

The Red Eléctrica Group is creating satellite connectivity bubbles on high voltage towers to fight against the digital divide

- Hispasat, Reintel and Elewit have demonstrated that satellite terminals can be installed on high voltage towers to roll out connectivity bubbles in rural settings, which will contribute to bridging the digital divide in Spain.
- The project has made it possible to verify the proper operation of satellite terminals in the highly unique electromagnetic environment of high voltage towers.

MADRID, 19 October 2021. The Red Eléctrica Group, through HISPASAT, the Spanish telecommunications operator, Red Eléctrica de España, the electrical system operator and transporter, and Elewit, the Group's technological platform, has carried out a pilot project on the Red Eléctrica's substation in Galapagar (Madrid) to demonstrate the viability of the use of high-voltage electrical infrastructure to provide satellite connectivity that extends cellular and broadband coverage in rural and remote environments that the power lines run through.

The three-month long pilot project has made it possible to verify the proper operation of satellite terminals in the highly unique electromagnetic environment of high voltage towers. Additionally, the project has shown that using solar panels to generate isolated photovoltaic electricity can be a sound power source for these terminals.

Thanks to all this, the project has also demonstrated that satellite terminals can be installed on Red Eléctrica's high-voltage towers, which boast extensive connectivity throughout Spain, to roll out connectivity bubbles in rural environments. This solution will contribute to bridging the digital divide and implementing solutions linked to the daily work in rural areas, such as crop and livestock monitoring and fire prevention. Based on these findings, the group is already working on defining a new pilot project aimed at analysing the viability of this model to create 4G/5G bubbles via satellite on high-voltage towers.

This initiative is proof of the many possibilities that HISPASAT's satellites offer to bridge the digital divide in Spain and ensure connectivity in every region, including those where other infrastructures cannot reach. The operator boasts universal coverage over 100% of the country which allows it to offer connectivity to any point in Spain. With this solution Hispasat can promote digitalisation in remote areas, which is the basis to provide social stability and ensure digitalisation without leaving anyone behind. Digital connectivity allows the rural world to access a wide variety of solutions, including high-speed broadband access, while also digitalising universal rights such as education and healthcare. Connectivity also promotes development in sectors such as agriculture and forestry and facilitates access to government entities without the need for travel by making it possible for people to handle their administrative processes online. For its part, Elewit works intensely on technological oversight, coordinating innovation within the group and analysing and detecting optimal solutions for every case.

About HISPASAT

HISPASAT is the leading satellite operator in Spain and a driver for innovation in the aerospace sector. The company is the main communication link between Europe and America as a broadband and connectivity service provider in America, Europe and North Africa through its companies in Spain and Latin America, where its Brazilian subsidiary, HISPAMAR, is located. HISPASAT is the leader in broadcasting and distributing multimedia content in Spanish and Portuguese, including broadcasts from major digital Direct to Home (DTH) and High Definition Television (HDTV) platforms. These activities make it one of the top companies in the world by revenue in its sector and it forms part of the Red Eléctrica Group.

About Elewit

Elewit is the technological platform of the Red Eléctrica Group. The company was founded in 2019 with the purpose of offering solutions to the new challenges arising in the electricity and telecommunications sectors. The company has a single goal: to promote the energy transition and connectivity for a sustainable future.

Elewit focuses its activity on six strategic pillars: citizen-centred outlook; transmission and accessibility to information; renewable energy and flexibility in the operations of the electrical system; electrification for society; intelligent asset development and management; and cross-cutting cybersecurity. For more information, visit: www.elewit.ventures

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