

Press release

NATURGY AND MINSAIT WIN AN ENERTIC AWARD FOR THEIR “GREEN” SOLUTION TO PREVENT FIRES USING ARTIFICIAL VISION

- **Fire Detection, the winning proposal in the “Predictive Maintenance” category of the 2021 enerTIC Awards, is a system that applies Artificial Intelligence from the height of electrical towers to allow 360° surveillance for the early detection of fires in large forest masses**
- **The solution is solar-powered, thus reducing CO₂ emissions, and includes software to minimize consumption after each operation.**

Madrid, December 2, 2021. Fire Detection, the “green” solution for the early detection of fires through Artificial Intelligence and the IoT (Internet of Things), has won an award at the 9th enerTIC Awards in the “Predictive Maintenance” category. The project was developed by UFD, an electricity distributor in the Naturgy group, and Minsait, an Indra company.

The enerTIC Awards, organized for the past nine years by the enerTIC Platform, seek to identify, reward and disseminate success stories and innovative good practices that serve as models for progress and to raise awareness of the opportunities provided by digitalization to improve energy efficiency and sustainability.

The award acknowledges the commitment of UFD and Minsait in these fields, as reflected in the development of an innovative technological project that prioritizes environmental protection and the use of renewable energies to reduce polluting emissions.

Fire Detection is a smart solution, based on Minsait’s Onesait Phygital Edge platform, that uses electrical towers and power lines as watchtowers and provides 360° control of large forest masses to detect potential fires with total reliability in a matter of seconds, including areas that are difficult to access. The system sends alerts that are processed by means of edge computing capabilities, a model that brings data computing closer to the location where it’s needed to improve response times and save on bandwidth.

The reduction of CO₂ emissions is another of the major benefits of the solution, given that it’s powered by photovoltaic energy, which it stores to ensure that it operates 24/7 every day of the year. It also features control software that allows the system to go into sleep mode after each operation to minimize energy usage.

As a result of its Artificial Intelligence algorithms, Fire Detection is capable of real-time analysis and extraction of information from the images obtained from the cameras located on high and medium-voltage pylons and the identification of signs of fire and smoke. If the result is positive, the system transmits a warning to the control center with the camera’s identification, the orientation in which it’s been taken, the image and the highlighted detection area.

It is also equipped with IoT sensors that help reduce “false positives” and optimize the energy resources that have been stored. In other words, they measure the temperature, humidity and atmospheric pressure so as to avoid taking images in meteorological conditions incompatible with the risk of fires and enhance their capture when there’s a high risk of one occurring.

Simple deployment

Fire Detection is an easily scalable and deployable system that can obtain images over broad areas of natural environments. In fact, the range of the cameras for detecting small fires is around two kilometers.

Press release

Fire Detection can also host algorithms to monitor the status of the electrical towers, assess the behavior of the infrastructures in extreme meteorological conditions and detect incursions into security-restricted areas. Its application is also being considered for the constant monitoring of wind speed in the selection of new locations for wind farms.

The Technical Committee of the enerTIC Platform evaluated the 100-plus projects submitted and chose the winners in each of the categories, taking into account the following criteria: degree of applied innovation, usability of information and communication technologies, impact on the reduction of energy consumption and CO₂ emissions, exemplary nature or applicability in other organizations/environments and use of metrics and improvement indicators.

Contributing to several sustainability goals in their multiple aspects: the reduction of carbon footprint, the circular economy and its social impact, constitutes one of the main challenges of Phygital, the new strategic vector for Minsait's growth, which also seeks to improve the efficiency, profitability and flexibility of its operations related to all kinds of assets, products and physical infrastructures and transform people's interaction with the physical world, combining real and virtual information.

About UFD (Naturgy group)

UFD is the third-largest electricity distribution operator in Spain, with 3.8 million supply points and 114,000 kilometers of power lines. For years it has incorporated new technologies into its power grids to make them increasingly smart. The investments made in Spain over these years have enabled it to enhance its infrastructure, providing digital services that are more environmentally-friendly and improving the quality of the supply to make its network one of the most modern, competitive and efficient of its kind in Europe.

About Minsait

Minsait (www.minsait.com), an Indra company, 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. Thus, it focuses its offering on high-impact value propositions, based on end-to-end solutions, with a remarkable degree of segmentation, which enables it to achieve tangible impacts for its customers in each industry with a transformational focus. Its capabilities and leadership are demonstrated in its product range, under the brand Onesait, and its across-the-board range of services.

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, end-to-end focus and with a high innovation component. In the 2020 financial year, Indra achieved revenue totaling 3,043 billion euros, had nearly 48,000 employees, a local presence in 46 countries and business operations in over 140 countries.