



## Press Release

# INDRA DEMONSTRATES IN VIGO ITS OPTIONALLY MANNED VESSEL, A PIONEERING DEVELOPMENT THAT POSITIONS GALICIA AT THE VANGUARD OF THIS SECTOR IN EUROPE

- **Development of this vessel is part of the Civil UAVs initiative, the project with which the Regional Government of Galicia is leading the development in Europe of unmanned platforms for civilian applications. Its purpose, to improve public administration services for citizens in the fields of emergency management, search and rescue, maritime surveillance, territorial management or environmental control**
- **The vessel is piloted remotely and transmits data from radars and images from sensors in real time**
- **The initial phase of development has required the collaboration of the University of Vigo, the Telecommunication Technology Center of Galicia (Gradiant) and a dozen other local companies. This collaboration will expand to other Galician companies with projects that entail an increasing technological component**

**Vigo, September 19, 2017.-** Indra has carried out this morning an initial demonstration at the Rande inlet of Ría de Vigo of the capabilities of the prototype of an optionally manned vessel under development as part of the Civil UAVs Initiative, a project driven by the Regional Government of Galicia. The system has been designed to cover search and rescue missions; surveillance at ports, marine farms and installations; customs control; and environmental research, among other possibilities.

The demonstration counted with the presence of the Minister for Economy, Enterprise and Industry of the Regional Government of Galicia, Francisco Conde, and the Director of the Agency for Innovation of Galicia (Gain), Patricia Argerey, accompanied by the Senior Vice President of Indra, José Manuel Pérez-Pujazón.

The USV (Unmanned Surface Vehicle) prototype is a vessel with a 7.3-meter length, 2.6-meter beam, waterjet propulsion and maximum 35-knot speed. The system was operated remotely from an onshore control station that received data gathered by its sensors, while the P2006T MRI maritime surveillance aircraft supervised the mission from the air while simultaneously transmitting images to ground.

The boat, that can optionally carry a two-person crew, includes propulsion controlled by a line-of-sight radio connection and a system that enables the autonomous deployment of an underwater robot. Today's exercise successfully closes the first phase of development of the USV.

To carry out the tasks of this part of the project, Indra has promoted the creation of Seadrone, a specialized engineering company with headquarters in Vigo, Galicia.

In its role as trailblazer, the company has driven the outsourcing of works with a dozen local companies from the sector, including Marine Instruments, and has collaborated with the University of Vigo and the Telecommunication Technology Center of Galicia (Gradiant).

In subsequent stages of development, Indra will expand its collaboration to a greater number of Galician companies in fields of activity requiring a growing contribution of technology. Some of these areas include from the design and manufacture of surveillance payloads and small series of vessels made with different, high-quality materials, through to the development and supply of communication, propulsion, naval electronics and automation systems.



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The Indra USV is a state-of-the-art system adapted to the requirements of the Regional Governmental of Galicia and the particularities of the Galician maritime zone. The project will contribute toward positioning Galician shipbuilders and the auxiliary naval industry at the forefront of this new sector.

The great number of missions in which it may be used is its best guarantee for commercial success. The vessel is prepared to develop maritime search and rescue tasks; fight against fires at sea; surveillance and maintenance at ports, offshore facilities and marine wind farms; surveillance at customs, fisheries and environmental protection; oceanographic research; support in aquaculture activities; and protection of historical heritage, among others.

### **A multipurpose USV with the highest capabilities**

In the upcoming development phases, Indra will focus on the integration of the underwater vehicle (ROV), which will be connected to the USV by an umbilical cord for control and data reception. To carry out underwater exploration tasks, the surface vehicle will be equipped with an alternative electric propulsion for navigating at low speed.

In addition, an underwater side-scan sonar and video capture system will be integrated for estimating biomass, searching for sunken bodies, and detecting hydrocarbon spills and shipwrecks.

Indra will evaluate the possibility of integrating a captive multicopter with the USV that will fly over the vessel with an optical sensor to expand its range of vision and act as a communications repeater. Another option that will be studied is the possibility of fitting the vessel with a hull to transform it into a trimaran.

The next prototype, now under construction, will be a slightly heavier vehicle, of greater length and lower length/beam ratio, to increase its stability for installing a water nozzle for firefighting, its double propulsion system will offer greater autonomy and capacity to reach speeds of 45 knots.

Estimates for the global Unmanned Surface Vehicle (USV) point out that it will double its billing in upcoming years, growing from the \$437.57 million in revenues worldwide in 2016 to the \$861.37 million forecasted for 2021.

These platforms play an increasingly decisive role in covering tasks that require accessing inaccessible or risk areas, and in contributing significant capacities for surveillance, identification and interception. Their considerable autonomy and the time during which they may remain on-site for surveillance make these the most efficient solution, at the most competitive operating cost.

### **Civil UAVs Initiative**

The development of the USV is part of the Civil UAVs initiative, the most innovative project for developing civil UAVs launched in Europe and with which the Regional Government of Galicia intends to convert this Community into a key player in the development of this type of technology. The companies Indra and Babcock were chosen in 2016 to lead the first phase of the initiative, funded with an investment totaling €115 million, of which €40 million correspond to funds contributed by the Regional Government of Galicia and €75 million to both companies' assets and investments. The second phase of the initiative corresponds to an Innovative Procurement of €24 million by the Regional Government of Galicia, raising the investment by Civil UAVs Initiative to €150 million.

### **About Indra**

Indra is one of the world's top consulting and technology companies, the leader in IT in Spain, and the advanced technology partner for core business operations of its customers everywhere. It offers a comprehensive range of proprietary solutions and cutting-edge services with a high added value in technology, which adds to a unique culture that is reliable, flexible and adaptable to its clients' needs. Indra is a world leader in the development of end-to-end technology solutions in fields such as Defense and Security;



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Transport and Traffic, Energy and Industry, Telecommunications and Media, Financial Services, Electoral Processes, and Public Administrations and Healthcare. Through its Minsait unit, it addresses the challenges of digital transformation. In 2016 Indra posted revenues of €2,709m and had a workforce of 34,000 professionals, a local presence in 46 countries, and sales operations in more than 140 countries. Following its acquisition of TecnoCom, Indra's combined revenues amounted to more than €3,200m in 2016 with a team of nearly 40,000 professionals.