

Spanish company is searching for a strategic Alliance for the implementation and improvement of Distributed Acoustic Sensing technology in critical infrastructures, such as telecommunications or power submarine cables, for protection or defense applications

## Summary

Profile type	Company's country	POD reference
<b>Business request</b>	<b>Spain</b>	<b>BRES20251027010</b>
Profile status	Type of partnership	Targeted countries
<b>PUBLISHED</b>	<b>Commercial agreement</b>	• <b>Japan</b>
Contact Person	Term of validity	Last update
<a href="#"><u>Noriko MITA</u></a>	<b>27 Oct 2025</b> <b>27 Oct 2026</b>	<b>27 Oct 2025</b>

## General Information

### Short summary

Spanish SME with a research, development and innovation character, specialist manufacturer of distributed acoustic sensing (DAS) interrogators and development of software solutions based on DAS, is looking for a Japanese company to form a strategic alliance and thus be able to improve and implement the Hardware and Software of DAS technology in applications related to the protection and sensing of critical infrastructures in Japan, such as submarine telecommunications or energy cables.

### Full description

Spanish company with more than 20 years of experience in the development and manufacture of optoelectronic devices. Their staff is highly educated, with more than 20% PhDs and more than 60% university graduates. Regarding DAS technology, we have more than 10 years of experience developing and innovating interrogators, improving both the characteristics of the technology (sensitivity, spatial resolution, sampling rate, noise reduction, range improvement) and the product characteristics (weight, power consumption, product design, etc.). In addition, for 5 years there has been a software development department that works with the data provided by the DAS to give direct solutions to specific customers in various markets, such as the protection of critical infrastructures, especially

in submarine cables. The use of DAS for the protection of submarine cables has been becoming popular for less than a year, due to the increase number in broken submarine cables mainly in the European and Eastern area, mainly caused by illegal fishing or caused by the Russian shadow fleet. This has caused the global geopolitical situation to consider submarine cables as critical infrastructures and it is probable that each country will be responsible to protect the coastal areas of their submarine cables. That is the reason why we are looking for a strategic alliance with a Japanese company related to or interested in the monitoring of critical infrastructures, especially submarine cables (telecommunications or energy) to increase the degree of innovation and technology of distributed acoustic sensing, both in hardware and software, for protection and/or defense applications of these infrastructures.

#### Advantages and innovations

One of the main competitive advantages of our DAS technology is that it is patented and, in addition, our interrogator is considered one of the best interrogators on the market in terms of detecting events at low frequencies, such as earthquakes or tsunamis. Furthermore, this patented technology has considerable improvements over conventional DAS, i.e., it has a linear and quantitative response, maintains a constant signal-to-noise ratio throughout the fiber and there are no fading points. These characteristics are essential if complex acoustic events, such as maritime events, want to be analyzed in detail. Thanks to both the years of experience of the company itself and its parent company, we have knowledge not only in the interrogator and post-processing of the signal, but we also have more than 30 years of experience in fiber optic cables and their installation, which makes it easier for us to provide end customers with comprehensive solutions. This knowledge positions us in a unique place in the world within the distributed acoustic sensing market, since most competing companies are dedicated to the manufacture of interrogators, or the post-processing of the signal, but due to our knowledge, we are the only company in the world that has such extensive knowledge in both fiber optic cable installation, interrogator fabrication and signal post-processing, by our knowledge.

#### Technical specification or expertise sought

We are looking for a company already established in the submarine cable sector or related, which has relationships such as manufacturers of submarine cables, operators, owners of submarine cables, etc., and that is interested in the use and application of distributed acoustic sensing (DAS) technology for the protection of critical infrastructures such as submarine cables, energy transport or telecommunications, both in the field of civil protection and monitoring, as well as that of defense. The partner sought must have an interest in introducing DAS technology in Japan and be able to commercialize such technology. In addition, they must be able to understand the generic process of innovation and development, understanding the timelines and objectives of this area to be in sync with our philosophy and business model.

#### Stage of development

#### Sustainable Development goals

- **Goal 17: Partnerships to achieve the Goal**
- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 13: Climate Action**
- **Goal 14: Life Below Water**

#### IPR Status

## IPR Notes

## Partner Sought

### Expected role of the partner

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### Type of partnership

**Commercial agreement**

### Type and size of the partner

• **Big company**

## Dissemination

### Technology keywords

- **01002008 - Optical Networks and Systems**
- **01006009 - Signal Processing**
- **01002010 - Printed circuits and integrated circuits**
- **05003001 - Vibration and Acoustic engineering**

### Market keywords

- **03008004 - Other electronics related (including alarm systems)**
- **03006 - Fibre Optics**
- **06009 - Energy Distribution**
- **01006001 - Defence communications**

### Targeted countries

- **Japan**

### Sector groups involved