



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

SMART4ALL

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

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Co-funded by the Horizon 2020 programme
of the European Union

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

www.smart4all-project.eu
Grant Agreement: 872614

SMART4ALL ID Card



Funded by the Horizon 2020
Framework Programme of the
European Union



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

Project information

SMART4ALL

Grant agreement ID: 872614

Status
Ongoing project


Start date End date
1 January 2020 **31 December 2023**

Funded under:
H2020-EU.2.1.1.

Overall budget:
€ 8 660 872,50

EU contribution
€ 7 997 647,50



Coordinated by:
UNIVERSITY OF PELOPONNESE
 **Greece**

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 self-sustained, 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 Objectives

- 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 Europe-wide
- To **ensure post-project sustainability and growth** of the SMART4ALL experiments & DIHs network
- To bring innovative CLEC CPS and the IoT technologies in the lives of **sensitive social groups**
- To support **Digital Skills & Jobs policy of European Commission**

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/FTTEs/CTTEs will be developed via open call funding

SMART4ALL PAE Cut Off Dates

PAE TYPE		Call 1	Call 2	Call 3
Knowledge Transfer Experiments (KTE)	Call Announcement:	Apr 15th, 2020	Mar 2021	Mar 15th, 2022
	Submission Deadline:	Sep 15th, 2020	Jun 15th, 2021	June 15th, 2022
Focused Technology Transfer Experiments (FTTE)	Call Announcement:	Jul 1st, 2020	Jun 15th, 2021	Jul 15th, 2022
	Submission Deadline:	Sep 30th, 2020	Sep 15th, 2021	Oct 17th, 2022
Cross Domain Technology Transfer Experiments (CTTE)	Call Announcement:	Dec 1st, 2020	Oct 15th, 2021	Oct 21th, 2022
	Submission Deadline:	Mar 15th, 2021	Jan 17th, 2022	Jan 17th, 2023

SMART4ALL 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 High Performance Computing Center

SMART4ALL offers to the members of its network/ecosystem, via a state-of-the-art **High Performance Computing Center (HPCC)**, the following bouquet of services :

- Software-as-a-Service (SaaS)
- Hardware-as-a-Service (HaaS)
- Scalable architecture to meet high workloads and provide 24/7 availability
- 24/7 support by technology experts
- High speed network interconnection via GRNET backbone
- Open source software employed from virtualization to application layer

SMART4ALL High Performance Computing Center (HPCC) is hosted and maintained by



Electrical & Computer
Engineering Department

**UNIVERSITY OF
PELOPONNESE**



**ESDA
LAB**

Embedded System
Design & Applications
Laboratory

SMART4ALL Tools – Marketplace-as-a-Service

<https://marketplace.smart4all-project.eu/>

Marketplace-as-a-Service (MaaS) provides an one-stop-smart-shop for:

- Applying Pathfinder Application Experiment (PAE) for funding
- Monitoring, supporting and advertising the PAEs funded via SMART4ALL open calls
- Coaching for identifying business development and funding opportunities

The screenshot displays the SMART4ALL Marketplace website. At the top, the navigation bar includes 'Marketplace', 'Repository', 'Matchmaking', 'Network', 'Events', 'Innovation Space', 'Contribute', and 'Login'. The main banner features a photograph of hands shaking over a desk with a smartphone and a notepad. The text on the banner reads 'Matchmaking Services' and 'Artificial Intelligence mobilized to accelerate your business'. Below the banner, three statistics are presented in dark blue boxes: '133 Artefacts and keep increasing...', '954 Network Members and keep joining...', and 'Funding opportunities to accelerate your business...'. The lower section, titled 'One Stop Smart Shop', illustrates a four-step process flow:

- Step 1:** Sign-up and we build your profile based on your domains, the keywords you provide and your geographic area.
- Step 2:** Machine learning algorithms will recommend software/hardware tools, business events, partners and funding opportunities that might interest you.
- Step 3:** Provide specific domain, geographical region and other criteria to get more focused recommendations.
- Step 4:** Save the results in your history and provide ratings to make your next searches better.

SMART4ALL Tools – Marketplace-as-a-Service

<https://marketplace.smart4all-project.eu/>

Tools/Services/Education material Repository

Marketplace Repository Matchmaking Network Events Innovation Space Contribute Login

Repository

Filters

Select Domain Select Category Select Type

enter keyword...

SEARCH RESET

Red Pitaya IoT platform

Credit size mobile IoT hardware & software platform that replaces many expensive laboratory measurements and control instruments. Open-source software examples, easy interfacing, well documented and easy to use. This is suitable for education.

Domain: Anything
Category: Tool
Type: N/A

Like Favourite

Croplio

Croplio is a satellite field management system that facilitates remote monitoring of agricultural land. The System provides real-time updates on current soil and crop conditions, determines vegetation levels, and provides weather forecasts.

Domain: Agriculture
Category: Tool
Type: N/A

Like Favourite

Red Pitaya - test and measurement instruments

This is about test and measurement instruments that can help engineers to develop electronic projects and how they are used. The artifact will cover topics like: What is an oscilloscope, how to use it, how to use a multimeter, etc.

Domain: Anything
Category: Education
Type: N/A

Like Favourite

Red Pitaya - circuits and electronic lectures

This artifact is about how to use STEMlab platform to teach circuits and electronics, by first explaining the theoretical background of a circuit and its elements and then doing practical work.

Domain: Anything
Category: Education
Type: N/A

Like Favourite

Red Pitaya - using STEMlab as SDR platform

This artifact will explain how STEMlab can be used for SDR applications that can be used to teach telecommunications or used in SDR related projects.

Domain: Anything
Category: Tool
Type: N/A

Like Favourite

Red Pitaya Jupyter Python programming

This artifact explains how to connect sensors and actuators to STEMlab devices and control them from a Jupyter Python environment and develop an automated home heating control.

Domain: Anything
Category: Tool
Type: N/A

Like Favourite

Matchmaking Services

Marketplace Repository Matchmaking Network Events Innovation Space Contribute H.chponag@gmail.com

Match Making

Filters

Select Domain Select Organization Type Select Country Select Keywords

enter keyword...

SEARCH RESET EXPORT SAVE

Organizations Artifacts

Dismantel

info@dismanet.com Spain EUS

The entire structure of the production chain at dismanet is aimed at offering its customers electronic production services (EMS) with an indistinct degree of professionalism and quality, as well as the firm commitment to comply with each and every one of the orders.

Domain: Agriculture
Type: SME
Size: 10-49
Keywords: IoT

Epoka University

EPOKA UNIVERSITY info@epoka.edu.al Albania EU13

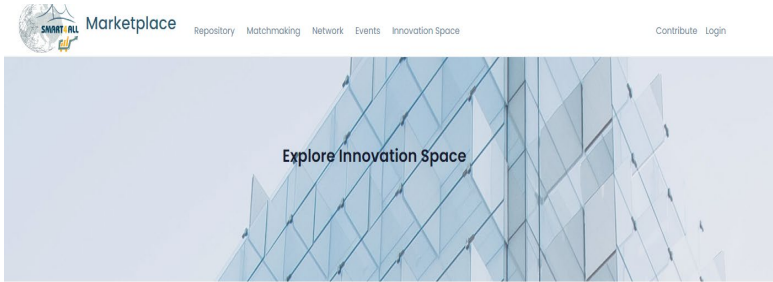
Epoka University is an international higher education institution located on a smart campus between the international connections and trading crossroads of Duresh Port and Rinas Airport in Tirana, the capital of Albania. The University commenced academic activities during the 2007-2008 academic year in compliance with the provisions of the Albanian higher education legislation.

Domain: Agriculture,Environment,Anything,Transport
Type: University
Size: >500
Keywords: Academic Research

SMART4ALL Tools – Marketplace-as-a-Service


<https://marketplace.smart4all-project.eu/>

Success Stories



Marketplace Repository Matchmaking Network Events Innovation Space Contribute Login

Explore Innovation Space




AgriCloud
Meet the SMART4ALL Champions!

An integrated platform for digitized agriculture based on real-time IoT context, monitoring and data analysis.

AgriCloud


The goal of this project was to improve an existing agriculture platform using advanced technologies in order to: 1) Reduce the energy consumption and dimension of the devices, 2) Increase the autonomous work of the devices, 3) Extend the connectivity, 4) Simplify the architecture.



FUTURE-MD
KTE: Capacity Building for Development of Innovative System for Prediction of Medical Device Performance

FUTURE-MD

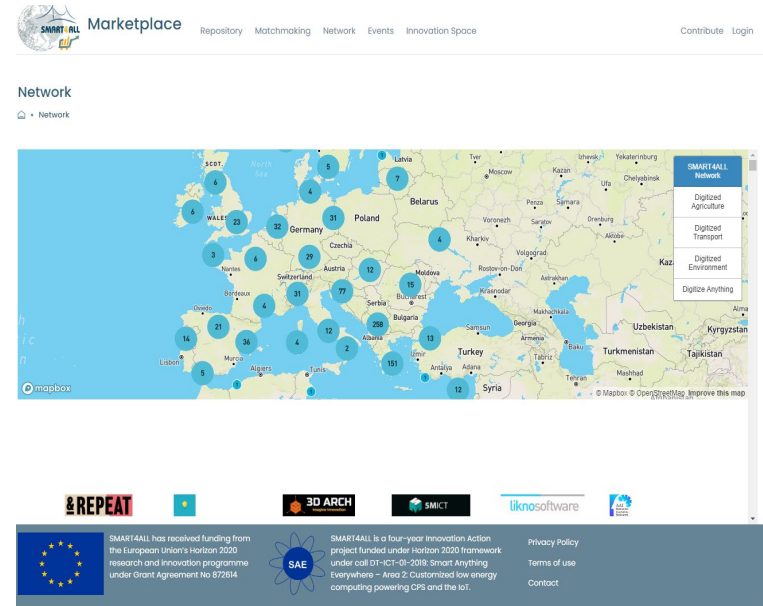
The project investigated the possibility of using artificial intelligence and IoT for the post-market surveillance of medical devices (FUTURE-MD). Such systems have the potential to dramatically improve safety and accuracy of medical devices that are already used in healthcare institutions.



MARINARA

MARINARA is an experiment based on knowledge transfer between complementary companies to develop a new, open-source, low-cost, and small-sized Unmanned Surface Vehicle (USV) with off-the-shelf water sensors for measuring near-surface water quality in real time for various environments.


Network Information



Marketplace Repository Matchmaking Network Events Innovation Space Contribute Login

Network

Network



SMART4ALL Networks
Digitized Agriculture
Digitized Transport
Digitized Environment
Digitize Anything

REPEAT, 3D ARCH, SMICT, liknosoftware, SAE

SMART4ALL has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 672814

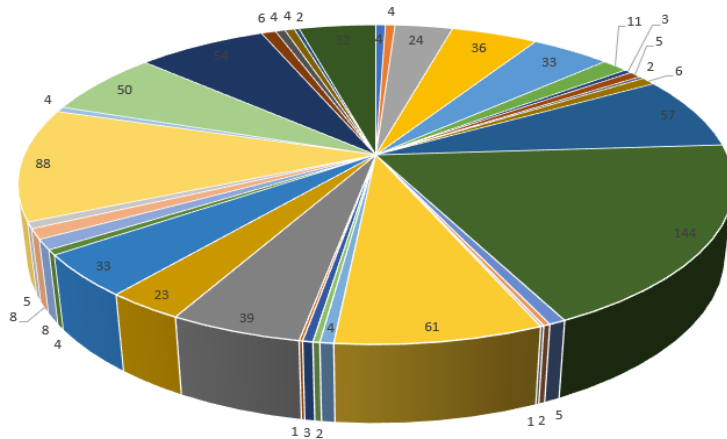
SMART4ALL is a four-year Innovation Action project funded under Horizon 2020 framework under call DT-ICT-01-2018: Smart Anything Everywhere – Area 2: Customized low energy computing powering CPS and the IoT.

Privacy Policy
Terms of use
Contact

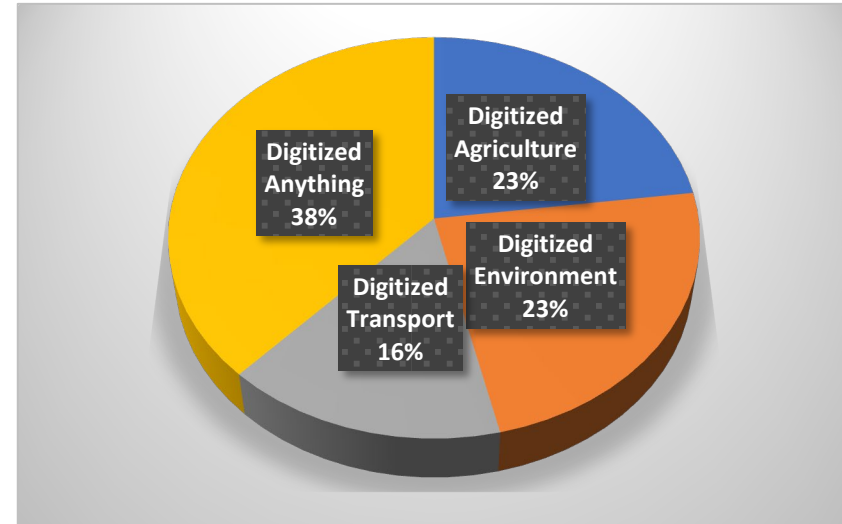
Open Call Statistics (8 open calls)

Applications per Country and Vertical

COUNTRIES (36 in total)



- | | | | | | |
|------------------|------------|------------------------|---------------|-------------------|------------------|
| ■ Albania | ■ Belgium | ■ Bosnia & Herzegovina | ■ Bulgaria | ■ Croatia | ■ Cyprus |
| ■ Czech Republic | ■ Estonia | ■ Finland | ■ France | ■ Germany | ■ Greece |
| ■ Hungary | ■ Ireland | ■ Israel | ■ Italy | ■ Kosovo | ■ Latvia |
| ■ Lithuania | ■ Malta | ■ Montenegro | ■ Netherlands | ■ North Macedonia | ■ Norway |
| ■ Poland | ■ Portugal | ■ Romania | ■ Serbia | ■ Slovakia | ■ Slovenia |
| ■ Spain | ■ Sweden | ■ Switzerland | ■ Turkey | ■ Ukraine | ■ United Kingdom |

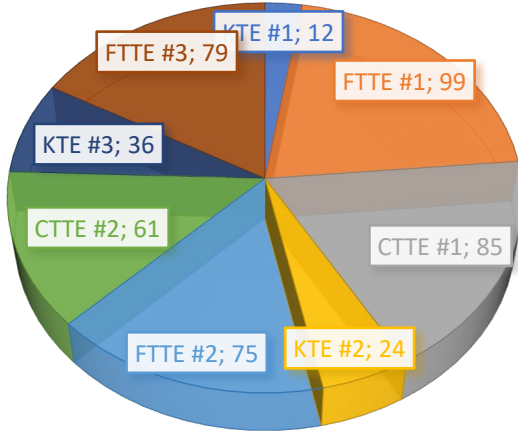


VERTICALS

Open Call Statistics (6 open calls)

Allocation per call

APPLICATIONS PER OPEN CALL



471 proposals

PAEs funded

- **59 PAEs** have been selected for funding with an overall amount of **1.624.000 €**
- ❑ 43 Knowledge Transfer Experiments – 8K €. 344K in total
- ❑ 8 Focused Technology Transfer Experiments – 80K €. 640K in total
- ❑ 8 Cross-domain Technology Transfer Experiments – 80K €. 640K in total

Join now SMART4ALL Network !

Join now SMART4ALL Network in South, Eastern and Central Europe by:

- Subscribing to SMART4ALL newsletter:
<https://smart4all-project.eu/joinus>
- Using SMART4ALL matchmaking services:
<https://marketplace.smart4all-project.eu/matchmaking>
- Applying to SMART4ALL Open Calls:
<https://smart4all-project.eu/opencalls-apply-now>
- Employing SMART4ALL marketplace:
<https://marketplace.smart4all-project.eu/>



SMART4ALL Social Media

Follow SMART4ALL on:



<https://www.linkedin.com/company/smart4all-h2020/>



https://twitter.com/Smart_4All

facebook

<https://www.facebook.com/SMART4ALL.Project>



<https://www.youtube.com/channel/UCwmSl9LCl2vNBO-3k75dvJA>

... and stay up to date for the latest SMART4ALL news, activities & funding opportunities !

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Thank you for your attention – Questions?

