

Research & Development Request

H2020-ICT-05-2017: Internet of Things (IoT) end users and experts in supercomputing, IoT software and programming sought

Summary

A Spanish SME specialised in ICT solutions is preparing a proposal for the ICT-05-2017 call (Customised and low energy computing) aimed to create secure intelligent services in the Internet of Things (IoT) capable of automatically optimizing their resources to be energy efficient. IT companies, universities and research centres are sought to perform tasks in supercomputing, IoT, programming, integrated drive electronics and low-power programming. IoT end users are also sought.

Creation Date	22 February 2017
Last Update	24 February 2017
Expiration Date	24 February 2018
Reference	RDES20170222001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/da22c024-335a-43ec-b56c-94beca59ed85

Details

Description

The project's mission is to aid software engineers in creating intelligent services in the Internet of Things (IoT) capable to automatically optimize their resources to be energy efficient and helping them to include in the solutions secure code.

The coordinator's vision in this research is to improve energy efficiency of computer systems by allowing the programming of self-optimizing software. This includes energy-awareness in the software and the involvement of the application in the resource allocation decision and in the scheduling. Their approach forms a stronger link between applications and the runtime system in form of an information flow used to steer the resources. This increases the self-awareness of software and is required for the research community to take the next step into energy efficient computing. Parameters of the executions like throughput, latency, energy consumption, temperature, reliability etc., can be monitored to exploit carefully the available resources. In this context, the concept of self-awareness will help to optimize the hardware resources in every situation. With this awareness, the system has a set point according to which it can be adapted to reach the globally most optimal setting. Resources can be allocated/deallocated to match the energy and performance goals.

To address the security aspect, the researchers must suppose that the solution will coexist with the risks involved in all these technological advances and the threats. So any industrial project will have to consider, in its own design, the risk associated with Industrial cybersecurity.

Programme framework conditions: Collaborative project, single stage evaluation.

Deadline for expressions of interest: 10/03/17

Call deadline: 25/04/17

Project duration: 3 years

The Spanish SME is looking for companies, universities and research centres with the suitable expertise for the following roles: Supercomputing, IoT software, IDE (Integrated Drive Electronics) creators, programming languages, experts on defensive programming, experts on low-power programming and IoT end users.

Keywords

Technology

01003006	Computer Software
01003025	Internet of Things
04007	Energy efficiency

Market

02007004	Program development tools/languages
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NACE

J.62.0.1	Computer programming activities
J.63.1.1	Data processing, hosting and related activities

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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Open for EOI : **Yes**

Dissemination

Send to Sector Group

ICT Industry and Services

Client

Type and Size of Organisation Behind the Profile

Industry SME 50-249

Year Established

1996

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
Spanish

Client Country

Spain

Partner Sought

Type and Role of Partner Sought

The coordinator is looking for industrial and research partners able to perform the following roles:

- Supercomputing experts.
- IoT (Internet of Things) software experts.
- IDE (Integrated Drive Electronics) creators
- Programming languages experts
- Experts on defensive programming
- Low-power programming experts
- IoT end users

Type and Size of Partner Sought

SME 11-50, University, R&D Institution, SME <10, >500 MNE, 251-500, SME 51-250, >500

Type of Partnership Considered

Research cooperation agreement

Research & Development Request

H2020: Partners sought for the delivery and testing of 'ICT e-learning & Training' in low and middle income countries

Summary

A UK SME providing ICT courses in community learning centres is planning a project to investigate, develop and implement an adaptable e-learning support system for integrating and managing learning objects for universities in the sub-Saharan region with the open source learning platform Moodle. Partners are sought for ICT-39-2016-2017 to apply the system in universities, provide training, manage and analyse feedback and test software modules designed to adapt and reconfigure the Moodle system.

Creation Date	09 February 2017
Last Update	10 February 2017
Expiration Date	10 February 2018
Reference	RDUK20170209001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/0d45e983-4142-4d4c-9446-794123f82229

Details

Description

A North West UK based SME providing personalised and flexible ICT courses for learners in community learning centres in collaboration with colleges and universities is looking to submit a proposal for the ICT-39-2016-2017 topic 'International partnership building in low and middle income countries'. The project focusses on innovative enhanced learning components for e-learning support with as an example learning content management system for universities in the sub-Saharan region. It investigates, develops and implements component-based software modules that would enhance learning and teaching for universities in the region.

The adaptable e-learning support system is designed and developed with a view to achieving the benefits of high-quality teaching and high-quality learning and training outcomes. It is a reliable, reusable, evolvable and maintainable learning support software system. The project will involve integrating and managing learning objects in the Moodle online content management system for enhanced learning and evaluation of learners; as well as testing innovative software tools to support the integration and incorporation of learning objects in the Moodle environment among other aspects.

The system addresses:

- The issue of 'learner congestion' in one location by enabling the delivery of courses simultaneously in different locations to more students and;
- The challenges of 'efficient evaluation of students on courses with high enrolments' by enabling teachers to post and evaluate courses assignments and exams online, thus efficiently

reaching students in different locations on a university campus.

Current participants in project:

- The UK based SME active in adaptable e-learning; specialist in bid writing and project adviser and linked to the College of Technology at University of Buea, Cameroon;
- The computer science department of a major North West UK based university; experts in course content development, accreditation, design as well as development of identified software modules and content to adapt existing Moodle learning content management environment;

The SME has a team of specialised staff in e-learning support systems and provides personalised tools and an innovative learning approach for organisations and individuals. It delivers learning support where and when needed. With its adaptable e-learning system, the company provides flexibility to learners, especially at community learning centres, colleges and remote regions. Currently, learners can develop specialised knowledge on various ICT subjects and achieve certification and accreditation for a wide range of courses. For this reason, the proposed system will accommodate ICT courses initially. However, it is flexible and adaptable to accommodate courses in others domains in the future.

To complement the consortium the UK SME is looking for the following:

- Partners to test the system (particularly, in other universities in the sub-Saharan region);
- Partners to test software modules and components designed for the adaptation and reconfiguration of the Moodle environment;
- Partners to provide human resources training on relevant content management system (e. g. Moodle);
- Trainers of teachers, lecturers and facilitators on the use and management of courses with the proposed system;
- Partners to manage and analyse feedback for the test-run and implementation of the proposed system (with a few of future developments);

Duration of this project is 18 months; the anticipated budget between EUR 1 and 2 million depending on the final consortium.

EOI Deadline: 17th March 2017

Call Deadline: 25th April 2017

Advantages and Innovations

The system will enable teachers in the target regions to teach and evaluate students and learners more effectively using 'customisable tools' of the automated online assessments and evaluation system; reduce the work-load of 'manual evaluation' of students (which typically are in their hundreds per course). It will provide more relevant resources for students and learners in the regions as well as easier access to learning and professional development. Further, the system allows for teaching, evaluating and assessing students in multiple locations simultaneously.

Keywords

Technology

- | | |
|-------|------------------------------------|
| 11002 | Education and Training |
| 11004 | Technology, Society and Employment |

Market

- | | |
|----------|----------------------------|
| 02006003 | Computer training services |
|----------|----------------------------|

02006009 Other computer services
09003005 Consulting services

NACE

J.62.0.2 Computer consultancy activities
J.63.1.1 Data processing, hosting and related activities
J.63.1.2 Web portals
P.85.4.2 Tertiary education
P.85.6.0 Educational support activities

Network Contact

Issuing Partner

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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

0

Already Engaged in Trans-National Cooperation

Yes

Experience Comments

This project will complement an article submitted for review for the "IST-Africa 2016 Conference" titled technology Enhanced Learning: E-Learning Platform Applying ADES-WiFlex tools and Internet roaming Broadband Services, in remote and rural regions" by Dr. G. Vegah of ADES, UK and Dr. M. Sone of University of Buea, College of Technology, Cameroon.

Languages Spoken

English
French

Client Country

United Kingdom

Partner Sought

Type and Role of Partner Sought

To complement the consortium the UK SME is looking for the following from either industry or academia:

- Partners to test the system (in other universities in the sub-Saharan region);
- Partners to provide human resources training on relevant content management system (e. g. Moodle);
- Training of teachers, lecturers and facilitator on the use and management of courses with the proposed system;
- Managing and analysing comments and feedback, of the test-run/implementation of the proposed system, for future development;
- Testing software modules/components designed for adapting / reconfigure the Moodle system for the College of Technology / University of Buea and the sub-Saharan region.

Type and Size of Partner Sought

SME 11-50, University, Inventor, R&D Institution, SME <10,>500 MNE, 251-500, SME 51-250, >500

Type of Partnership Considered

Research cooperation agreement

Research & Development Request

H2020: Partners sought by UK based SME for the delivery of a 'Personal Health Record System' in low and middle income countries

Summary

A UK SME providing ICT courses in community learning centres is planning a project to investigate, design and implement a secure network-based medical record system for Cameroon government hospitals and health centres by adapting the Open Medical Record System (OpenMRS). Partners are sought for ICT-39-2016-2017 to test the system in other countries, provide training on OpenMRS with 'plug-in modules', test software modules designed to adapt and reconfigure OpenMRS and manage and analyse feedback.

Creation Date 21 February 2017

Last Update 24 February 2017

Expiration Date 24 February 2018

Reference RDUK20170220001

Profile link <http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/3fbc81dc-61de-44ee-a891-e4468c3fad31>

Details

Description

A North West UK based SME providing personalised and flexible ICT courses for learners in community learning centres in collaboration with colleges and universities is looking to submit a proposal for the ICT-39-2016-2017 topic 'International partnership building in low and middle income countries'. The project focusses on the delivery of a 'Personal Health Record System' in the sub-Saharan region. It will investigate, design and implement a secure network-based medical record system by adapting the Open Medical Record System (OpenMRS) for Cameroon government hospitals, health centres and clinics and other healthcare providers in the region.

This would involve electronically managing and analysing patient records and sharing data with practitioners via clinical user friendly interfaces. The healthcare and management system would be accessible within districts and divisions of a region as well as across regions within the country. Issues to be investigated include:

- Local government confidentiality and access to patient records;
- Ability of the national health system to arrest epidemic outbreaks;
- Customisation, development and implementation of OpenMRS.

These will address secure patient records management and distribution for Cameroon in a LAN / WAN environment. The pilot system would be in Cameroon. One of the partners of the project would be in charge of the evaluation of the pilot.

The open source medical record system would be adapted to input patient data both, for and about patients, as well as data from doctors. This by using a tablet and mobile phone interface with the aim to enable new and existing records to be shared and distributed securely and ethically.

The stakeholders of the system include:

- End-users such as government hospitals and health centres, Ministry of Health, Medical Order, communications companies and universities in the central African region such as in Cameroon (e. g. Buea, Bamenda and Nchange), Gabon, Democratic Republic of the Congo, Ghana and Nigeria;
- European partners.

The goals and objectives of this project are to identify patients at high-risk in various regions in case of an outbreak; and ensure they get the treatment they need quickly. Further, to develop algorithms to predict the number of days a patient will spend in hospital in a year.

Current participants in this project:

- UK based SME active in adaptable e-learning; specialist in bid writing and project adviser; linked to the University of Nchange and University of Buea, both in Cameroon;
- Computer science department of a major North West UK based university with expertise in design / development of identified software modules and content to adapt existing OpenMRS.

The SME has a team of specialised staff providing learning and training support; incl. ICT service provision in remote regions by partnering with dedicated broadband services companies in the UK and collaborating with VSAT (satellite internet) system providers for remote regions.

To complement the consortium the UK SME is looking for partners to:

- Test the system in the sub-Saharan region;
- Provide human resources and training on OpenMRS with 'plug-in modules' developed and adapted for patient record management in the sub-Saharan region;
- Train facilitators on the use and management of patient records with the proposed system;
- Manage and analyse feedback for the test-run and implementation of the proposed system (with a view of future developments);
- Test software modules and components designed for the adaptation and reconfiguration of the OpenMRS in the sub-Saharan region.

Project duration is 18 months (generating innovation modules - 6 months; test-run / assessment & evaluation of the system - 6 months; feedback analysis and updates - 6 months). The anticipated budget is between EUR 1 and 2 million depending on the final composition of the consortium.

EOI Deadline: 24th March 2017

Call Deadline: 25th April 2017

Keywords

Technology

11002

Education and Training

11004

Technology, Society and Employment

Market

02006003	Computer training services
02006009	Other computer services
09003005	Consulting services

NACE

J.62.0.2	Computer consultancy activities
J.63.1.1	Data processing, hosting and related activities
J.63.1.2	Web portals
P.85.4.2	Tertiary education
P.85.6.0	Educational support activities

Network Contact

Issuing Partner

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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

0

Already Engaged in Trans-National Cooperation

Yes

Experience Comments

Please see the document on 'H2020 Poverty reduction through improved health delivery system and follow-up' attached to this profile for further information. Recent research work in health informatics and online / e-learning systems, such as "The Adaptive Agents support learning plan (ADALP) which implements an "Intelligent software agents support for personalised learning" (University of Manchester, 2012); addresses "personalised" learning issues exemplified in the MOODLE LMS environment. Intelligent software agents of the system assume the role of a learning support companion, and provide professional and pedagogic advice to learners, trainees and students from monitoring learning activities and performance scores. Modules of this system are adaptable to suit the learning and training in health informatics environments of the proposed system. Other proprietary online / health informatics systems (such as the in-house National Health System (NHS) of the UK) are seen to have limitations which include high maintenance and update or modification cost, which are typically unaffordable for institutions in the sub-Saharan region. They also lack flexibility compared to adopting and adapting OpenMRS. Hence, the innovation aspects aforementioned will draw on research work accessible through resources of the UK partners with relevant acknowledgements of the intellectual property. The above limitation coupled with the demand for effective patient record management in the sub-Saharan region and the challenges of diagnosing, evaluating and treating patients in epidemic outbreak situations can be addressed with an adaptable online patient record management system.

Languages Spoken

English
French

Client Country

United Kingdom

Partner Sought

Type of Partnership Considered

Research cooperation agreement

Research & Development Request

Partner search for Horizon 2020: ICT-14-2016-2017 - Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation.

Summary

A Greek SME is developing a proposal under ICT-14-2016-2017, and is looking for a coordinator under a research agreement. An Italian SME and a French research center are already members of the consortium and they are specializing in data collection, management, integration and fusion. The project aims to facilitate the data sharing between data "owners" (e.g. data warehouses) and entrepreneurs. An experimentation incubator will be developed to link data providers with entrepreneurs.

Creation Date	06 February 2017
Last Update	08 February 2017
Expiration Date	08 February 2018
Reference	RDGR20170206001
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/459eae3-7d7c-4082-b985-ae77661df57c

Details

Description

Europe lacks a systematic cross sectoral transfer of knowledge and technology. This lack is due to underdeveloped data sharing systems. The project aims to overpass the barriers of cross-sectorial, cross-lingual and cross boarder data sharing as well as barriers of data integration (e.g. standards and formats, low rates of publishing data assets, difference of appearance in textual data).

The main idea is to develop a data experimentation incubator that will stimulate, encourage and accelerate start-ups, SMEs and entrepreneurs to work with big data which could lead to the development of innovative products and services, advance existing business models and improve profit margins.

The project is called "wIRED: IncubatoR of Experimental Data sharing" and it's idea is based on the comparative advantages that big data could provide and add value to SMEs and especially to SMEs focused on innovation products and services. The project aims to develop a generic framework for cross-sectorial data sharing management. The main objective is to develop an experimental incubator that will facilitate data sharing among data "owners" (e.g. companies, organizations, public authorities) and data "users" (e.g. web entrepreneurs, SMEs, start-ups).

The consortium is offering technical support and requests a partner to act as the coordinator for the project, establishing a research cooperation agreement.

Per the presented idea, the profile of the potential partners should be either companies/ organizations/ associations which own big data, or organizations/ institutes/ associations which are involved in development incubators, accelerators.

The proposal falls under the topic: Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation ICT-14-2016-2017. The proposal will cover part b. "Data experimentation incubators" of the topic's scope.

The incubator (thus, the project) should run for a minimum of three years (36 months).

Important dates:

- deadline for Eols: 5 March 2017
- call deadline: 25 April 2017

Stage of Development

Proposal under development

Comments Regarding Stage of Development

The consortium is currently composed of three partners from three different countries. Therefore, this major eligibility condition has already been fulfilled.

IPR Status

Other

Keywords

Technology

01003008	Data Processing / Data Interchange, Middleware
01003009	Data Protection, Storage, Cryptography, Security
01003010	Databases, Database Management, Data Mining
01003018	User Interfaces, Usability
01003024	Cloud Technologies

Market

01004	Data Communications
02006009	Other computer services
02007002	Database and file management
09003007	Other services (not elsewhere classified)

NACE

J.62.0	Computer programming, consultancy and related activities
J.63.1.1	Data processing, hosting and related activities

Network Contact

Issuing Partner

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Open for EOI : **Yes**

Dissemination

Send to Sector Group

ICT Industry and Services

Client

Type and Size of Organisation Behind the Profile

Industry SME 11-49

Year Established

2015

Already Engaged in Trans-National Cooperation

No.

Experience Comments

The SME already has been awarded with an EU Marie Curie, grant for hiring a PhD holder, expert in data fusion and behavioral analytics to conduct a project on sustainable mobility.

Client Country

Greece

Partner Sought

Type and Role of Partner Sought

The potential coordinator could be either:

- National/international company or organization willing to share its data in order to provide the SMEs with the opportunity of developing innovative products or services that will promote the sector by tackling specific problems or identifying lacks in the market.

Or,

- Organization (e.g. chamber of commerce, university, public authority, company) or association of business development experts or existing incubator that is willing to assist in the development of the data.

Type and Size of Partner Sought

University, R&D Institution, 251-500, SME 51-250, >500

Type of Partnership Considered

Research cooperation agreement

Research & Development Request

H2020 - SME Instrument- Phase 1: looking for public authorities dealing with water/flooding control

Summary

A SME based in Italy has developed an advanced land monitoring system: through the installation of meteo stations and detectors, which reveal in real time the hydrometric regime of the watercourse under investigation, the system elaborates data and gives the necessary information for water management and evaluation of risks to the user. They look for research collaborations for a H2020 SME Inst "Boosting the potential of small businesses in the areas of climate action, environment, resources".

Creation Date	02 February 2017
Last Update	23 February 2017
Expiration Date	23 February 2018
Reference	RDIT20170202002
Profile link	http://een.ec.europa.eu/tools/services/PRO/Profile/Detail/4535d681-70f4-4ace-b6f4-46161738e618

Details

Description

The SME (a cooperative company of engineers, social scientists and digital artisans) offers ICT services related to the rural and agrarian world and to the environmental monitoring. It has developed an advanced land monitoring system that includes the acquisition of meteorological, hydraulic and soil information for the purpose of study and alert. Through the installation of meteo stations and a series of detectors, which reveal in real time the hydrometric regime of the watercourse under investigation, this system elaborates data and gives to the user, on his own PC, Smartphone or Tablet, the necessary information for water management and evaluation of potential risk situations.

The system consists of:

- Meteo stations that measure and send data to the web platform where the processing software is located;
- Level sensors to know the hydrometric regime of the watercourse and to carry out water balance studies;
- Cameras for visual supervision of certain potentially dangerous situations.

Each user has the opportunity to access, through a personal account, in a reserved web area where he can check in real time the received data from detectors and he can be notified with a sms/e-mail if any predetermined critical conditions have been reached.

The company is planning to submit a SME instrument project proposal (Phase 1) and they want to start a collaboration with local authorities, associations and municipalities dealing with water management and flood risks. They are also interested in collaborations with Universities and research centers.

Call: SMEInst-11-2016-2017: Boosting the potential of small businesses in the areas of climate

action, environment, resource efficiency and raw materials

Call deadline: 03/05/2017

Expressions of Interest deadline: 15/04/2017

Advantages and Innovations

The advantages of the system are:

- Cost reduction compared to the design, realization and maintenance of structures of protection like new banks and walls;
- Optimization of the resources compared to the use of specific and outdated monitoring systems; a saving tied to the use of last generation, solid and low cost technologies;
- Qualitative and quantitative use of an integrated, meteorological and hydrometric monitoring system (for the purpose of managing the hydrological risk) guarantees the reduction of false alarms and the optimization of alerts thanks to a bigger spatial and temporal notice.
- Limited environmental impact thanks to the use of little sensors that require a little power source and a wireless communication and transmission network.

Stage of Development

Prototype available for demonstration

Keywords

Technology

01003014	Internet Technologies/Communication (Wireless, Bluetooth)
01004006	Environment Management Systems
09001009	Sensor Technology related to measurements

Market

01004008	Other data communications
09005	Agriculture, Forestry, Fishing, Animal Husbandry & Related Products

NACE

J.61.2.0	Wireless telecommunications activities
J.62.0.1	Computer programming activities
M.72.1.9	Other research and experimental development on natural sciences and engineering
M.74.9.0	Other professional, scientific and technical activities n.e.c.

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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Open for EOI : **Yes**

Dissemination**Send to Sector Group**

Environment

Client**Type and Size of Organisation Behind the Profile**

Industry SME <= 10

Year Established

0

Turnover

<1M

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English

Italian

Client Country

Italy

Partner Sought**Type and Role of Partner Sought**

A) Local authorities, associations and municipalities dealing with water management and flood risks. Their role would be to become stakeholders and potential end-users of the technology.

B) Universities and research centers that could become partners in the project.

Type of Partnership Considered

Research cooperation agreement