Albania at the crossroads of the new information highway

The case of Trans Adriatic Express and how this changes Albania and the Balkans

Antonios Kollaras   **13 December 2022**

EXA company profile

About EXA Infrastructure

EXA was born in September 2021 after the private equity firm I Squared Capital has acquired the infrastructure division of GTT.

InfraCo Asset Perimeter

EXA owns and operates the most extensive dedicated infrastructure footprint connecting Europe and North America. Our network spans 32 countries and 8 subsea cable segments, including 3 Transatlantic routes. Our infrastructure provides the world's lowest latency links between NY and London.

EXA is laser focused on 4 highly complimentary products

Infrastructure (Fiber and Duct)
- Unique and differentiated routes
- Carrier grade long-haul fibre network
- G.652, G.655 and latest specification Low Loss fibre types

Transport (Spectrum, Wavelength)
- 10G, 100G and 400G wavelengths
- Deterministic Ethernet with fixed routing
- Lowest latency route from London to NYC

Colocation (ILA, DC)
- Fully flexible colocation integrated into EXA network
- Build to suit
- 14 Tier 3 equivalent datacentres
- 270+ Edge colocation sites
- 10KW to 1MW

Technical Services (CLS, FLM)
- 20 years' experience underpinning our client's businesses.
- First Line Maintenance and Spares Management
- Subsea landing party agreements
- CLS design, build and operate

Existing network
Under development

Our strategy

As a dedicated provider we will focus 100% of our resources and investment on the construction of new network.

- Our business plan will commit more than €500m of capex over the next 5 years, to expand the breadth and depth of our capabilities.

- We plan to build over 15,000km of new terrestrial duct and fibre network.

- Our long-haul and metro networks will expand to connect every major datacentre and CLS across our footprint.

- Unique subsea builds will augment and support our terrestrial networks.

Committed investments in Albania and SE Europe

EXA is executing a targeted growth strategy to invest capital in new infrastructure in Southeast Europe

Several projects have been approved and are currently in implementation phase:

- New transport route between Crotone in Italy and Preveza in Greece, with extensions to Athens and Thessaloniki.

- Trans Adriatic Express. TAE is a seamless fiber backbone between the Greek/Turkish border and Marseille, connecting the major data centers of Southeast Europe. Thessaloniki and Athens are amongst the cities that will be connected to TAE.

- New transport route between Belgrade and Milan with new PoP in Zagreb.

SE EUROPE PROJECTS

Existing footprint	
New footprint	
Point of Presence	

6

The case of Trans Adriatic Express

TAP is a gas pipeline connecting Turkey to Southern Italy. EXA has formed an exclusive joint venture with TAP to deliver infrastructure services using the high-quality dark fibre which has been installed along the pipeline. The joint venture is called Trans Adriatic Express

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

TRANS ADRIATIC EXPRESS

| EXA footprint |
| TAE Footprint |

Service Availability

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

4,500 KM NETWORK PERIMETER

6 COUNTRIES CONNECTED

>25 TBPS PER FIBER PAIR

400G D1 WAVELENGTH SERVICE

Q2 2023 READY FOR SERVICE

EXA

Trans Adriatic Express (TAE) Client Value Proposition

High quality, modern assets with high reliability

State-of-the art network

TAE provides a very high-quality route between southern Italy and Turkey using latest quality **G.652D** fibre. Competing fibre in traversing countries is generally old and of poor quality.

Embedded reliability

By being installed on a gas pipeline, the route is well protected and expected to provide **very high reliability** compared to competing networks

Low-latency route

The gas pipeline is built in a very direct route (for economic reasons) and therefore offers an attractive **low-latency route** between Italy and Turkey

How TAE changes the Albanian ecosystem and the Balkans?

How TAE changes the Albanian ecosystem and the Balkans

New routes to Greece and Italy

Existing trans Adriatic subsea infrastructure is dated and lacking suitable scale. Existing terrestrial routes rather old and generally of lower quality
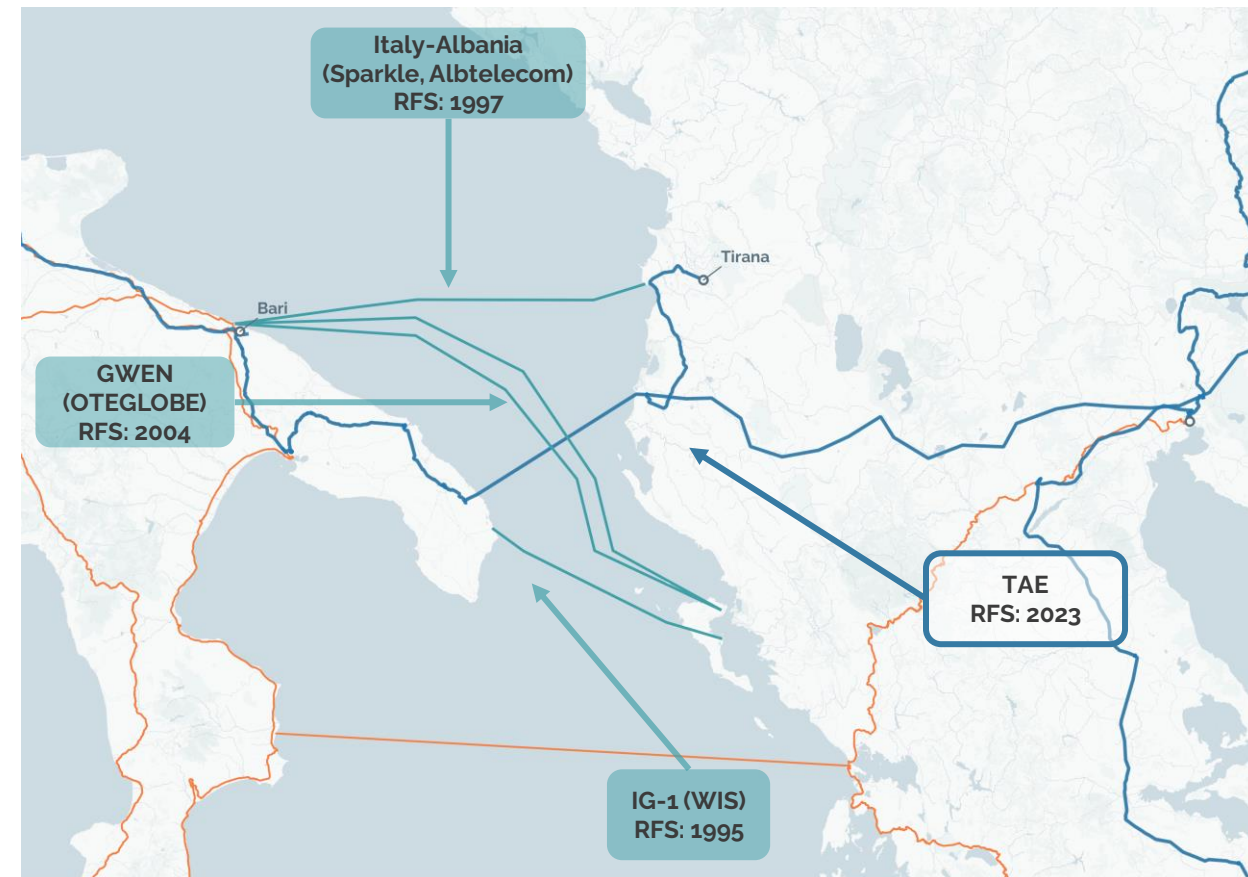
TAE provides an alternative route that connects Albania to Greece and Italy that is especially important for the Albanian Internet ecosystem

- **Increased resiliency**

- **Increased traffic stability**

- **Improved reach and latency**

International Internet Bandwidth (Gbps)

Country	2018	2019	2020	2021	2022
Greece	92.0	281.0	300.0	340.0	410.0
Italy	182.5	140.0	100.0	180.0	300.0
Serbia	30.0	70.0	91.0	140.0	200.0
Bulgaria	20.0	20.0	120.0	160.0	180.0
Germany	–	–	–	–	20.0
Kosovo	–	–	–	10.0	20.0
North Macedonia	–	–	1.0	1.0	1.0
Montenegro	10.0	–	–	–	–
Total	334.5	511.0	612.0	831.0	1,131.0

Data from Telegeography.com

Italy-Albania
(Sparkle, Albtelecom)
RFS: 1997

GWEN
(OTEGLOBE)
RFS: 2004

TAE
RFS: 2023

IG-1 (WIS)
RFS: 1995

Tirana

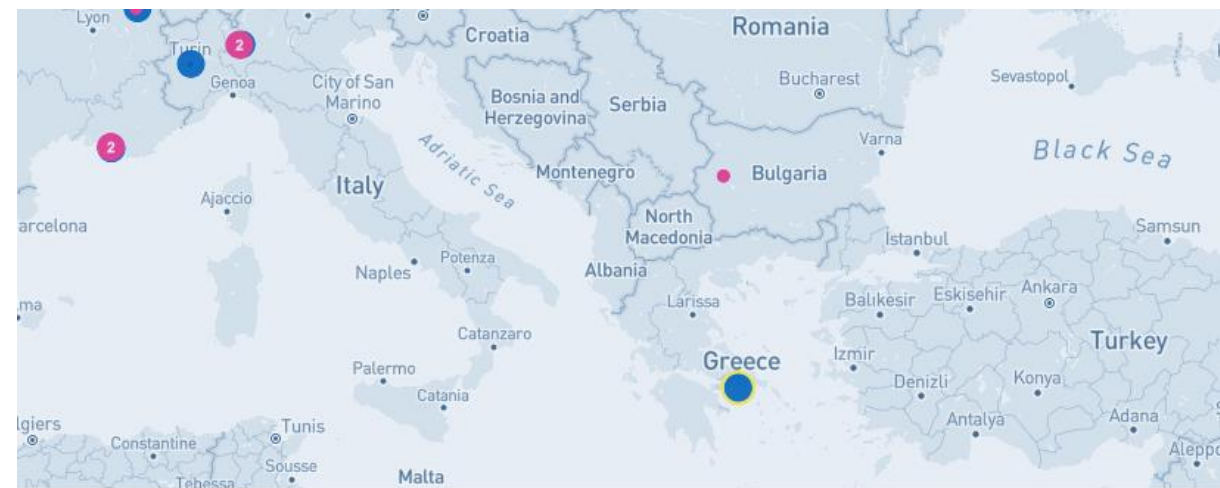Bari

How TAE changes the Albanian ecosystem and the Balkans

TAE stimulates Internet growth

- TAE will further stimulate the development of the Internet and local ecosystem.

- Allows access to the **hyperscale deployments** in Istanbul, Athens (Planned: Google, MSFT Discussions: FB and AWS) and Milan.

- Further facilitates the digital transformation for end-users and businesses

Map source https://www.cloudinfrastructuremap.com/

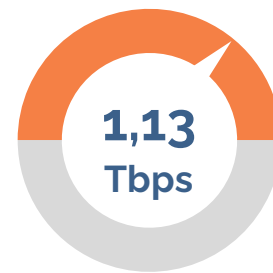# How TAE changes the Albanian ecosystem and the Balkans

Investment effects

- The TAE can be seen as a **growth enabler**. It is expected to attract additional local/foreign investments to satisfy the needs of a growing ecosystem.

- TAE complements investments in the domestic backhaul and access networks

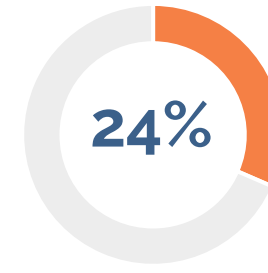- Spurs further investments

Success triad of an ecosystem:

- Subsea cables

- Datacenters (+edge caches and IXPs)

- Terrestrial fibers

Albania and SE Europe

1,13 Tbps

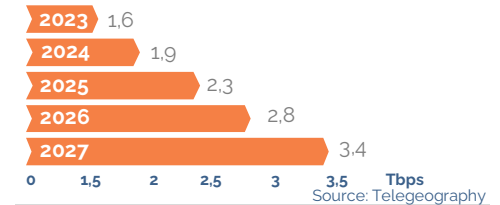Albania 2022E – Used International BW
Source: Telegeography

24%

CAGR Albania 2021-28 Used International BW
Source: Telegeography

Albania - Used International BW

Year	Tbps
2023	1,6
2024	1,9
2025	2,3
2026	2,8
2027	3,4

0   1,5   2   2,5   3   3,5   Tbps
Source: Telegeography

Old CS 1995
Dated subsea infrastructure

Greece
Attracting new DC, Cloud, submarine cables investments

Southeast Europe markets
The Southeast Europe markets experience relatively **high growth with low international competition** in comparison to WE

Turkey
Turkey's economy is forecast to experience the **largest growth %** in Europe by 2025. All the OTTs have established a growing presence in the country

Bulgaria
One of the largest regional markets, Sofia is a **key city** where many network routes converge and protection rings close

EXA's pipeline of investments

EXA is executing a targeted growth strategy to invest capital in new infrastructure in Southeast Europe

Several projects have been approved and are currently in implementation phase and others are in the project pipeline:

- EXA will be establishing a new PoP in the NAMEX Bari facilities in Bari.
  Expected RFS: Q1 2023

- New DF route connecting Crotone to Lamezia effectively providing diversity out from Crotone to the north of Italy
  Expected RFS: Q1/Q2 2023

- Crete expansion. Expansion of the network to Chania
  Expected RFS: Q3/Q4 2023

Existing footprint
New footprint
Point of Presence

CROTONE-LAMEZIA TX SHORTCUT

CRETE EXTENSION

NAMEX BARI INTERNET EXCHANGE POINT

Milan · Zagreb · Marseille · Sofia · Bari · Tirana · Istanbul · Thessaloniki · Kipoi · Crotone · Preveza · Athens

EXA

Thank you

EXA+