

## INDRA PREPARES THE EUROPEAN ARMORED VEHICLES OF THE FUTURE TO PREVAIL IN DIGITALIZED THEATERS OF OPERATIONS

- **The company is leading the design of the Mission System to be built into next-generation European military vehicles within the European FAMOUS program**
- **The solution will enhance situational awareness and network the armored vehicles to function as a system of systems, thus multiplying intelligence, agility and coordination**
- **The system could become the standard for European armored vehicles, yielding significant savings for member countries**

**Madrid, February 16, 2022.** Indra, one of the leading global technology and consulting companies, as part of the FAMOUS program (European Future Highly Mobile Augmented Armored Systems) led by the company Patria, is coordinating the design of the Mission System that will allow European next-generation armored vehicles to impose their superiority on the digitalized battlefield, where control over data and information are key factors.

Only those armies that use the most advanced technologies based on artificial intelligence, hyperconnectivity, the combat cloud and the use of new generation sensors will be able to intervene in this type of scenario.

The FAMOUS program, involving 19 European companies, addresses the architecture design and will lay the groundwork for the subsequent development and manufacture of a tracked all-terrain vehicle and a light wheeled armored infantry vehicle, both equipped with disruptive technologies and possibly operational by the end of the decade.

Indra is working on the electronic architecture and is also leading the project to develop the armored vehicles' Mission System, in which the companies Nexter, Cybernetica, Savox, and LMT are also participating. This system is the 'on-board brain' that will provide situational awareness and the ability to interoperate in real time with other platforms and soldiers deployed in the field. "The vehicles will operate in a network, forming a true system of systems with a continuous data exchange with other platforms. This coordination, this teamwork, is what multiplies intelligence and efficiency," Indra notes.

The system will make use of artificial intelligence and virtual and augmented reality to display tactical information to the crew on what is happening at all times, contextually displaying data on the adversary's position, detected threats or the advance of their own or allied units. "It is about supporting decision-making for maximum precision, taking advantage of a vision assembled from the data gathered by multiple systems, sensors, platforms and soldiers located at different points on the ground," the company says.

The level of intelligence provided by this capability facilitates near-perfect coordination, which is especially critical in asymmetric or hybrid conflicts, where the adversary tries to go unnoticed and forces every action taken by one's own forces to be extremely precise. Indra points out that military tactics are taking an important turn with the arrival of these systems: "A forward platform can provide, for example, immediate data to vehicles advancing on another flank, providing a great advantage and the possibility of catching the adversary off-guard".

This technology will also allow vehicles to move alongside unmanned ground or aerial platforms that provide support and clear the way to avoid explosive ordnance attacks.

The Indra-led team will ensure the comprehensive integration of all electronic defence, survival, communications and sensor systems in the vehicles to put every piece of information at the service of the mission, which in itself represents an advance over current armored vehicles. "For the crew, all these improvements translate into greater situational awareness, a lower degree of complexity and greater ease of moving around safely," they stress.

The system's cybersecurity is also one of the factors being taken into account from the earliest design stages. This ensures the vehicle's maximum resistance to any cyber-attack.

All development will be based on open software, with a core that can be shared by different types of vehicles, allowing them to be easily adapted to each other. Subsystems of this kind designed by the FAMOUS program — including the mission system itself — will be adaptable to vehicles with years of service behind them as well as to newer models. They could thus become a European standard for armored vehicles, bringing significant savings in future developments, supplies or modernizations.

The ultimate goal is to have the most advanced solutions available and be able to add new technologies that are yet to come. "We are preparing for a race in which new and increasingly advanced systems will have to be integrated much faster," the Indra team adds.

### **The data domain**

Operating in a coordinated and simultaneous manner in all defence domains: Land, Sea, Air, Cyberspace and Space. This is the enormous challenge military defence have to tackle in responding to threats that will emerge in the coming decades.

The mission systems that equip the platforms are one of the core elements on which this capability is built, together with the battlefield management systems (BMS). These systems allow other systems, sensors and devices in the field to be interconnected and exchange information with one another and with command. Indra is implementing its mission system in the Spanish Army's 8x8 Dragon vehicles and has equipped hundreds of the Army's vehicles with BMS systems, which have already been tested in international missions.

In parallel, it is working on the key upper echelons for the development of future multi-domain operations and is leading the most ambitious project promoted by the European Union in this field: the development of the Strategic Command and Control System for Joint Security and Defence Missions and Operations (ESC2), which will enable Europe to coordinate the actions of multiple countries. It is also working on the development of the European Cyber Situational Awareness Platform (ECYSAP), which will be responsible for identifying and assessing risks associated with the technology facet of any operation and estimating the propagation and possible impact of a cyber-attack, as well as providing response capabilities.

### **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 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, end-to-end 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.

### **About the article**

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