

CASE STUDY

# EOLO chooses Thales to support drive for universal gigabit broadband

The Eolo logo is displayed in blue on a white circular sign. The logo consists of the word "eolo" in a lowercase, sans-serif font, with three curved lines above the "e" representing a signal or Wi-Fi symbol. The sign is mounted on a silver pole and is set against a background of a blue sky with light trails and a landscape with greenery and buildings.

**THALES**  
Building a future we can all trust

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## Building a Gigabit Society

The European Union (EU) wants all its citizens to have access to 1Gbps broadband by 2030. The creation of a 'Gigabit Society' is a key priority to foster more inclusive and cohesive communities, while boosting innovation and economic growth.

The rapid deployment of FWA (Fixed Wireless Access) services is critical for achieving this ambitious goal, as it brings ultrafast broadband within easy reach of millions of citizens who today are not already served by fibre optic. This typically includes people living in small towns, villages, remote rural areas or, in wider terms, outside the most populated cities. By leveraging radio access, FWA is targeting these so-called digital deserts.



## Taking FWA to the next level

EOLO is firmly established as Italy's leading provider of FWA connectivity. The company has always pioneered the use of radio wave technology to offer high quality FWA broadband services, complementing FTTH fiber outside the most populated towns in Italy. EOLO's current proprietary FWA solution is based on a network of radio antennas, delivering wireless broadband speeds of up to 300Mbps via small dishes mounted on customers' homes and buildings. EOLO's service has overcome the threshold of 700.000 households connected, ensuring that reliable broadband internet access reaches parts of the country affected by digital divide or digital speed divide.

To help meet the EU's goal of a Gigabit Society and further enhance the company's offer, EOLO is now rolling out a groundbreaking 1Gbps FWA solution. This project leverages an innovative combination of 5G and millimeter wave (mmWave) radio technologies, operating in the 26 GHz band. Key elements include the deployment of a 5G native mmWave Stand Alone network to connect hundreds of thousands of new eSIM (embedded SIM)-enabled receiving antennas (5G FWA antenna), "which will be installed on customer premises.

## Thales joins the EOLO team

EOLO is bringing together several blue-chip technology suppliers to realise its ambitious plan. Mavenir and 6Wind are supporting the deployment of EOLO's 5G core, while Nokia and ZTE are providing both Radio Access Network (RAN) and the 5G FWA receiving antennas.

Thales is another key member of this team, supplying its eSIM Management platform, called Thales On Demand Subscription Manager (OSM), aimed to prepare and download profiles (subscriptions) to the 5G FWA receiving antennas before the installation. Thanks to Thales' solution, connecting the customer is significantly easier since the devices can be activated as soon as they are powered on due to the pre-loaded subscriptions.

EOLO technicians are then responsible for installing the devices and activating subscriptions, facilitating 1Gbps wireless broadband connectivity in homes and workplaces across the country.



## Connecting customers with EOLO's new FWA network

Thales OSM plays a critical role in this new FWA ecosystem. Profiles downloaded to eSIMs effectively unlock 5G-powered broadband by providing customers with reliable and secure access to EOLO's new radio network.

EOLO selected the Thales solution following a rigorous tendering process. The company was already familiar with Thales's experience and expertise in this area. Moreover, the local Thales team worked closely with EOLO to integrate Thales OSM. Thales is also leveraging long-established relationships within the mobile industry to foster a fruitful and successful collaboration.

## Ultrafast broadband for everyone

As EOLO will help in contrasting digital divide and digital speed divide in the country, Italian businesses will benefit from opportunities to innovate, improve efficiency, and launch exciting services that drive growth and prosperity. At the same time, the new service will contribute to citizens' ability to access public digital services everywhere and to live in less densely populated territories with a connectivity performance similar to the one they can find in the urban areas. Furthermore, by pioneering the combination of 5G and millimetre wave radio, EOLO is a trailblazer for similar projects across Europe, speeding the creation of a Gigabit Society that embraces the EU's 27 member states and some 449 million citizens.



The infrastructure that we are building together will play a pivotal role by complementing fiber coverage in our country. With a connectivity able to reach 1 Gbps, we will meet the ambitious goals of both European and Italian agendas, helping citizens and enterprises to overcome digital divide and digital speed divide.

**Guido Garrone,**  
CEO at EOLO

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