

## Business Request

### UK-based technology company seeking a hardware security module manufacturer

#### Summary

*A London-based company is developing an innovative technology to secure the cyber space using quantum based encryption keys. It has a range of applications including military defence, industrial internet of things and better connected transportation system for smart cities. The company has both software and hardware development capabilities, and they are seeking to sign a manufacturing agreement with a manufacturing partner capable of producing hardware security modules.*

Creation Date	28 February 2018
Last Update	02 March 2018
Expiration Date	03 March 2019
Reference	BRUK20180213002
Public Link	<a href="https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/7531b207-b6ae-4657-a3ff-d9ceb31edb61">https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/7531b207-b6ae-4657-a3ff-d9ceb31edb61</a>

#### Details

##### Description

The London-based technology company was established in 2015 with a strong commitment to safeguarding cyber security from being attacked by the increasingly skilled cyber invaders. Current internet encryption security does not allow random number generation at quantum level, and as a result, is predisposed to unintended consequences. For example, in the context of healthcare IT management, patients' and other confidential clinical data are at higher risk. The company has developed a proprietary encryption technology that produces quantum random number through a hardware security module. By using the randomness of quantum mechanics, their technology is able to demonstrate superior cyber security for a range of applications and industries, including military defence; connected autonomous vehicles; and medical applications to secure medical equipment relying on internet connections such as magnetic resonance imaging machines.

The company is currently looking for a manufacturing partner that can produce hardware security modules.

##### Advantages and Innovations

The company is a recipient of public grants for quantum based encryption for connected, autonomous vehicles and smartphones. They also worked with the UK Ministry of Defence on prototyping quantum random number generator module miniaturisation. The company realises the importance of research and development collaborations and have worked or is working with

many quantum research laboratories including Cambridge University, Oxford University and University of Singapore. In addition, the company also received initial interest from a multinational telecommunication company.

To the best of the company's knowledge, there is no encryption technology stronger than the power of quantum computing at present. The successful commercialisation and scale up of this technology will enable the company to further their research & development efforts in the field of quantum encryption.

## Technical Specification or Expertise Sought

The company would need an initial order of approximately 5,000 units of hardware security modules, with future potential order of up to 70,000 units.

## Stage of Development

Project already started

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## Keywords

### Market

03001001

Semiconductors

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## Network Contact

### Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

### Contact Person

Hubert Dyba

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**Open for EOI :**    **Yes**

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## Dissemination

### Send to Sector Group

ICT Industry and Services

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## Client

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### Type and Size of Organisation Behind the Profile

Industry SME <= 10

### Year Established

2015

### Turnover

<1M

### Already Engaged in Trans-National Cooperation

No.

### Languages Spoken

English

### Client Country

United Kingdom

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## Partner Sought

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### Type and Role of Partner Sought

The company is looking for a manufacturing partner capable of producing hardware security modules.

The company already has the design of the hardware security module, they are seeking to sign a manufacturing agreement with a partner that has a fully functional assembly line and capable of assisting the company's supply chain management.

### Type and Size of Partner Sought

>500 MNE, 251-500, SME 51-250, >500

### Type of Partnership Considered

Manufacturing agreement

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## Attachments

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