

SELFSUSTAINED CROSS-BORDER CUSTOMIZED CYBERPHYSICAL SYSTEM EXPERIMENTS FOR CAPACITY BUILDING AMONG EUROPEAN STAKEHOLDERS

SMART4ALL

SAE Event Valencia 13-14 December 2021

Session on
Technologies and DIH's in SAE/I4MS initiatives

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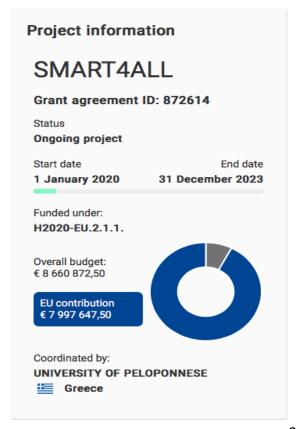


DT-ICT-01-2019
Smart Anything Everywhere Area 2

SMART4ALL ID Card



DT-ICT-01-2019: Smart Anything low energy computing Everywhere – Area 2: Customized powering CPS and the IoT



SMART⁴**ALL** Consortium

- 25 partners originated from South, Eastern & Central Europe
- The consortium is composed of universities, research institutes, investors, networking organizations, SMEs, Innovation Hubs and NGOs



Diversity in Partners Expertise	Geographic Diversity (15 countries)		
Universities: 10	Albania: 1	Montenegro: 1	
Research institutes (R&D): 3	North Macedonia: 2	Poland: 2	
Research institutes (BizDev): 1	Cyprus: 1	Portugal: 1	
SMEs (R&D): 6	Estonia: 1	Serbia: 1	
SMEs (BizDev): 2	Germany: 3	Slovenia: 1	
Innovation Hubs: 1	Greece: 5	Spain: 1	
NGOs: 1	Hungary: 1	The Netherlands: 1	
	Kosovo: 2		

SMART⁴ALL in a Nutshell

- Vision: To build capacity amongst European stakeholders by joining different cultures, different policies, different geographical areas and different application domains
- How: Through the development of selfsustained, cross-border experiments that transfer knowledge and technology between academia and industry
- Technological Areas: Customized low energy computing (CLEC) & IoT
- Application Areas: Digitized Environment, Digitized Agriculture, Digitized Anything and Digitized Transport

SMART4ALL PAE Types

PAE

Pathfinder Application Experiments

KTEs

Knowledge Transfer
Experiments

Funding: 8K Euros

Type: Internship

FTTEs

Focused Technology
Transfer Experiments

Funding: 80K Euros

Type: Project

CTTES

Cross-domain
Technology Transfer
Experiments

Funding: 80K Euros

Type: Project

- Internal: 21 FTTE (vertical) will be developed by SMART4ALL
- External: 67 KTEs/FTEs/CCTEs will be developed via open call funding

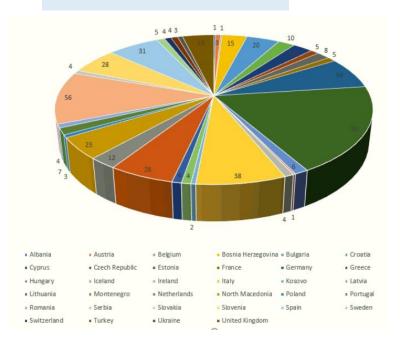
SMART⁴**ALL PAE Cut Off Dates**

PAE Type		Call 1	Call 2	Call 3
Knowledge Transfer Experiments (KTE)	Call Announcement	Apr 15th, 2020	Mar 2021	Mar 2022
	Submission Deadline:	Jul 15th, 2020	May 2021	May 2022
Focused Technology Transfer Experiments (FTTE)	Call Announcement	Jul 1st, 2020	Jun 2021	Jun 2022
	Submission Deadline:	Sep 30th, 2020	Aug 2021	Aug 202
Cross Domain Technology Transfer Experiments (CTTE)	Call Announcement	Dec 2020	Sep 2021	Sep 2022
	Submission Deadline:	Feb 2021	Nov 2021	Nov 2022

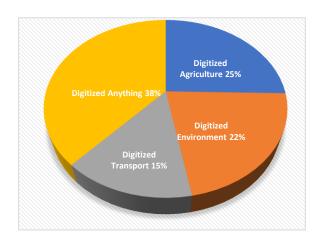
Open Call Statistics

Submissions per country & application domain

of countries: 34



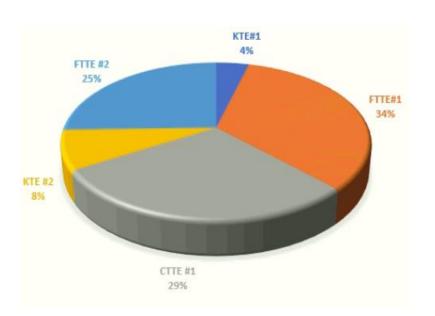
of submissions: 295



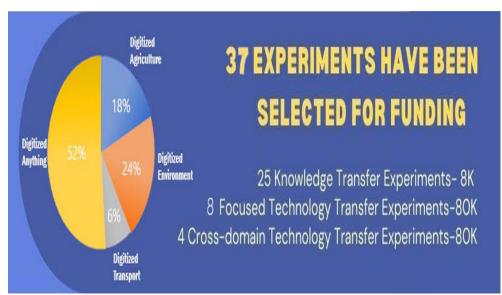
APPLICATION DOMAIN

Open Call Statistics

Allocation per call



PAEs funded



SMART⁴**ALL** An Extensive Network of DIHs

An extensive network of Digital Innovation Hubs for boosting technology and business development in South, Eastern and Central Europe

Ecosystem Services:

- Access to SMART4ALL network/ecosystem
- Identify funding opportunities
 - ✓ SMART4ALL Open Calls
 - ✓ Local and European funding frameworks
- Application oriented ethics coaching
- Interconnection with other networks/ecosystems

Business Services:

- Application oriented coaching for business development
- Partner search and business matchmaking
- Online training courses

Technological Services:

- Application oriented technological coaching
- Access to state-of-the-art infrastructures
 & services
- Technological matchmaking
- Online training courses

SMART⁴ALL Infrastructure

ESDA Lab Data Center

8 Rack Mounted High Performance Servers

Total CPUs: **164**

Total Memory: **1.216 GBytes**

Type 1 Hypervisors: VMWARE ESXi / Proxmox

Virtualization Technologies

Next Generation Firewalls (HGFW) - Hardware / High Availability Cluster

Double hardware firewalls

Storage Area Network (SAN) - Fibre

Channel (FC @ 16 Gbps) Infrastructure

Capacity: 20 TBytes

Network Attached Storage (NAS @

1 Gbps) Infrastructure

Capacity: 30 Tbytes



Specialized High Performance Computing Nodes

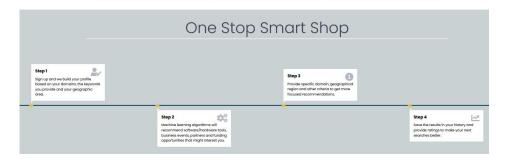
FPGA and GPU Cluster Provision



SMART4ALL Marketplace

https://marketplace.smart4all-project.eu





What is it?

A novel one-stop-smart-shop for experts and non-expert third parties seeking (open-source mainly) ICT technologies

MaaS offers:

- Diverse tools/services repository
- AI based multifaceted matchmaking
- Access to SMART4ALL Network
- Access to SMART4ALL Events
- Access to SMART4ALL Showcase

Concluding SMART4ALL aims to...

- Bring innovative Customized Low Energy Computing (CLEC) CPS and the IoT technologies to underrepresented business sectors
- Unlock South-Eastern parties' potentials through links to investors across value chains and regions in order to accelerate CLEC CPS/IoT solutions development and industrialization
- Develop/offer novel tools to boost the use of CLEC CPS and the IoT technologies Europewide
- To ensure post-project sustainability and growth of the SMART4ALL experiments & DIHs network

Thank you for your attention – Questions?

