

The logo for FiberCop, featuring a stylized icon of three horizontal bars on the left and the text "FiberCop" in a white, sans-serif font to its right. The background is a dark blue field filled with numerous fiber optic cables that are illuminated from their ends, creating a bokeh effect of colorful light spots (blue, green, red, yellow) and bright streaks of light.

FiberCop

BITSTREAM NGA

Ultra-broadband delivered where you want it

Bitstream NGA

With the Bitstream NGA service, you can aggregate all your Customers' ultra-broadband access on your network from over 500 locations across Italy, with FiberCop managing the transport!

FTTCab/FTTE accesses	FTTH accesses	National coverage
Downstream up to: 200 Mbit/s	Downstream up to: 1 Gbit/s – 2.5 Gbit/s – 10 Gbit/s	95%
Upstream to: 20 Mbit/s	Upstream to: 100 Mbit/s – 300 Mbit/s - 500 Mbit/s – 1 Gbit/s – 2 Gbit/s	

Who are they for?

Bitstream NGA is the ideal solution if:

- you want to make limited investments in your network
- you want to customise your ultra-broadband offer
- your customers are 'scattered' throughout the country

You can use VULA, Bitstream NGA and Easy IP NGA services together to offer ultra-broadband to your customers with maximum flexibility

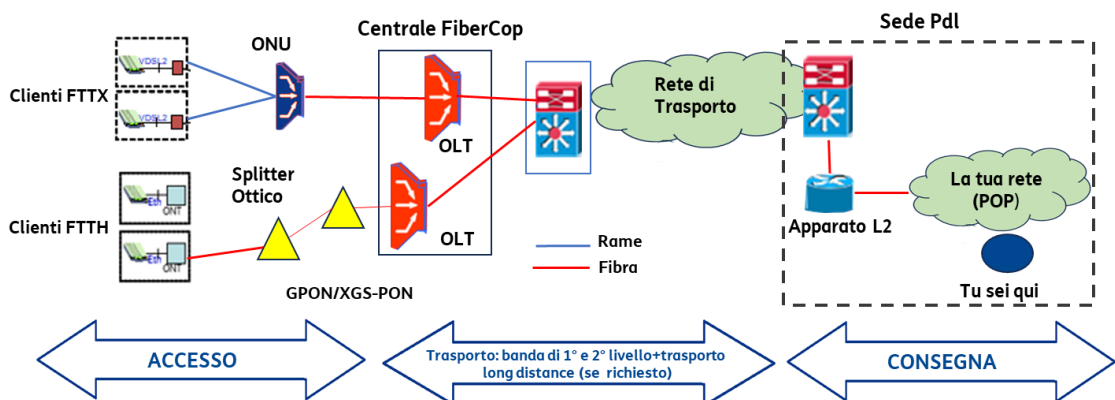
Preliminary services

COLOCATION

Description of the service

With the regulated Bitstream NGA service, we collect your Customers' broadband traffic, transport it with our network and deliver it to your network at 'layer 2' (Ethernet).

The service has three components: delivery, bandwidth, access.



Bitstream NGA

DELIVERY

Traffic delivery to your network can take place at various levels of interconnection. However, in any case, it requires that your network connects to one of the more than 500 Telecom Italia network points enabled to deliver the Bitstream service ('Points of Interconnection' or 'Pol').

The connection between the Pol and your network is made through special devices ('L2 devices'). These devices act as a 'border' between the Telecom Italia network and your network: the L2 device and the ports that connect it to the Pol constitute the 'Delivery Kit'.

To connect your network, you can choose from:

- **Interconnection at the Macroarea level:** if you are interconnected at this network level, you can gather traffic from all the central offices (OLT sites) within a Macroarea. The Macroarea is one of the 30 zones into which the Italian territory is divided in the network. The traffic transport to your network will start from the central office and pass through: the network segment between the central office and the Parent node ("1st level transport bandwidth") and the segment between the Parent node and the Delivery Kit in the same Macroarea ("2nd level transport bandwidth");
- **Long Distance Interconnection:*** If you are interconnected at this network level, you can gather traffic from all the central offices (OLT sites) from all Macroareas in the Italian territory. The traffic transport from the central office to the Pdl consists of: the network segment between the central office and the Parent node ("1st level transport bandwidth"), the segment between nodes in the same Macroarea ("2nd level transport bandwidth"), and the segment between Macroareas up to the Delivery Kit ("long distance transport bandwidth").

Bandwidth

You can choose the type of transport and the related transmission capacity (bandwidth) to use on the segment between the central office (OLT site) and the Pdl: in the Bitstream NGA service, in fact, several classes of service (CoS: Class Of Service) are available to offer differentiated quality services (web browsing, VoIP, video streaming, gaming, ...), and the two models of bandwidth aggregation,"

- **Shared bandwidth:** in this case, you choose the total transmission capacity to be assigned to a plurality of access lines; the capacity is managed according to a contention model, which divides it among these lines based on the traffic generated by each of them;
- **Dedicated bandwidth:** in this case, you can assign a specific transmission capacity to each line. You can adjust the bandwidth allocation over time according to your technical and commercial needs, without service interruption.

Access

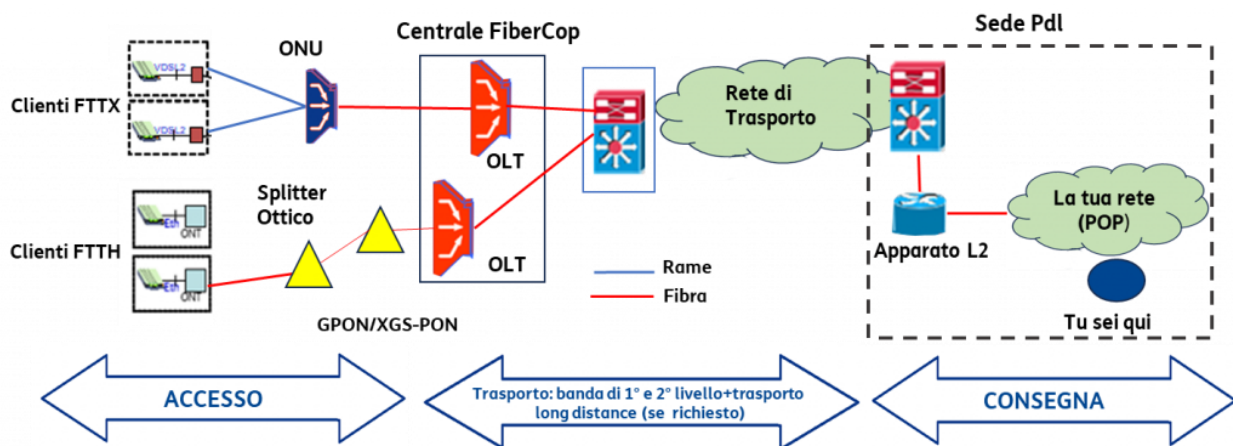
It is the connection between your Customer's site and the FiberCop central office, in FTTCab or FTTH technology.

Bitstream NGA

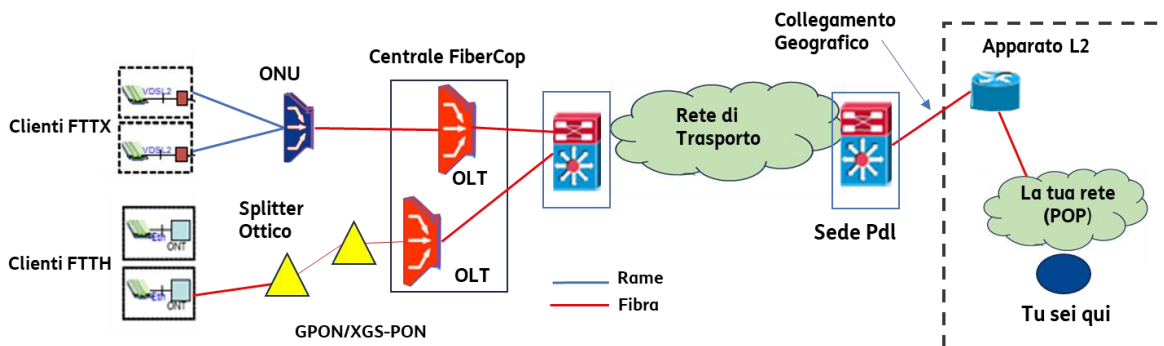
Getting Started

After signing the contract, you will need to:

1. Ask us for one or more Delivery Kits at the Pdl's you are interested in. You can choose the L2 device model from those available with 1 Gbit/s or 10 Gbit/s ports;
 - If you are collocated at the Pdl -> To set up the Kit, you will need:
 - one or two ports on the Pdl
 - the L2 device
 - an internal central office jumper that connects it to your network



- If you are not collocated in the Pol -> You can ask us if you can 'take home' the L2 device on a project basis



2. Ask us for one or more collection VLANs and the CoS with which you want to transport your Customers' traffic on our network. VLANs are "virtual channels" between the FiberCop central office (OLT site) and the L2 device, and serve to separate your Customers' traffic from that of other Operators' Customers.

Bitstream NGA

3. Ask us to provide ultra-broadband access, FTTCab or FTTH, from your Customers' locations to the FiberCop central office (OLT site). You can ask us to either create a new line or perform a "migration," which means transferring the Customer from another Operator (OAO).

If you already have the Bitstream NGA service, you can use the same delivery kits for collecting Bitstream broadband access as well. If you want to know more, read the [FAQ](#)

What else should you know

You can collect your customers' ultra-broadband access from eligible FiberCop central offices: there are more than 500.

- If you want to do it directly from the central office you have chosen -> You need Colocation
- If you want to do it from your own site --> FiberCop can deliver the Bitstream NGA service "to your doorstep" with fiber optic cable.

Pricing

The service is regulated and has 3 elements:

1. Delivery Kit
2. VLAN and bandwidth
3. Access.

Each element has one-time contributions and monthly fees. For more information, please contact your Account Manager or consult the Reference Offer.

However, if you are not yet one of our Customers, you can access the section [Become a Customer](#) of the Wholesale portal and fill in the form. One of our Sales Representatives will contact you as soon as possible!

Regulatory Conditions

The service is for:

- Operators with an individual license or a general authorisation for telecommunications networks and services for public use which existed before the entry into force of Italian Legislative Decree no. 259 of 1 August, 2003, containing the 'Electronic Communications Code' (referred to in Article 38 of the Code), as last amended by Italian Legislative Decree no. 70 of 28 May 2012.
- Companies with a general authorisation for electronic communications networks and services pursuant to Art. 25 of Italian Legislative Decree no. 259 of 1 August 2003, as last amended by Italian Legislative Decree no. 70 of 28 May 2012.

The Offer relating to the **NGA Bitstream** service is 'regulated', i.e. it is subject to approval in all its aspects by the Italian Communications Regulator (AGCom) and is updated every year and published on this website in the Reference Offers section of this service

 FiberCop