# Who is EOLO

EOLO owns the **main fixed wireless network using ultra broadband technology** in Italy and in the world. It provides some of the most innovative technologies and aims itself as a unique reality within the ISP (Internet Service Provider) market.



Connecting Italy where a village is.





Connecting to Italy? Italians do IT better.

fully

covered

commercial

partner

connected

to our network

turnover

# **Technologies**



#### FWA

**EOLO** provides Fixed Wireless Access (FWA) solutions based on different point-to-point and point-to-multipoint technologies:

- EOLOwave
- EOLOwaveG
- EOLO PtP

The point-to-point connections are delivered in licensed band; point-to-multipoint connections are either in licensed or free band. Our radio transmission is encrypted with AES or proprietary protocols.



### FTTH

**EOLO** realizes FTTH fiber connections (Fiber To The Home), using ITU-T G.984 **standard** technology. The standard, commonly known as GPON (Gigabit-capable Passive Optical Network), defines the architecture for connecting fiber-optic customers to their premises and is able to operate at speed of up to:

- 2.4 Gbps in **downstream**
- 1.2 Gbps in **upstream**

## Performances

**EOLOwaveG EOLO PtP FTTH GPON EOLOwave** Download speed 30 Mb/s 200 Mb/s 1 Gb/s 2.4 Gb/s Upload speed 1 Gb/s 1.2 Gb/s 8 Mb/s 50 Mb/s Channel bandwidth TDD (30 MHz) FDD (56+56 MHz) FDD (112+112 MHz) N/A Frequency band Non licensed Licensed Licensed N/A 70% 100% 70% 70% Fiber backhauling of the network of the network of the network of the network Access latency <18 ms <14 ms <14 ms <1 ms Average Jitter <30 ms <5 ms <5 ms <1 ms Packet Loss <1% <0.2% <0,2% <0,2%



## The structure of the network

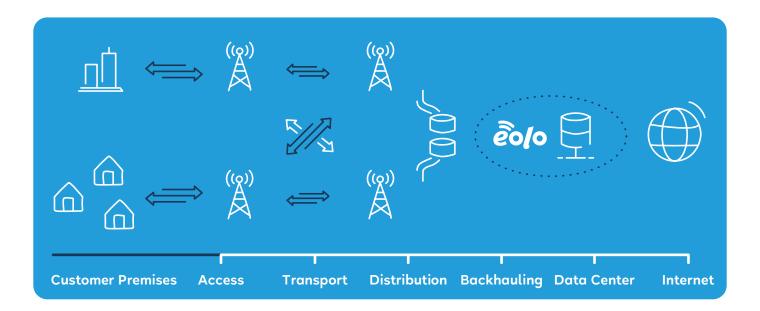
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4	3	17,000Km	10 or 100 Gb/s	300
Data Center with 80 Gb/s transit capacity	Neutral Access Point (NAP) Mix (Mi); Top-IX (To); NaMeX (Ro)	of Backbone <b>Optical Fiber</b> throughout Italy	Scalable circuits, with solutions Dense Wavelenght Division Multiplex (DWDM)	Point of Presence (PoP) fiber network distribution

The transport takes place through high-capacity fiber optic circuits, or through point-to-point radio connections operating on frequency bands licensed for exclusive use by EOLO.

## **Architecture**

**Fixed Wireless Access (FWA) telecommunications infrastructure**, offers a broadband access service, with over 4,100 access points distributed throughout the country, to reach over 6,900 municipalities in all Italian regions.

**Network access points** are Base Transceiver Stations (BTS) that allow network connections with Customer Premise Equipment (CPE) devices installed at the user's premises through microwave data transport technologies operating in both unlicensed use frequency bands and wideband licensed spectrum for exclusive use.



### **Local Tail**



#### INTERNET

The EOLO **layer3 solution** offers fast and reliable broadband Internet access, able to satisfy the different needs of national customers and multinational corporations.

**EOLO Internet** connections are ideal for delivering OTT services (Cloud, IP centrex, SD-WAN).



#### **ETHERNET**

The EOLO **layer2 solution** offers providers fast and stable broadband with full quality of service control.

With **EOLO Ethernet** solutions it will be possible to deliver integrated services effectively and securely thanks to the end-to-end network control.



#### **ACCESSES**

EOLO offers providers a complete range of accesses in order to meet the B2B and B2C market needs:

- **Dedicated Internet Access** (DIA), providing the best Internet connectivity, typical of large companies with bandwidth up to 1 Gb/s.
- **Broadband Internet Access** (BIA), providing quality Internet connectivity with bandwidth up to 100 Mb/s.



### **EOLO** network evolution

**EOLO** constantly pursues a policy of significant investments into the technology development, endowing the network with the leading edge solutions available in the vendors global market.

The unique combination of high-end **5G wireless and FTTx technologies** enables EOLO to always offer the optimal solution that fits the customer's requirements in order to always deliver **top-quality services.** EOLO's vision is to consolidate its market positioning as major ultra-broadband service provider to residential and business customers in rural and urban areas in Italy.

