

INDRA TO EQUIP EUROFIGHTER MAINTENANCE WITH ARTIFICIAL INTELLIGENCE TO ENHANCE OPERATIONAL AVAILABILITY

- **The company shall develop a solution for the Spanish Air Force that will detect failures in critical avionics systems before they occur**
- **This technology, promoted in the framework of the BACSI programme with the Air Base of Albacete, improves safety, saves on maintenance costs, extends platform life and increases fleet availability**
- **Indra is committed to the digitization of Defence Systems by developing cutting-edge technologies based on AI, hyper-connectivity, cloud computing, next-generation sensors and virtual and mixed reality. As a driving force in the sector, the company bolsters Spanish presence in the areas with the greatest standing and future**

Madrid, January 13, 2022. - Indra, a leading global technology and consulting company, has been awarded the R&D contract "MP C16: Use of a System based in Artificial Intelligence (AI) Techniques for the Predictive Maintenance of the avionics systems of the C.16 Eurofighter", funded by the Spanish Directorate-General for Armament and Material, at the proposal of the Air Force. The company will develop a new artificial intelligence system that will provide this aircraft with the ability to self-diagnose the status of around twenty critical avionics systems, thus enhancing flight safety and superiority of one of the most advanced fighter aircraft on the planet.

Indra makes strides with this Defence Systems digitalization project that will mark the future for the sector. The adoption of technologies such as the combat cloud, hyper-connectivity, virtual reality and artificial intelligence will be decisive for any army to maintain its operational capacity in the coming years.

Developing this solution in the framework of the Connected, Sustainable, and Intelligent Air Base project (BACSI) of the Spanish Air Force to improve the maintenance of the Eurofighter opens up a new avenue for preparing this advanced fighter for the use of cutting-edge technology, such as AI. It also does so in the context of Sustainment 4.0, an area that is serving as a testing ground for many of these digital technologies before they are put into service in critical systems in the field.

The solution will allow early detection of the possible failure in different critical systems and will check that the aircraft is in perfect condition before each takeoff. This intelligent maintenance system not only improves safety, but is also cost-saving, extends each platform's service life and ensures maximum fleet availability.

Indra's expert system will analyze the huge volumes of data collected by the Eurofighter's systems and process it to look for any anomalous behavior. It will also record the exact environmental conditions in which it was produced in order to classify the data and train the system, thus progressively increasing its accuracy. Indra will also study the possibility of installing additional sensors on the aircraft to enhance the system's capabilities.

This project is aligned with the plans of the Spanish Armed Forces and Air Force to advance their digital transformation and prepare to face new threats. The development of this system is possible thanks to Indra's cooperation with personnel from the Ministry of Defence and its bases as well as the data collected over the years by the Spanish Air Force and company personnel.

Deployment of this AI solution will represent a new, previously unexplored milestone in aircraft maintenance in Spain. It also represents an advance in the application of the Sustainment 4.0 concept that Indra is working on, which proposes the introduction of the most cutting-edge technologies to comprehensively manage the maintenance and logistics of armies with an extremely precise degree of control. Their incorporation will allow for much more agile armed forces, with greater deployment capacity and effectiveness against the most technologically advanced adversaries.

Indra's Artificial Intelligence system will also contribute to the development of the Sustainable and Intelligent Connected Air Base (BACSI in its Spanish acronym) that the Air Force is promoting. A model that is committed to more operative, efficient and sustainable bases thanks to the technological and digital revolution.

The future of defence is digital

The dizzying speed with which the world is becoming digitized is forcing the most advanced armies to undertake a profound transformation in order to adapt and not lose their superiority over their adversaries.

The importance of new cutting-edge technologies in next-generation systems and platforms is increasingly on the rise. Aircraft, ships and armored vehicles will operate in a few years as veritable 'systems of systems', exchanging data in real time thanks to combat clouds, artificial intelligence, hyper-connectivity, advanced sensors, next-generation interfaces, intelligent robotics, hybrid simulation, etc.

In this sense, the company is pushing the frontiers of AI and the advances it has achieved together with universities and the Spanish Armed Forces have already been collected and published in different forums and leading scientific journals. The company is also working on major European and national innovation and development programs that will shape the future of Defence: it is the national coordinator of the NGWS/FCAS, digitizing the 8x8 Dragon vehicle, it has deployed some of the world's most powerful early warning and space surveillance radars, and is working on the command and control and situational awareness systems of the future that will protect our continent.

From its position as a leader in large programs such as these, Indra works to be a driving force behind Spanish industry in this field, so that Spanish industry not only gains volume of work, but also positions itself in those activities of greater added value and with more technological and digital content, where the real growth, innovation and jobs of higher quality and greater standing are to be found

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.