July 2017

Research Success Story

PROJECTS THAT FIT YOUR COMPANY'S ROADMAP

The Horizon 2020 project "SCISSOR" (Security in Trusted SCADA and Smart-Grids) aims to keep such critical infrastructure as power stations and dams safe from hacking and environmental disruption. For the company SixSq Sàrl, based in Geneva, participation in the SCISSOR consortium is a great opportunity to develop and disseminate its own edge-computing products.

SixSq Sàrl, a software company in Geneva offering cloud-neutral products, is a veteran of 7 EU-funded projects, including 5 in Horizon 2020. With so much experience, SixSq now has a clear idea about what it expects to gain from joining a consortium: to advance its own R&D and ensure that SixSq products are right for the chosen market. "Once, we were open to joining any EU project," says Dr Charles Loomis, Chief Technical Officer at SixSq "Now, a project must be aligned with our roadmap so that it can make a concrete contribution to our company. We basically fund our R&D by participating in European projects."

Exchange of experience

SixSq has not kept this experience to itself. Through the company's interaction with Euresearch, other SMEs based in western Switzerland, a region with a concen-

tration of high-tech companies, can also benefit from what SixSq has learned in its projects. SixSq also shares its experience by participating in the CityZen initiative, a Swiss project employing smart-grid technology to improve consumers' use of public utilities, waste management and transportation. "We see participation in CityZen as a valuable opportunity to disseminate the positive results of our EU projects," says Dr Loomis.

"We basically fund our R&D by participating in European projects"

The Horizon 2020 SCISSOR project is perhaps SixSq's most ambitious EU-funded project to date. The consortium, composed of 9 members, aims to develop a new generation system for monitoring and controlling critical infrastructure.

SixSq's contribution includes a private cloud solution called "NuvlaBox", a smart cloud-in-a-box appliance. "Before internet, the systems controlling critical infrastructure stood alone and so were not designed to cope with the security issues posed by interconnected technology," Dr Loomis explains. "SCISSOR's goal is to enhance protection while improving reliability and efficiency."

Successful deployment

Successful deployment is underway in an electrical substation on the tiny island of Favignana, 7 km west of Sicily. "Isolated, hot, with salty sea air and clouds of dust – it is the perfect place to test real-world deployment of our technology," says Dr Loomis. "The fact that it works on Favignana shows that it can work anywhere."

About SCISSOR

"SCISSOR's goal is to enhance protection while improving reliability and efficiency"

Dr Charles Loomis
Chief Technical Officer,
SixSq Sàrl

CONTENT SUMMARY

SCISSOR is a 3-year project to improve the security and flexibility of supervisory control and data acquisition (SCADA) systems employed in industrial control processes. The 9-member consortium is testing technology to fix serious weaknesses in current systems, employing a combination of innovative cloud technologies and remote on-site hardware/software for a faster, better adapted response to threats.

FACTS AND FIGURES

Project Name
SCISSOR – Security in Trusted SCADA and Smart-Grids

Research Area
Cybersecurity, Trustworthy ICT

Organisations
Assystem, France (Coordinator) and 8 partners

Start Date – End Date
01.01.2015 – 31.12.2017

Duration
3 years

Project Cost
€3.9 million

Project Funding
€3.9 million

Programme
Horizon 2020 Industrial Leadership: Leadership in Enabling and Industrial Technologies (LEIT) – Information and Communication Technologies (ICT)

More Information
https://scissor-project.com/

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