H2020: Research partners sought for the project ENTRUST, a new generation network security system.

Summary

A Turkish company in ICT sector located in Istanbul, is working on data processing, data security with various vertical applications. Acronymed as "Entrust" under the program call Addressing Advanced Cyber Security Threats and Threat Actors - DS-07-2017, the project is about targeting the issue of "Digital security in the presence of evolved threats, encrypted traffic, and possible insider attacks". The company is looking for partners under research cooperation.

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Expiration Date	21 April 2018
Reference	RDTR20170407001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/1a20ef35-56a2-4232-a0b0-43dbd6e64cce

Details

Description

Network security evolved from access lists to firewalls to intrusion detection systems (IDS).

The proposed technique shall first look into Data Sources such as Applications, Users and Network Equipment. Applications can generate event logs, application activity logs, emails and database activity. Users can generate transactions, act with certain behaviours, have user activity and have social activity. Network equipment can generate data such as those from security devices, other types of network activity, server and host logs, syslogs, configuration data and threat information.
Data emerging from such sources will then be stored & processed.

Here it is possible to envisage a hot-warm-cold data selection, large scale machine learning, distributed infrastructure and big data capabilities.
Next, analysis will be performed using predictive and decision modelling and transaction analysis.

Finally, a proposal shall be made for the incident management.
There is no common log format across the industry and proposal of a common log format may also be considered as an innovative aspect of this work.

Research cooperation partners are sought as such; as part of the research collaboration, the focus on research collaboration is to analyse the alarms, other events, logs, and data traffic that emerges from layers 2 through to 7 of the network based on OSI model, run big data analysis and machine learning methods on them the big data obtained. The storage, handling or the data is challenging.

Another challenge is that there is no existing standard for the logs generated across a variety of vendors whose equipments are used in today's data networks, making it a need for work for standardisation.

The official deadline for the call is 24.08.2017 and duration of the pproject is 156 weeks. Latest EOI can be made until 24.07.2017.

Advantages and Innovations

Existing security methods address certain aspect of security problem, resulting in the following disadvantages:

Threat assumed to be from outside, rather than inside; making the system ineffective against a Trojan horse or an infected user from inside.

SSL-encrypted malicious activity raises no direct alarm in IDS.
Also, known backdoors in leading non-EU manufacturers
Proposed solution provides:
-An evolved security system that can address 'evolved risks' currently undetectable by the IDS systems
 -Machine learning ideas incorporated
 -Kills threats from outside and inside
 -Detects extended list of network activities such as an abnormally high number of MX lookup local email addresses, or DDOS.
-A common log format for use in network equipment
-A European security system with zero backdoors
 -Higher security of systems and personal information
-Worldwide network security and information security markets nearing $10b and $100b in size, respectively
 -With 2-digit year-on-year growth
 -Governments, data centres, corporates, SMEs can be beneficiaries.

Keywords

Technology

01003009	Data Protection, Storage, Cryptography, Security
01003010	Databases, Database Management, Data Mining
01006005	Network Technology, Network Security

Market

01004002	Data communication components
02006004	Data processing, analysis and input services
02006005	Big data management

NACE

J.61.1	Wired telecommunications activities
J.61.2	Wireless telecommunications activities
J.62	Computer programming, consultancy and related activities

Partnering Opportunity

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

Contact Person
Pawel Zebrowski

Phone Number
+48 91 449 43 64

Email
pzebrowski@zut.edu.pl

Open for EOI :   Yes

Dissemination

Send to Sector Group
ICT Industry and Services

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established
2012

Turnover
<1M

Already Engaged in Trans-National Cooperation

No.

Client Country
Turkey

Partner Sought

Type and Role of Partner Sought

Type of Partner;

- A Vendor that have security products like firewall, intrusion detection system, intrusion prevention system or log analysis (security information and event management) SIEM system. The developments that are planned to take place within the research part of the project will eventually need to be implemented at a lower level programming language such as C or Python, where a vendor expertise and assistance with usecases will also be needed.

Role of Partner;

The developments that are planned to take place within the research part of the project will eventually need to be implemented at a lower level programming language such as C or Python, where a vendor expertise and assistance with usecases will also be needed.

Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250

Type of Partnership Considered

Research cooperation agreement

German research institute seeks industrial partners working on redox-flow battery to join its H2020 proposal

Summary

A German research institute is looking for industrial partners to take part in their consortium for a H2020 proposal through a research cooperation agreement in a project that aims at developing a redox-flow battery that can be regenerated (recharged) by a low temperature (<100°C) heat source. The sought partners should be companies working in the field of redox-flow batteries, ceramics, liquid-liquid exchange, membrane chemical processes and/or related fields.

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Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/34acd404-bcd9-4412-aea3-aaae5e999707

Details

Description

The research institute and its current partners are looking for industrial partners with different profiles and specialization to take part in the project that comes as response to the H2020 FETOPEN-01-2016-2017 topic. The cooperation between the consortium and the targeted partners will be based on a research cooperation agreement. The current consortium consists of the German research institute, an Italian research institute and an Italian SME.

The project aims at developing a prototype of a redox-flow battery that can be recharged by using a low temperature heat source (<100°C). The two feed solutions used by the battery have the same composition but different concentration. The cell produces current by exploiting the two feed solutions; at the end of the discharge, the difference of concentration between the two solutions vanishes. The recharge is performed by distillation, which restores the concentration difference.

The electrochemical device is unconventional, the further development of scheme is part of the project. It is a concentration cell, with analogies to a redox-flow battery. The electrodes will be carbon cloths, possibly platinized. The whole device requires, in particular, a diaphragm made of perm-selective material, which will be a solid-state ion conductor, e.g. a ceramic material of the class of NASICON. Another device that will be integrated in the system is based on a technology bearing analogies with the liquid-liquid exchange.

The deadline for the proposal submission is the 27th of September 2017.
The deadline for the Expression of interest is the 31st of August 2017.

Keywords

Technology

02007003	Ceramic Materials and Powders
04001003	Storage of electricity, batteries
04002005	Generators, electric engines and power converters
04007003	Process optimisation, waste heat utilisation
05004002	Extraction

Market

06003001	Solar/thermal energy
06003005	Geothermal energy
06006003	Heat recovery
06008	Energy Storage

NACE

M.72.1.1	Research and experimental development on biotechnology

Network Contact

Issuing Partner
ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

Contact Person
Pawel Zebrowski

Phone Number
+48 91 449 43 64

Email
pzebrowski@zut.edu.pl

Open for EOI :   Yes

Dissemination

Send to Sector Group
Intelligent Energy

Client

Type and Size of Organisation Behind the Profile

R&D Institution

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
German
Italian

Client Country

Germany

Partner Sought

Type and Role of Partner Sought

The research institute is looking for industrial partners with different profiles for a research cooperation agreement.

- Profile 1: SME/ Industry partner with an expertise in advanced/functional/technical ceramics to develop an ion-conducting diaphragm made of ceramics.

- Profile 2: SME/ Industry with expertise in redox-flow batteries to design and scale-up the electrochemical cell.

- Profile 3: SME/ Industry with expertise in engineering of solutions, databases of thermodynamic and electrochemical Properties to design the working fluids for the electrochemical cell, to optimize the solutions for distillation and to supervise the safety/ regulation issues.

- Profile 4: SME/ Industry with expertise in liquid- liquid extraction/ solvent extraction to develop a small mixer- settler to be associated to the prototype.

Type of Partnership Considered

Research cooperation agreement