

Backhauling Mobile Over Ethernet

The Service allows the Operator to transport voice and data traffic from its mobile or wireless antennas to its POPs and is based on TIM's Ethernet network.

Service features

Availability	SLA for outage
• Italy 100%	 Within 8 Calendar Hours: 90% of cases Within 14 Calendar Hours: 100% of cases KIT within 5 Calendar Hours

Who is it for?

The service responds to the growing demand from Operators to transport voice and data traffic from their radio antennas to their network PoPs. It is based on TIM's Ethernet network capable of providing differentiated traffic quality.

Description of the service

The Backhauling Mobile Over Ethernet service allows the Operator to transport voice and data traffic from its radio antennas to its network PoPs. It is based on TIM's Ethernet network, which can provide differentiated traffic quality.

The service envisages the installation of a level 2 Ethernet device, NTP or Catalyst, at the Telecom Italia line stage (LS) pertaining to the location subject to Backhauling.

It consists of connections with access via fibre optics and transport on TIM's packet network (OPM network). OPM transport occurs by creating 802.1ad compliant s-VLANs delivered to the Operator via interconnection kits at its location. Compliance with the QinQ (802.1q) standard can be optionally provided at the Operator's request.

The profiles available in the Offer are:

- BH Internet Data: with CoS 1;
- BH Silver Data: for video applications with CoS 3;
- BH Gold Data: for voice applications with CoS 5;
- Multi-CoS: the following profiles are envisaged:
 - o Profile A: 70% CoS 1. 20% CoS 3. 10% CoS 5
 - o Profile B: 90% CoS 1 and 10% CoS 5
 - o Profile C: 80% CoS 1 and 20% COS 3

Below a summary table with the available speeds for each profile:

Annual availability of connection

The levels of availability depend on the length of the connections to the mobile sites . Therefore, therelative figure is assessed on a project specific basis.



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The annual availability values of the connection, , assuming an approximately 10 km long fibre connection 10 longare as follows:

- if delivery takes place within Metropolitanarea: 99.959 %;
- if delivery takes place over Long Distance: 99.957 %.

Assurance SLAs

In case of Outage:

- Connection SLAs
- 8 Calendar Hours in 90% of cases;
- 14 Calendar Hours in 100% of cases

Kit SLAs:

• 5 Calendar Hours.

In case of degradation of performance:

• For all connectiontypes: 3 Calendar days in 99% of cases.

What else should you know

The sale of Connections must always be preceded by a feasibility study. If the Operator wants a connection delivered to one of its PoPs at a TIM exchange, it must have signed aCommercial or Colocation contract.

Prices

For each individual BH Fixed Connection the following are provided:

- a one-off payment for the activation
- of a monthly fee

For each Ethernet KIT the following are provided:

- a one-off payment for the activation
- of a monthly fee

Regulatory Conditions

The offer is aimed at Operators holding individual licences or general authorisations 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 concerning the 'Electronic Communications Code' (referred to in Art. 38 of the Code), as last amended by Italian Legislative Decree no. 70 of 28 May 2012, and to companies holding a general authorisation for electronic communications networks and services pursuant to Article 25 of Italian Legislative Decree no. 259 of 1 August 2003, as last amended by Italian Legislative Decree no. 70 of 28 May 2012.



