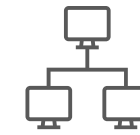
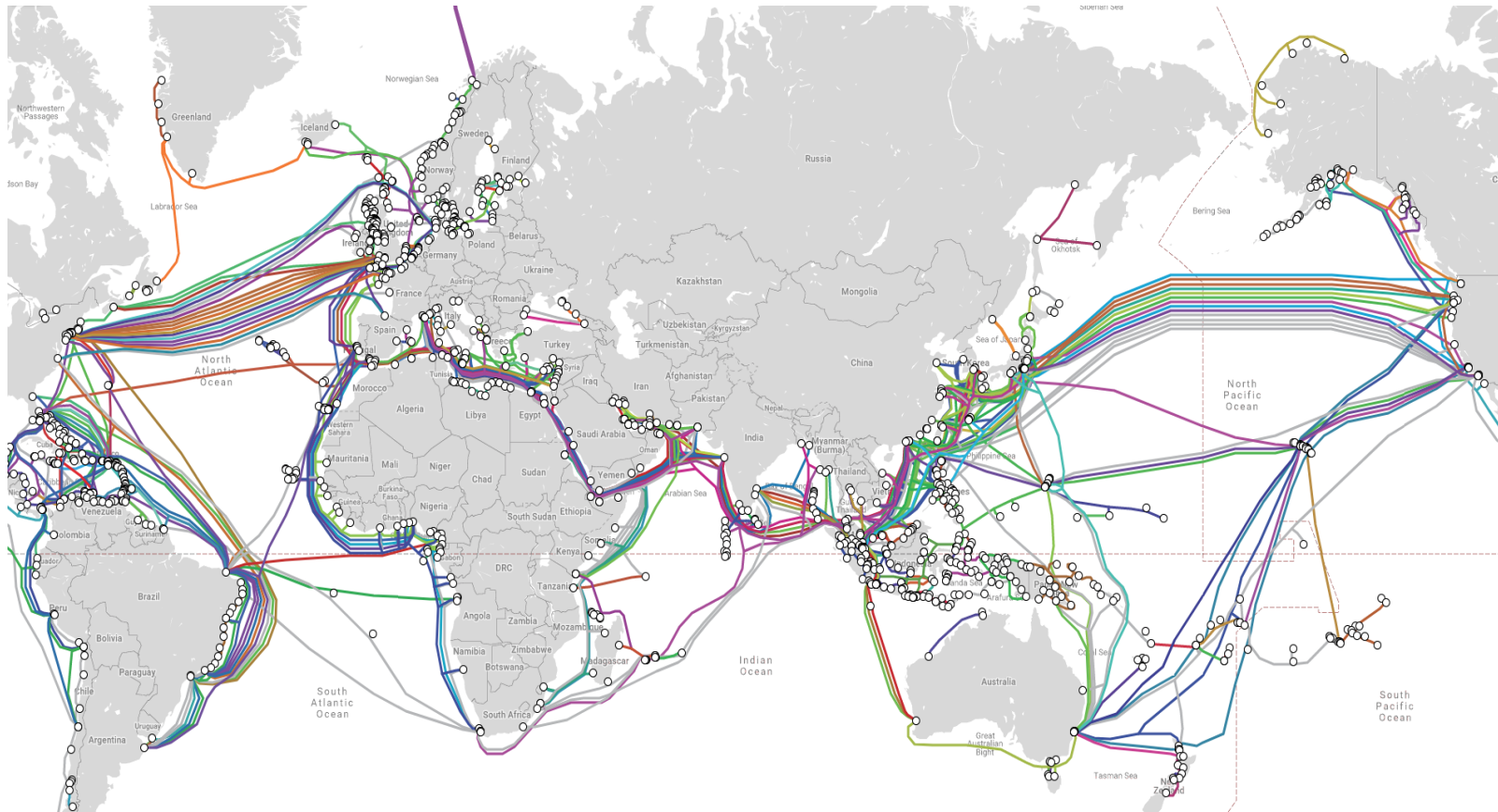




Digital infrastructure: From Strategy to Investment opportunities

EaP Digital Conference – EU4Digital 24 October

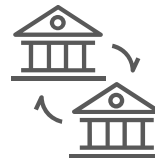
International digital connectivity is foundational to the global internet and developing national markets



Interconnects national networks to form the world wide web



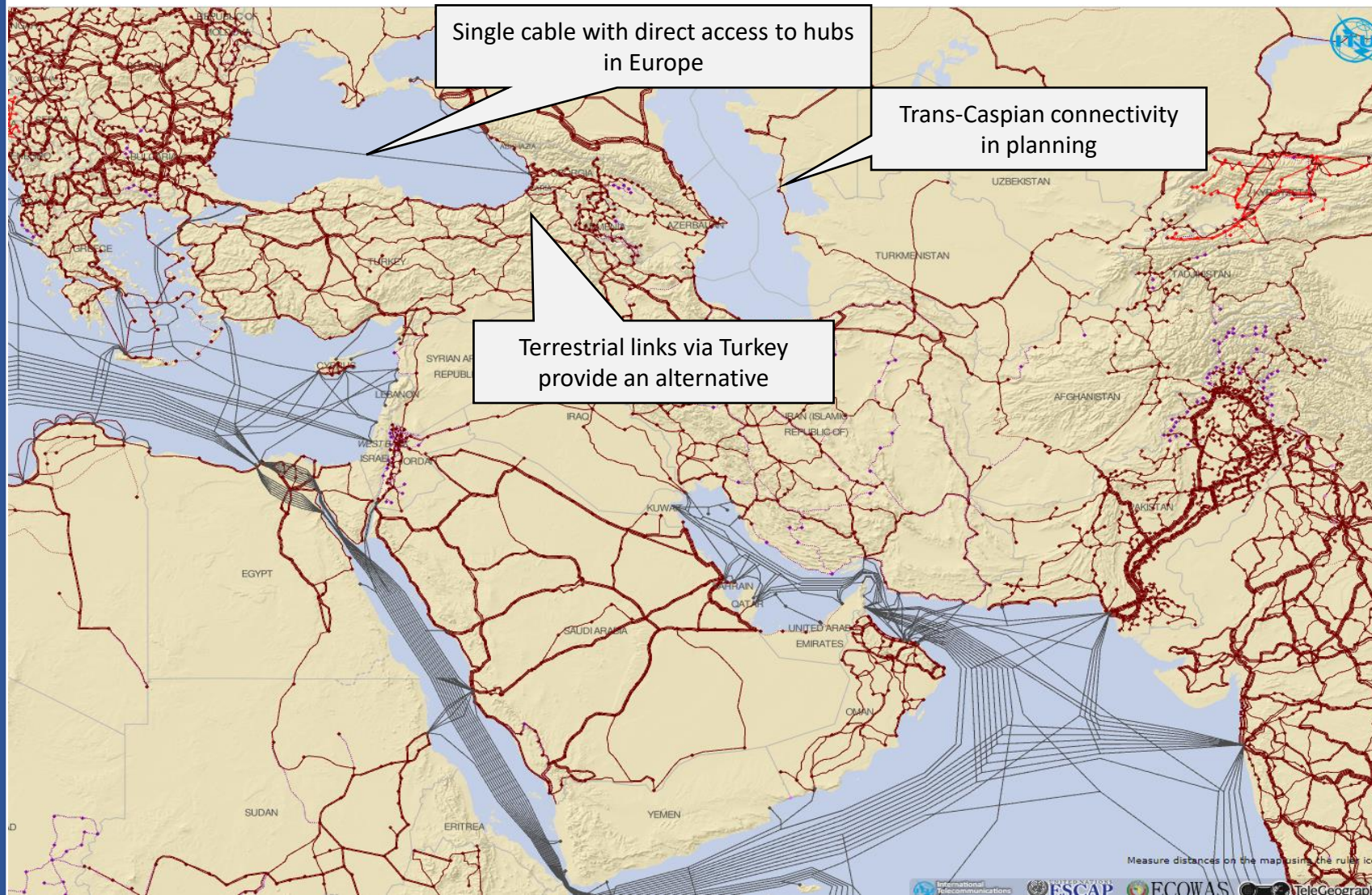
Most upstream segment of the broadband value chain



Enables cross border transactions – data exchange, financial transactions etc.

There are over 400 active submarine cable systems globally and ~60 under development

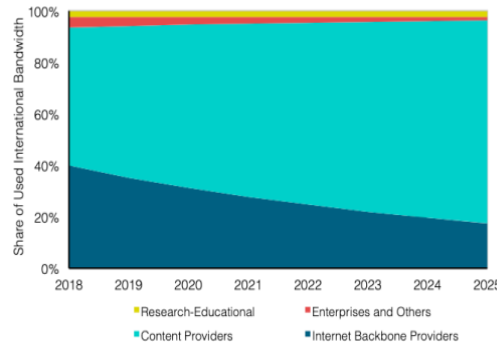
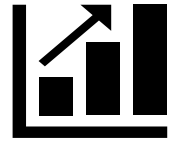
International connectivity in the South Caucasus



- Region is primarily served by a **single submarine cable** connecting directly to Europe
- ISPs and telcos in the region exchange traffic and **provide transit for each other** already
- Terrestrial **connectivity via Turkey** provides an alternative
- Region is also connected to **Russia and Middle-East** along North-South corridor

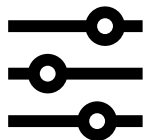
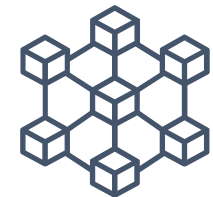
Key global trends that are influencing international connectivity market development

Mature international connectivity markets are still growing. Trans-Atlantic, Trans-Pacific, and Europe-Europe used international bandwidth is forecasted to grow between 30-40% CAGR till 2028.



Large **content providers are the biggest users** of international bandwidth and are entering the infrastructure market on key routes.

Content and digital services are **moving closer to end users** through edge computing, requiring multiple access routes to such nodes for resilience.



Terrestrial international connectivity routes are increasingly **more relevant to avoid existing choke points** on submarine networks and for redundancy.

The South Caucasus region can benefit from greater international access

The opportunity in the international connectivity market for the South Caucasus countries is significantly **larger than currently explored**, if the scale offered through cooperation among sector stakeholders in the three countries is leveraged effectively.

1

Resilience of international access

2

Growing domestic demand

3

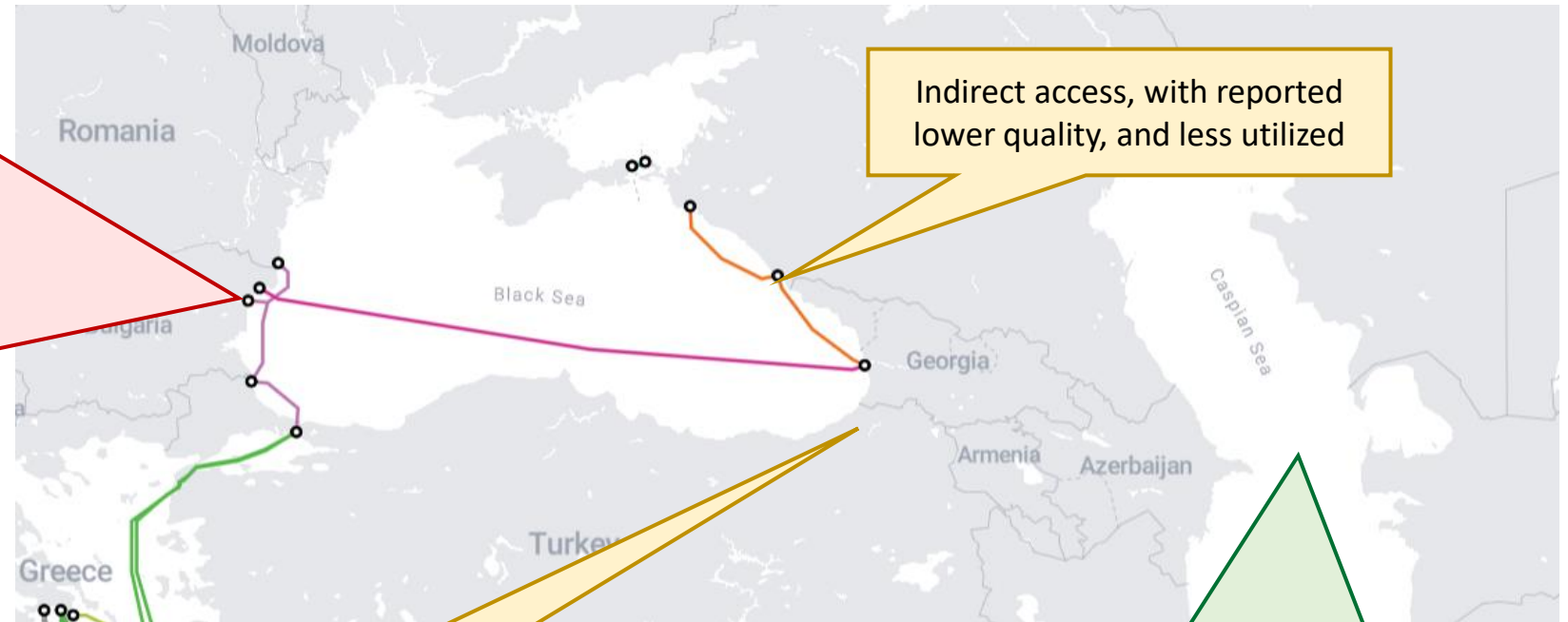
Developing inter-regional networks

Resilience: Additional direct connectivity between the region and Europe will boost cyber-resilience

Over 10 years old single-owner cable system connecting Georgia to Europe – single point of failure risk

Only direct access to global connectivity hubs for the – terrestrial routes to via Turkey serve as alternatives

Note Western coast countries **using submarine cables** to connect with each other and to inter-regional cable systems via Turkey

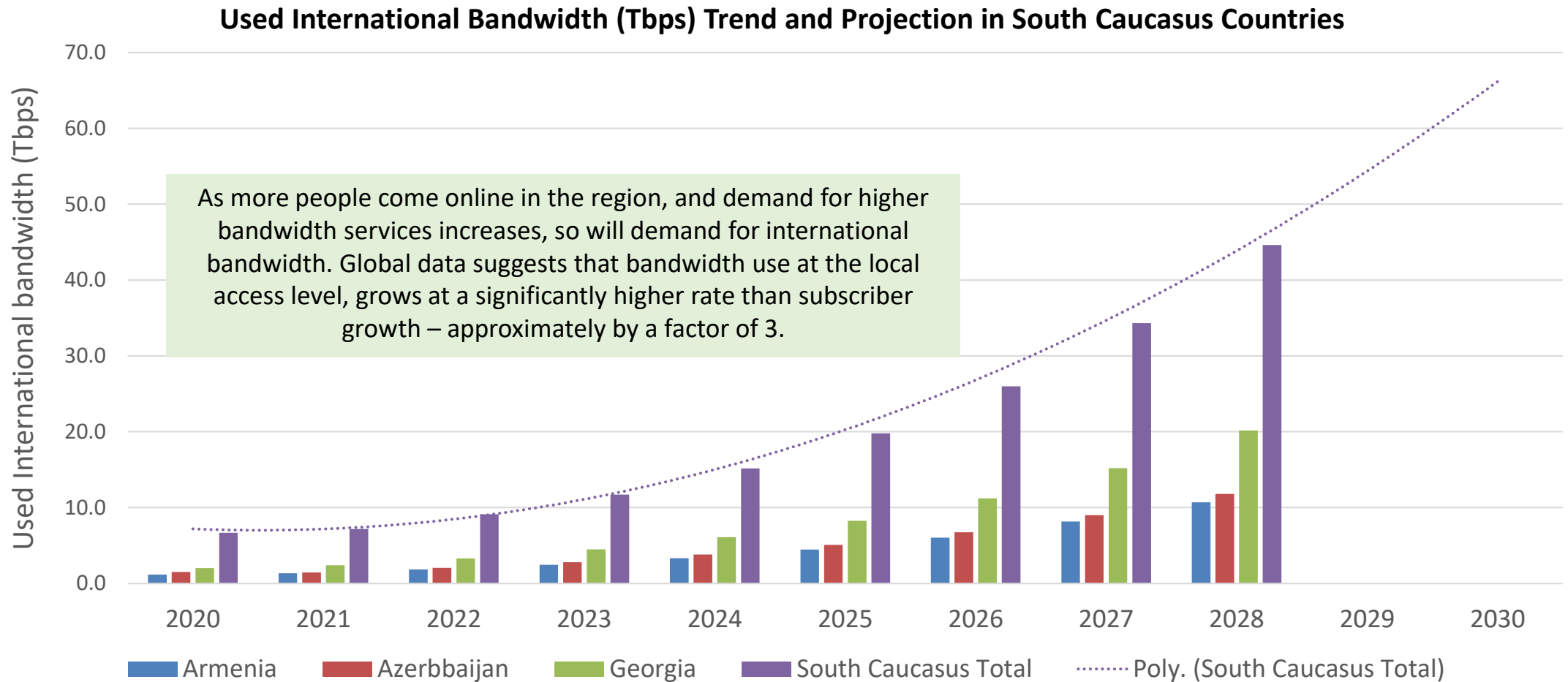


Indirect access, with reported lower quality, and less utilized

Current alternate route for the region to connect to global resources

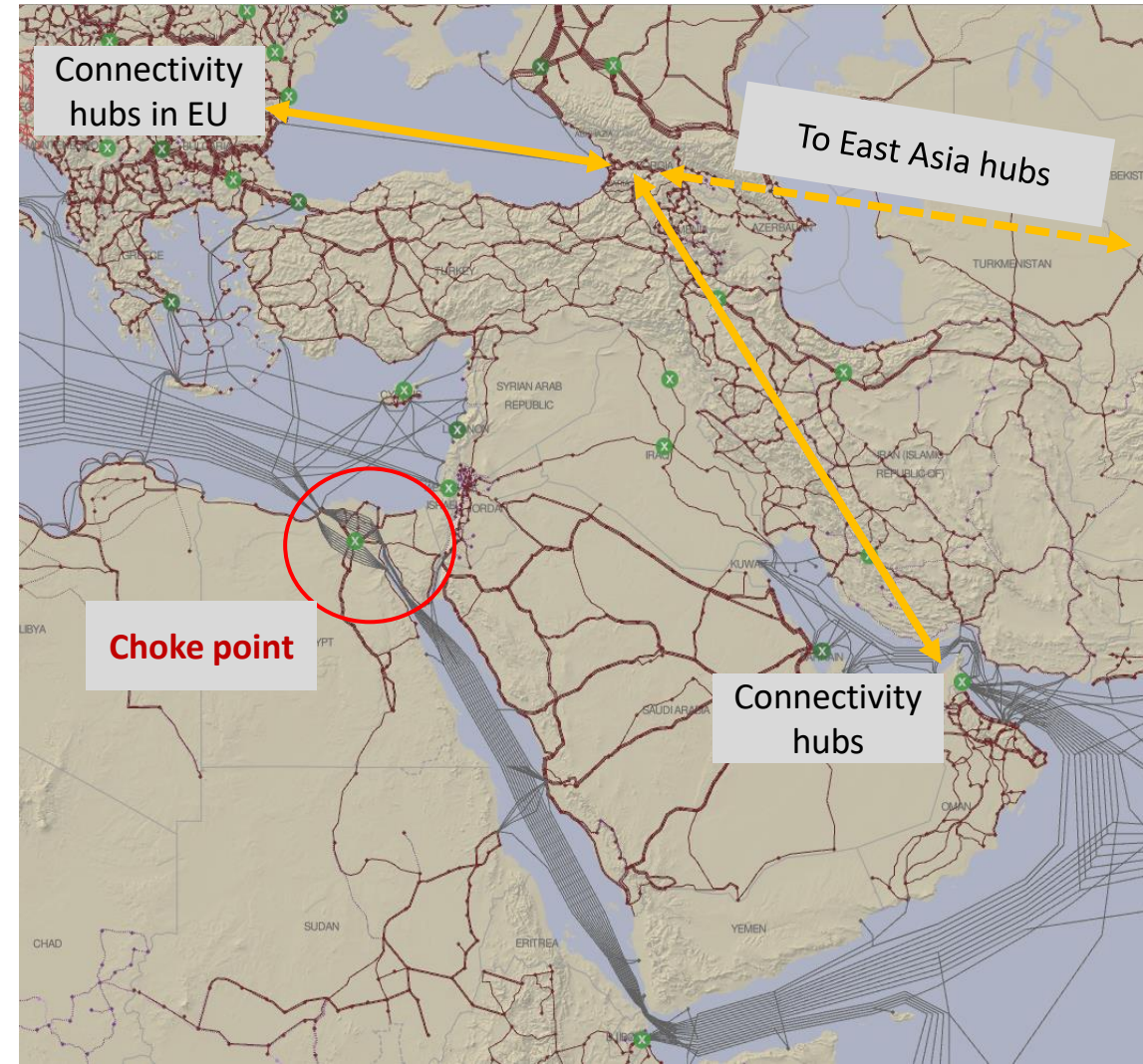
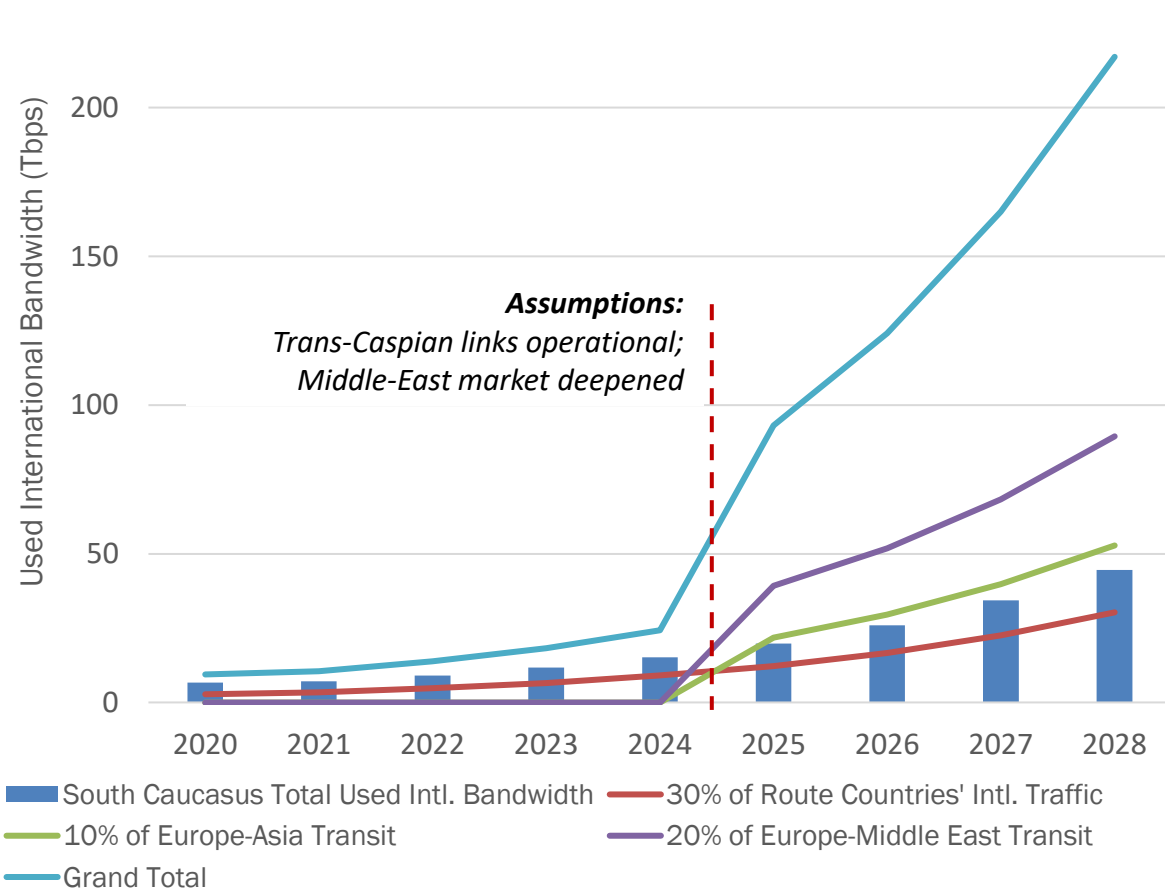
Trans-Caspian cables under discussion between Azerbaijan and Central Asian countries, providing access to **East Asia** along the shortest path – *opportunity for developing redundant access through 2 cable systems*

Domestic Demand: Growing domestic demand for connectivity is driving international used bandwidth



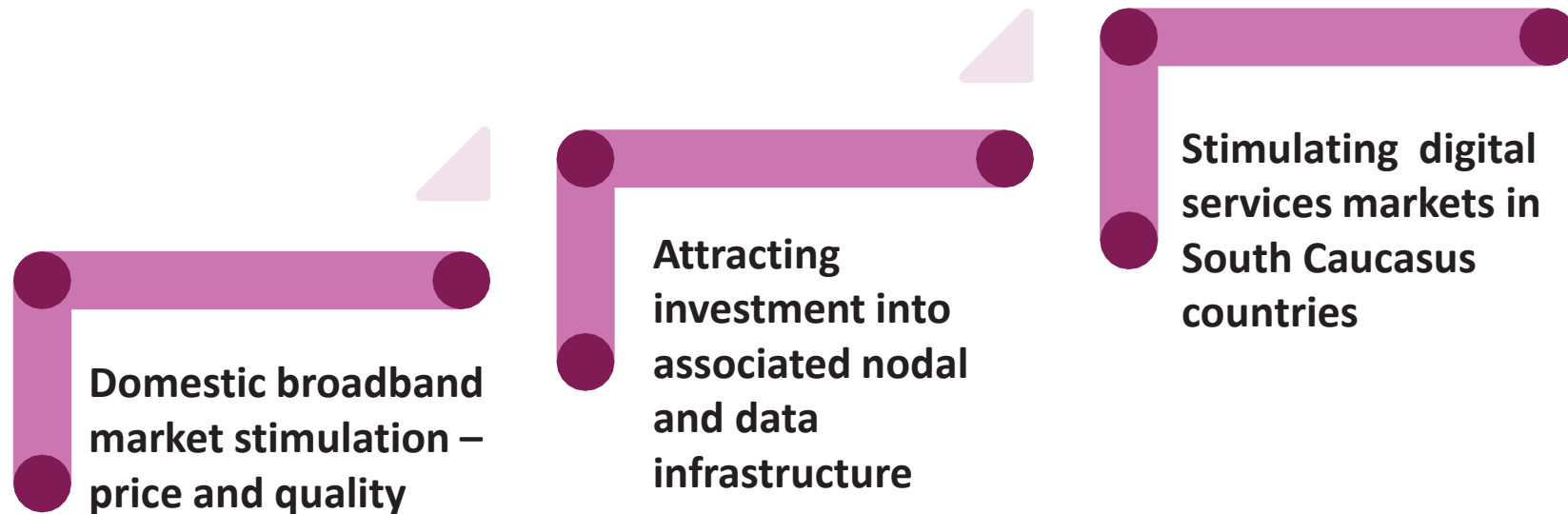
Inter-regional Connectivity: Potential for viable alternate route between Europe and Asia

Potential Used International Capacity via South Caucasus (Tbps) if Connectivity Corridor Opportunity is Developed



All South Caucasus countries can realize multiple downstream benefits

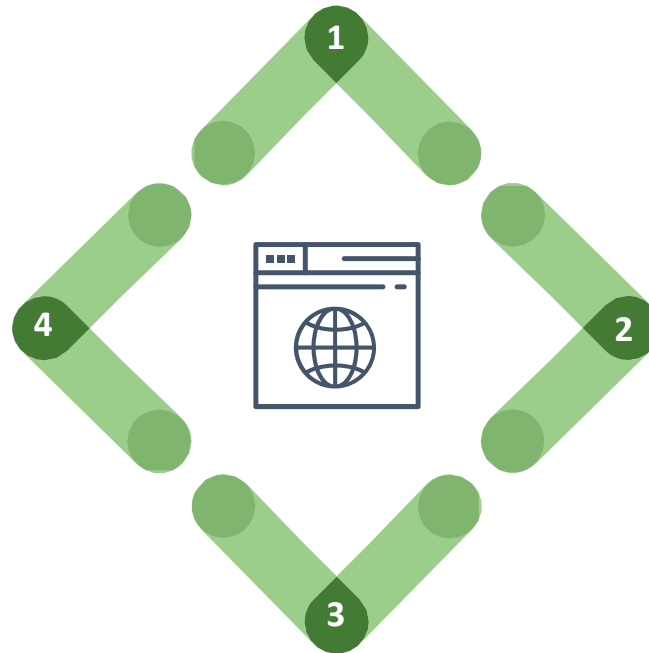
Global experiences have demonstrated that countries can build on improved connectivity to **establish data infrastructure and stimulate digital services markets**. All three South Caucasus countries stand to benefit from this, with potential to specialize in the development of their respective technology and digital services sector.



What's needed to realize these opportunities?

Coordination and Collaboration

Data Infrastructure and
Skilled Talent Pool



Dense Cross-Border
Terrestrial Connectivity

Redundant Black Sea and Caspian
Sea Submarine Infrastructure



Thank you for your attention!