

## MINSAIT WILL PROVIDE PORTS WITH THE MOST ADVANCED TECHNOLOGY TO REDUCE THE IMPACT OF OIL SPILLS

- **The Indra company will integrate the Vessel Traffic Management System (VTMS) together with Onesait Oil & Gas Environment (formerly HEADS), an unparalleled technology in the world developed jointly with Repsol that already operates in various refineries to detect, in just a few minutes and without human intervention, small spills on the sea surface**
- **Minsait and Repsol's early detection system bridges the gap in the market between detection and response solutions, while offering detailed, real-time information to streamline spill management and containment**

**Madrid, April 30, 2020.-** Minsait, an Indra company, will enable the automatic detection of hydrocarbon spills in just a few minutes in port control centers, which are responsible for managing the information related to the incoming and outgoing vessels to guarantee the safety of maritime traffic.

The company has integrated the capabilities of Onesait Oil & Gas Environment (formerly HEADS), a technology developed jointly with Repsol Technology Lab for the early detection of oil spills on the sea surface (HEADS), with iMARE, the Vessel Traffic Management System (VTMS) by Indra. iMARE collects information from radars, cameras, AIS and other sensors to create a maritime image that identifies each vessel, providing consolidated information about their position, cargo and route so that operators can quickly make decisions to ensure navigation safety.

Thus, for the first time, Minsait will integrate the environmental monitoring function into maritime traffic systems, while increasing the capabilities of Onesait Oil & Gas Environment, which already operates in various Repsol facilities.

Onesait Oil & Gas Environment is the only system on the market that integrates different sensors (infrared camera and radars) 100% automatically. Thanks to the use of artificial intelligence algorithms, the system is capable of detecting amounts ranging from 10 to 20 liters in a very few minutes, providing detailed information in real time to streamline resource management, as well as spill monitoring and containment.

Furthermore, the iMARE system, which has been implemented in more than 70 ports all over the world, merges all the information provided by the automatic tracking equipment (AIS) carried by all ships of a certain tonnage provided with the information equipped with the radar, the digital distress and safety call system (DSC system) and weather and tide stations. Significant cost savings are facilitated, ensuring safety in maneuvers while also enabling the automation of repetitive tasks such as automatic alarm allocation or route creation.

The integration of iMARE and Onesait Oil & Gas Environment is also a clear example of cutting edge technology transfer in the security and defense sector to improve environmental sustainability for the civil sector.

Furthermore, Indra's subsidiary will extend Onesait Oil & Gas Environment to the deepwater market thanks to the project jointly being developed with Repsol Sinopec Brasil and the University of Rio de Janeiro to adapt this technology to the needs of mobile oil rigs.

### **Digitalization of maritime surveillance**

Onesait Oil & Gas Environment marks a milestone in the digital transformation of monitoring functions in maritime operations, since it is capable of triggering alarms quickly without the need for human intervention,

thus helping to eliminate errors. It also facilitates the storage and use of data through analysis tools to obtain valuable information in order to improve safety in operations, conduct audits, resolve conflicts and promote a culture of transparency.

This is a fully-automated system, available 24x7, that works in adverse weather conditions, which can also be configured according to the geometry of each site. The reduction in the response times provided by Onesait Oil & Gas Environment compared to other technologies that exist on the market is essential to increase safety in operations.

Another important benefit is the rationalization of costs. Early warning and automated operation mean that response times are minimized, as well as controlling and avoiding future operating costs.

Onesait Oil & Gas Environment, developed at the Repsol Technology Lab, benefits from Repsol's extensive knowledge in exploration and production in hydrocarbons and the marine environment. For its part, Minsait has contributed knowledge in image interpretation algorithms and experience in developing data processing in real time, as well as in the construction and use of radars and infra-red cameras and command and control centers.

Minsait has also obtained important recognition, such as the Awards of the Association for the Promotion of the Tarragona Port (Apport 2016), and the best technological project by the renowned specialized publication World Oil in the category "Health, Safety, Environment/Sustainable Development Offshore", in which companies specialized in the development and commercialization of offshore technology, such as Halliburton and GE Oil & Gas, competed.

### **About Minsait**

Minsait, an Indra company ([www.minsait.com](http://www.minsait.com)), is a leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America. Minsait possesses a high degree of specialization and knowledge of the sector, which it backs up with its high capability to integrate the core world with the digital world, its leadership in innovation and digital transformation, and its flexibility. In this way, it focuses its range of products and services on high-impact value propositions, based on end-to-end solutions, with a remarkable degree of segmentation. This enables it to achieve tangible impacts for its customers in every industry, with a transformational focus. Its capabilities and leadership are demonstrated in its product range, under the brand name Onesait, and its across-the-board range of services.

### **About Indra**

Indra ([www.indracompany.com](http://www.indracompany.com)) is one of the leading global technology and consulting companies and the technological partner for core business operations of its customers world-wide. It is a world-leader in providing proprietary solutions in specific segments in Transport and Defence markets, and a leading firm in Digital Transformation Consultancy and Information Technologies in Spain and Latin America through its affiliate Minsait. Its business model is based on a comprehensive range of proprietary products, with a high-value focus and with a high innovation component. In the 2019 financial year, Indra achieved revenue of €3,204 billion, with more than 49,000 employees, a local presence in 46 countries and business operations in over 140 countries.