

**TRANS ADRIATIC  
EXPRESS**



# TRANS ADRIATIC EXPRESS

EXA footprint  
TAE footprint



EXA Infrastructure has formed an exclusive JV with TAP - a gas pipeline connecting Turkey to Southern Italy - to deliver infrastructure services using high-quality dark fibre installed along the pipeline.

The JV is called **Trans Adriatic Express (TAE)** and provides:

- Lowest latency route between Italy and Istanbul
- Latest technology fibre and ILA shelters
- Provides unique diversity from Istanbul to Europe

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Service Availability	
Wavelength	10G, 100G, 400G
Spectrum	Yes
Ethernet	Yes
Dark Fibre	G.652D
ILA colocation	Yes



# The most direct route from Italy to Turkey

## Key statistics

**1138 km**

Total route from Bari to Kipoi

**106 km**

Adriatic subsea crossing

**0.19dB/km**

Attenuation @1550nm

**72**

Optical fibers

**12**

ILA Shelters Bari-Kipoi

## Trans Adriatic Express (TAE) explained

**TAE is a joint venture (JV) between EXA Infrastructure and the Trans Adriatic Pipeline (TAP), designed to provide the most direct and reliable fibre optic infrastructure between Italy, Greece and Turkey.**

### Connecting at scale:

- 2 G.652D cables laid adjacent to the TAP gasline between Melendugno, Italy and Kipoi at the Greek/Turkish border
- 48 pairs of G,652D subsea cables stretching 106km between San Foca, Italy and Senen beach in Albania
- 72 pairs of new terrestrial G.652D cables between Melendugno and Bari, Italy. Integrating with EXA Infrastructure's pan-European duct network
- ILA shelters are secured at regular intervals along the route across the gas compressor sites
- Infinera's optical platform is seamlessly integrated with the EXA Infrastructure optical network in Bari, Sofia, Athens and Istanbul
- EXA Infrastructure is the majority shareholder in the JV and has the sole commercialisation rights
- EXA Infrastructure provides all technical, operational and maintenance activities. The platform is managed from the EXAInfrastructure Dublin NOC
- TAE interconnects to local fibre providers in Albania, Greece and Turkey including a planned connection to SOCAR/TANAP for onward connection to Azerbaijan, the Caucasus and Central Asia

# TAE provides a unique proposition

## High quality, modern assets with high reliability

### State-of-the art network

- TAE provides the highest quality route between southern Italy and Turkey using **G.652D** fibre with average installed loss of <math><0.19\text{dB/m}</math>
- Existing fibre in traversing countries is generally old and of poor quality

### Low-latency route

- The gas pipeline has been built in a direct route, offering an attractive **low-latency route** between Italy and Turkey
- The route requires 39 directional drill river crossings and 3 microtunnels through mountains for end-to-end operations

### Embedded reliability

- The fibre optic cable has **been built to the same engineering standards as the gas pipeline**, providing exceptionally high levels of reliability compared to traditional cables installed in the public highway
- The gas pipeline includes a 40m wide protection strip where digging and construction activities are forbidden, **significantly reducing the possibility of cable damage**
- ILA shelters are placed within secure gas compressor locations

The fibre optic cable (FOC) ducts are buried at the same depth as the pipeline in all locations because they are attached to the pipeline. In normal terrain the depth of cover is specified as a **minimum of 1m** from the top of the pipe to the ground surface. In river crossings this requires a much deeper burial, **up to 10m** in some projects.



The fibre optic cable (FOC) ducts are strapped to the pipeline at 10 o'clock and 2 o'clock orientations. This gives a separation of around **862mm**. On the offshore duct only one FOC ducts is present at 10 o'clock position



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