European Initiative

Smart Anything Everywhere

Horizon 2020 Programme

Success Stories in the field of Smart Systems Integration

Smart4Europe2 has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 872111.

Goals of the SAE Initiative

to build and consolidate a **sustainable pan-European network** of **Digital Innovation Hubs** (DIHs)

to **support European companies (start-ups, SMEs, mid-caps, and public organisations)** in their **digital transformation**

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Evolution of the SAE Initiative

H2020
Creating a well-functioning ecosystem

PHASE 1

- Gateone, Smarter-SI
- EuroCPS, CPSELabs

H2020
Growing the ecosystem to its European dimension

PHASE 2

- SmartEEs
- diatomic
- FED4SAE
- TETRAMAX
- Smart4Europe

H2020
Widening the pan-European network of DIHs

PHASE 3

- BOWI
- SMART4ALL
- DIGIFED
- HUBCAP
- DIH4CPS
- SmartEEs2
- Smart4Europe2

2015 | 2016 | 2017 | 2018 | 2019 | 2020

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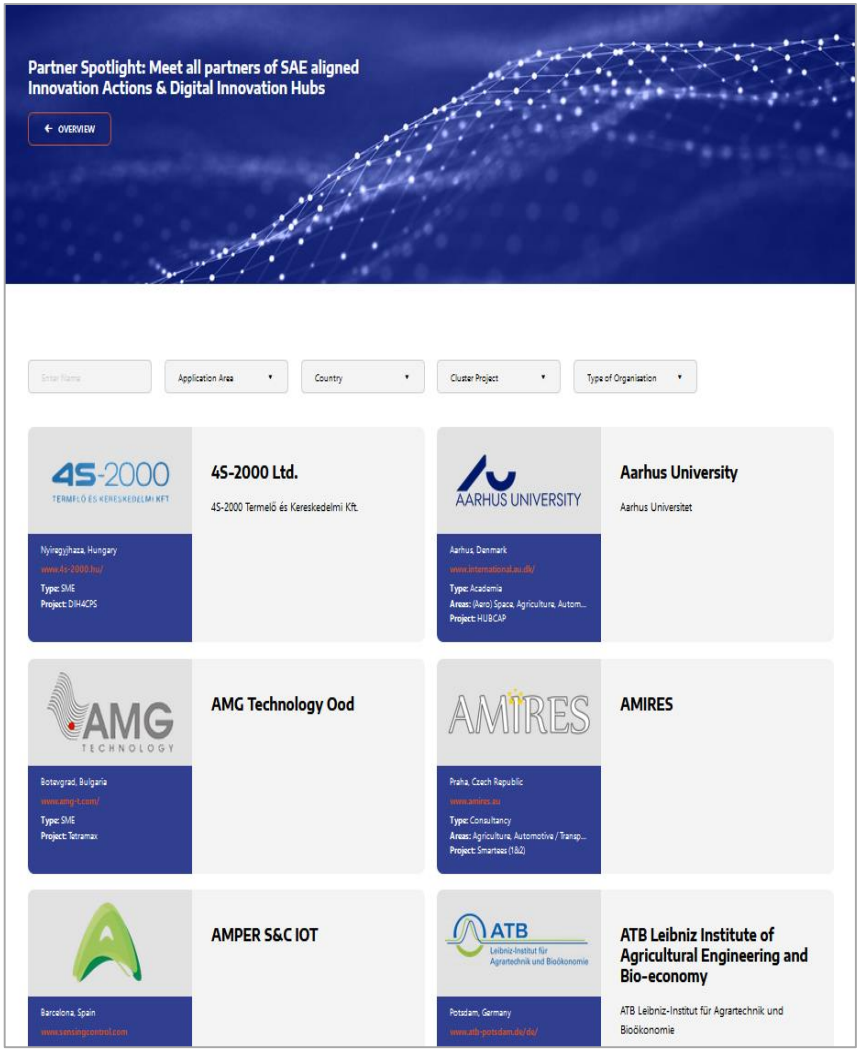
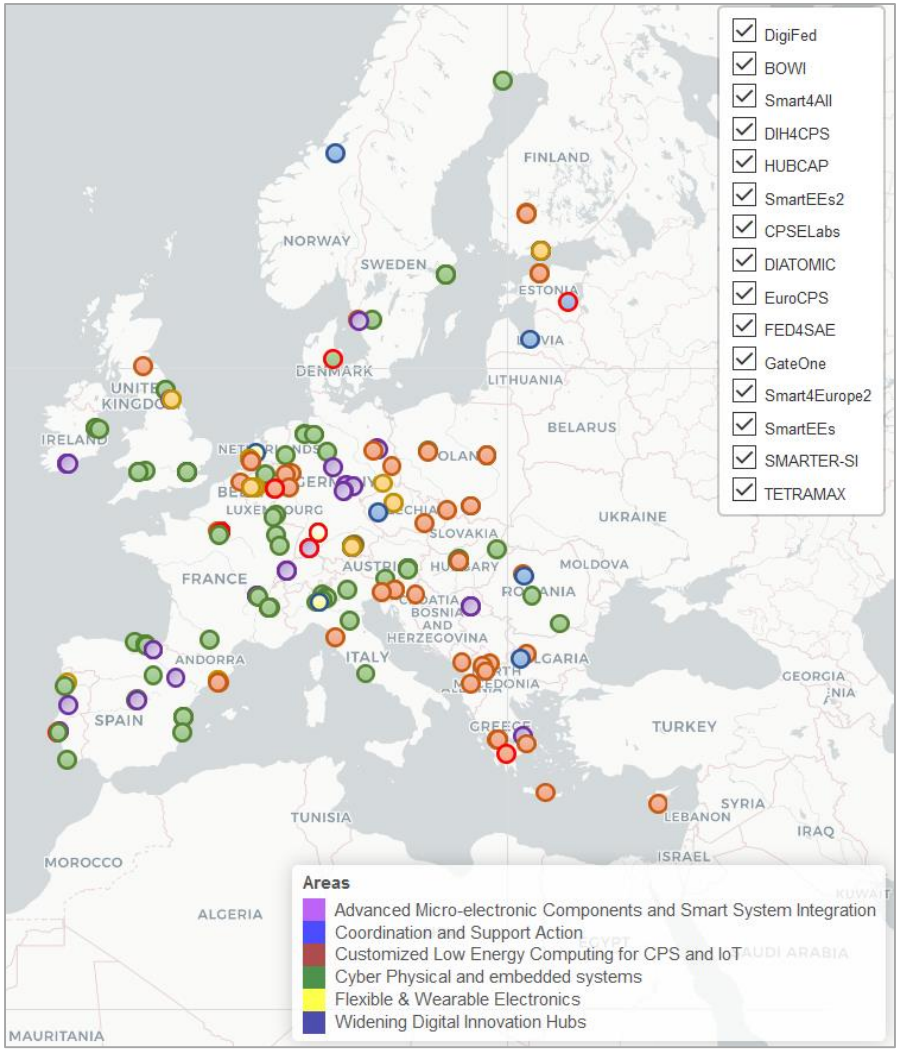
Network of 150 DIHs





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Funding Scheme

Financial Support to Third Parties / “Cascade Funding”

This funding scheme aims at **simplifying the administrative procedures**, creating a light, **SME-friendly application scheme** and is used by all Innovation Actions aligned to the SAE initiative.

It offers the following advantages for SMEs:

- Funds from the EU **passed on to the SMEs directly** by the Innovation Action
- SMEs are **not entering into a complex contract** with the European Commission but
- **Lean contract with a representative of the Innovation Action**

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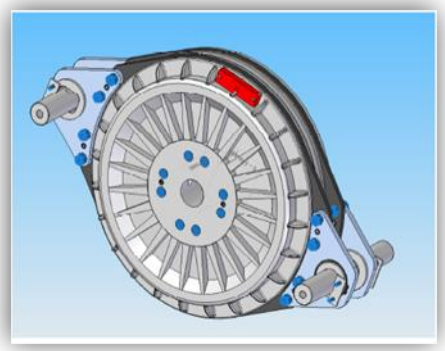
Success Story « Clutsen »

Wireless Sensor System communication kit for condition monitoring

Application Area: Industry
Innovation Action: Smarter-SI

Problem:
Clutch-brakes transfer motion from industrial motor flywheels.
From time time, **clutch brakes need to be exchanged** due to abrasion.
Unplanned, the **exchange is done too early without need** or
too late creating significat downtime costs.

Solution:
The task was **to develop a smart sensor system** that reliably predicts the next maintanance point of time. The break pads are monitored by **distance transducer** and **temperature sensor**. **Low energy electronics** enable data processing as well as **wireless transmission** while powered by a **kinetic energy harvester.**



Partners:
Goizper (SME, Spain) / IK4-IKERLAN (RTO, Spain) / Hahn-Schickard (RTO, Germany)

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Success Story « Alp'ride »

Avalanche Airbag System to call mountain rescue without GSM network

Application Area: Digitised Anything
Innovation Action: gateone

Problem:
Mountain rescuers often face the problem of not being able to locate the victims as there is **no GSM network and signal**.

Solution:
Integration of LETI patented **SECURELOC concept into an avalanche airbag** transmitting emergency **signals whenever the airbag is inflated**.
In network covered areas, **GPS coordinates are sent both on the GSM network** whenever it is available. In **white areas, the SECURELOC uses PMR radio frequencies** (Walkie Talkie) in a **point to point link**. It becomes then possible to send GPS coordinate to a distance of 10km without the need of a network (white area).

Partners:
Alpride (SME, Switzerland) / CEA LETI (RTO, France)

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Success Story « AgriNav »

Variable-rate Fertilizer Technology for precision agriculture

Application Area: Agriculture/ Environment
Innovation Action: Diatomic

Problem:
To obtain high yields, **over-fertilization** results in **algae overgrowth** in rivers and streams which leads to fish being killed. By applying the optimal amount of fertilizer, both the farmer and the environment benefit.

Solution:
Development of a **software** for the **application of variable quantities of fertilizer** to a crop **according to need**. **Fertilizer spreaders** are equipped with the developed software & hardware and then **fitted on an all terrain vehicle** (e.g. quad) to **move precisely along each crop row**.

Partners:
Vultus (SME, Sweden) / Agricultural University of Athens (RTO, Greece)

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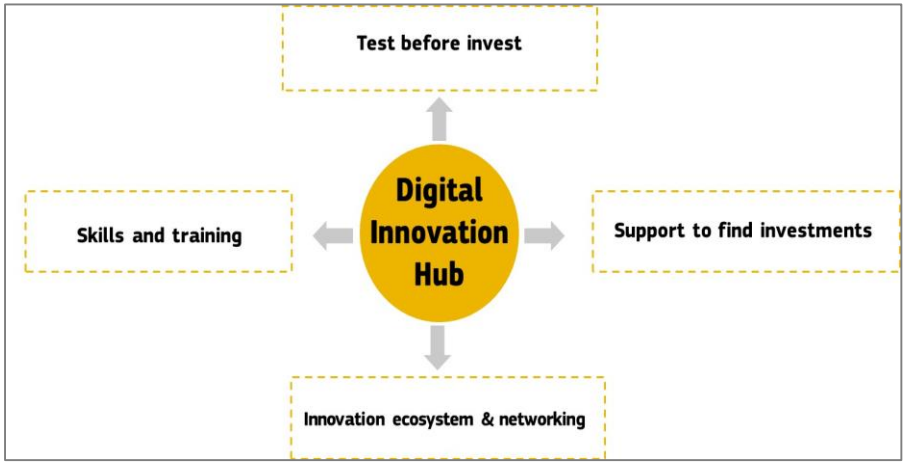
What‘s next



SAE will emerge into the concept of **European Digital Innovation Hubs (EDIH)** focusing on 4 thematic pillars

EDIHs:

- a **single organisation** or a **coordinated group** of organisations
- with **complementary expertise**,
- with a non-profit objective

to support companies – especially SMEs and mid-caps – and/or the public sector in their digital transformation.

EDIHs will function as **one-stop shops** that help companies dynamically respond to the digital challenges and become more competitive.

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Good to know…

- (Financial) **Support of Member States** is crucial for EU funding
- Selected EDIHs will base on **existing DIHs**, **clusters or organisations**
- **Call for EDIHs is expected to be launched this month** to enable selected EDIHs to start their operation towards the second quarter of 2022.

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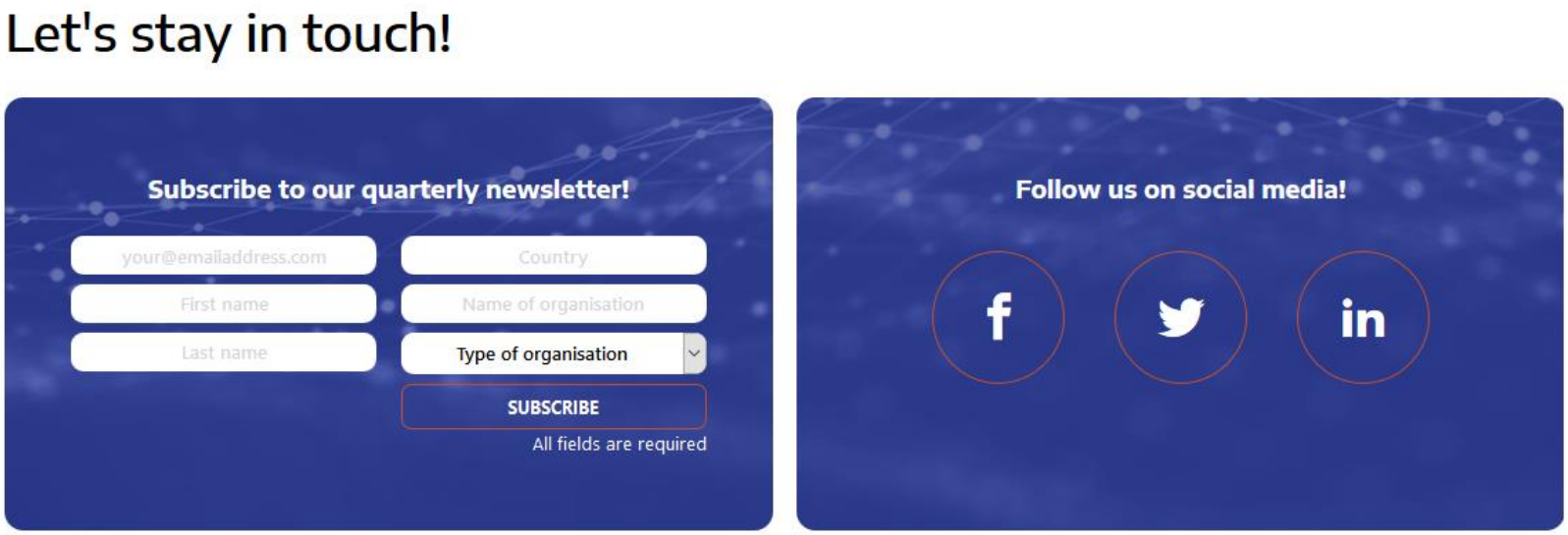
Let‘s stay in touch!

Join us on our Social Media Channels and subscribe to our quaterly newsletter!



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Thank you very much for your interest!

Julia C. Koch

Dissemination Manager CSA „Smart4Europe2“

Julia.Koch@Hahn-Schickard.de

+49 7721 943 192

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