weight against a too formal process that could discourage potential applicants

Submitted Proposals

36
80
- Yes
- No

Funded Proposals

4
28

Not Fundable Proposals

23
26

Fundable Proposals

13
54

Lessons learnt

AE monitoring process

- Importance of having a monitoring process to cover the AEs entire lifecycle (set-up, execution up to completion) : monitoring tool, periodic report template, CF payment process

- Capability to efficiently *create and maintain* status of the AEs and identify important aspects to escalate for the regular FED4SAE management meetings

- *COVID-19 pandemic $\Rightarrow$ to identify the AE at risk and quantify the risk + mitigation plan*

Identifier, name of the AE

Additional information, e.g., FED4SAE partners, timeline

Status, including Legal, Technical, Financial, exploitation

Lessons learnt

AE business management support

- Added value to the technical coaching

- Effective support and orientation on the granted companies' roadmap

- Capability to leverage collaboration between granted companies and between companies of different IAs

  o Companies on the same domain

  o Complementary activity

- To foster exchange between granted companies

Ideas for Collaboration

▸ Echange of best practices and lessons learnt

▸ Leveraging from contacts, community, collaborations

▸ Shared activities on already existing ecosystem

▸ Leveraging from business activities, innovation management support, companies matchmaking

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Thank you for your attention!