INDRA APPLIES ARTIFICIAL INTELLIGENCE, SENSORIZATION AND BLOCKCHAIN TO HELP ARMIES MULTIPLY THEIR EFFECTIVENESS IN OPERATIONS AND PEACEKEEPING MISSIONS

- **It develops an intelligent sustainment 4.0 platform based on the use of blockchain technology, equipment sensing and cloud platforms, which automates the maintenance of systems and platforms to extend their useful life, reduce costs and ensure maximum efficiency in each mission**

- **The predictive intelligence developed by Indra allows armies to foresee their logistical needs, reinforcing their capacity for survival, speed of deployment and operability in all types of scenarios, including international peacekeeping missions**

Madrid, June 24 2021.- Indra, a leading global technology and consulting company, has completed the development of an intelligent sustainment 4.0 platform that predicts the logistical needs of armies and makes it easier for all air, naval and land systems and platforms to be ready to fulfill their mission in the best conditions.

The system multiplies the efficiency with which armies plan their operations, allowing them to know with complete precision the status and availability of each system and platform. This provides enormous agility in deploying and supporting units anywhere in the world. These predictive maintenance technologies are especially useful in international peacekeeping missions.

At the same time, it ensures perfect maintenance of each system, vehicle, aircraft or vessel, avoiding serious breakdowns and extending the useful life and availability of each piece of equipment. All this means higher levels of safety, efficiency and enormous cost savings.

Thanks to this pioneering system, commanders will be able to monitor in real time all logistical flows of an entire army, forecast maintenance work with enormous accuracy, predict material demand, calculate costs and budgets, and integrate with all their suppliers seamlessly, using blockchain technology.

The sensorization of the equipment makes it possible to collect an enormous amount of data on the performance of each system, vehicle, aircraft, etc. This data can be transmitted to the sustainment platform in real time or, if this type of communication is not possible, at the end of the mission, thanks to hyperconnectivity between systems.

This means that if an aircraft detects, for example, an anomaly in any of its engine parameters or any electronic system while it is completing a mission, it can alert of the problem in real time.

Indra's sustainment platform receives the alert and is responsible for requesting the components and mobilizing the technical team so that the failure can be reviewed and repaired upon the aircraft's return to the base.

The accuracy and amount of data collected from each system enables the generation of digital twins with which awareness of the operational status of the platform can be gained and key information can be obtained for decision making. This makes it possible to analyze and simulate scenarios to see how the system will respond under certain conditions in its next mission.

Indra's sustainment 4.0 platform is designed to rely strictly on private cloud infrastructure under the Army's own control to securely store the huge volumes of data it collects and provide a seamless view of the status and needs of each Army unit. Powerful analytical software and artificial intelligence algorithms process and study them to present commanders with the relevant information they need for decision making.

On the other hand, operators and mechanics in the workshops have access to extremely useful information on detected faults, configuration of each system, pending revisions, etc.

Mixed and virtual reality solutions guide them in the repair of increasingly complex and sophisticated systems. The camera of a cell phone or tablet is enough to recognize the system in front of them and access up-to-date information on its configuration and status in a matter of seconds.

The use of virtual reality headsets takes these possibilities even further, allowing them to request remote support from colleagues in other bases or even in other countries, which is especially useful in international missions.

Indra's sustainment platform is the first in the market that integrates, under a single umbrella group, defence asset management, computerized maintenance management and systems and facilities management.

The development of this advanced Sustainment 4.0 concept incorporates all of Indra's knowledge as a leading company with decades of experience in the development and evolution of the SIGLE logistics management system used by the Spanish Army.

SIGLE serves more than 10,000 users, a thousand units, centers and organizations, and manages more than 700,000 different materials. Indra has also developed the automatic maintenance systems that test the correct functioning of all the electronics of the Pizarro vehicles, Leopard tanks, Tiger helicopters and the European Eurofighter combat aircraft.

About Indra

Indra (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 2020 financial year, Indra achieved revenue of €3.043 billion, near 48,000 employees, a local presence in 46 countries and business operations in over 140 countries.