



DARK FIBER

A wide network of opportunities for investing in fibre optics

Dark Fiber

A carefully chosen, customised domain can make all the difference to a company selling on the Internet, appearing at the top of search results on major search engines.

Service features

Fibre optics installed

25,500 mln km

(as of March 2024)

Who is it for?

The offer is for fixed, mobile and wireless network operators who intend to implement:

- metropolitan networks to connect two or more POPs together;
- connections to link radio sites to traffic concentration nodes;
- a backbone or an entire proprietary transport network.

Domain service description

SMEs are increasingly expressing the need to boost their visibility by exploiting the new potential offered by the web.

Preliminary services

Optional (in case you need to install optical signal regeneration equipment)
Commercial Housing.

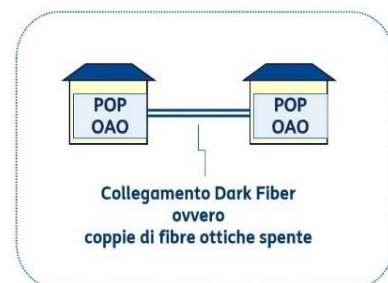
Description of the Dark Fiber service

The service consists in the assignment to operators of Indefeasible Right of Use (IRU) on connections made using one or more pairs of unlit optical fibres, that is, without equipment at the two ends.

Operators can acquire rights of use for a period of 5, 10, 15 or 20 years.

The Operator will be responsible for 'lighting' the optical fibres using its equipment positioned at the ends of the connection.

In the case of particularly long connections, FiberCop provides the Commercial Housing service, whereby the Operator rents the space needed to install the signal regeneration equipment.



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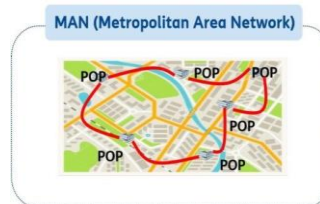
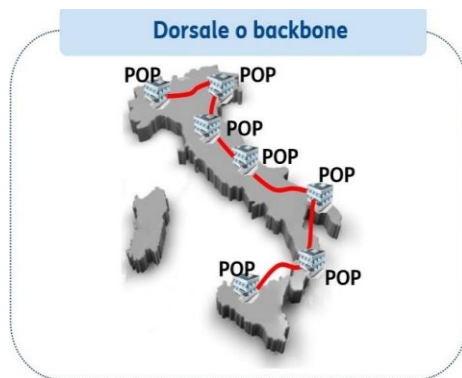
The maintenance of the equipment owned by the Operator, necessary for the transmission/regeneration of the signal on the optical fibre, is the Operator's responsibility and is not included in the Dark fiber service.

On the other hand, the maintenance of fibre optics is paid for by FiberCop and included in the Dark fiber service.

Applications

Dark fibre connections can be used to make:

- operator POP* connections;
- connections between POPs and colocation sites;
- connections between colocation sites;
- backhaul connections between POPs and SRBs** or wireless access nodes (FWA).



Fibre types and technical characteristics

The main technical characteristics of fibre optics are:

- attenuation;
- chromatic dispersion;
- the cut-off wavelength.

The ITU has standardised various types of optical fibres, which differ in their technical parameters.

The types of fibre optics used in the FiberCop network are: ITU-T G.652, G.653, G.655, G.657.



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Prices

The price is formulated based on the outcome of a feasibility study and consists of:

- an activation fee;
- an IRU fee;
- an annual maintenance fee.

Regulatory Conditions

The service is exclusively 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.

 FiberCop