

# ANIX 26 Meeting

Tirana

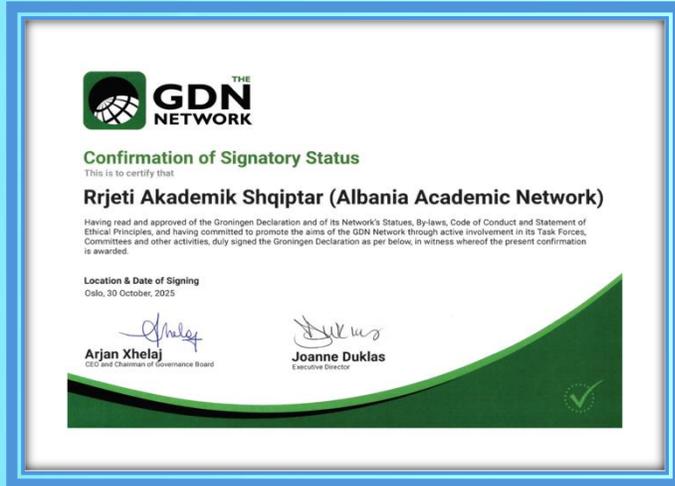
February 5<sup>th</sup>, 2026

Dr. Arjan Xhelaj





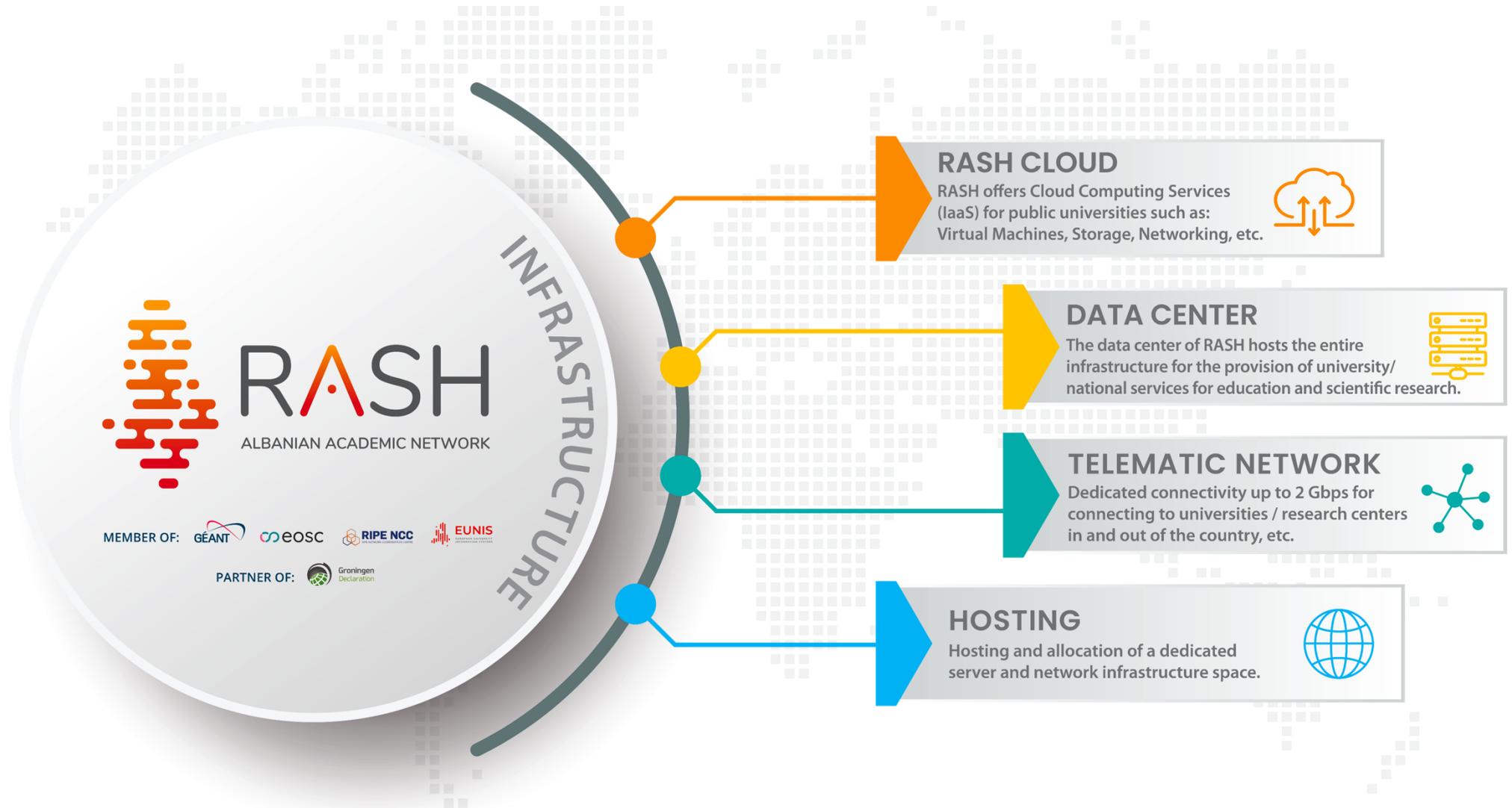
- **RASH the Academic Network of ALBANIA is an Autonomous Inter-institutional Centre for ICT.**
- **RASH as the Albanian NREN joins as mandated member 2012 the European Research & Education Network- GÉANT.**
- **2016 RASH the Albanian NREN build the Academic Network Backbone for universities and research institutions.**
- **2017 RASH infrastructure connect with GÉANT Network through interconnections with its 38 NREN.**
- **2020 joins as mandated member EOSC –the European Open Science Cloud.**
- **2023 RASH upgrade the connection to GÉANT Network by 100 GBps.**



## Software developed “in-House” by RASH

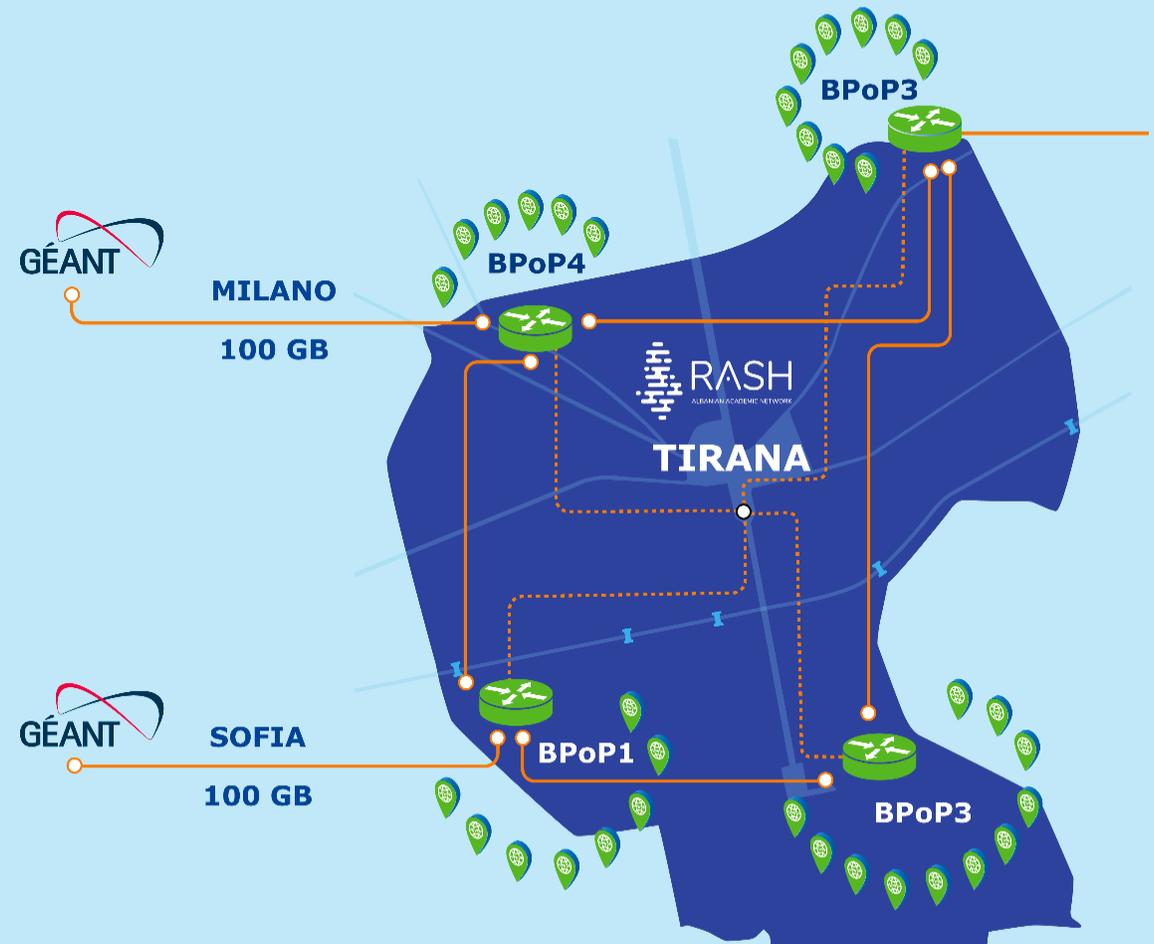


## RASH e-Infrastructure “in-House”

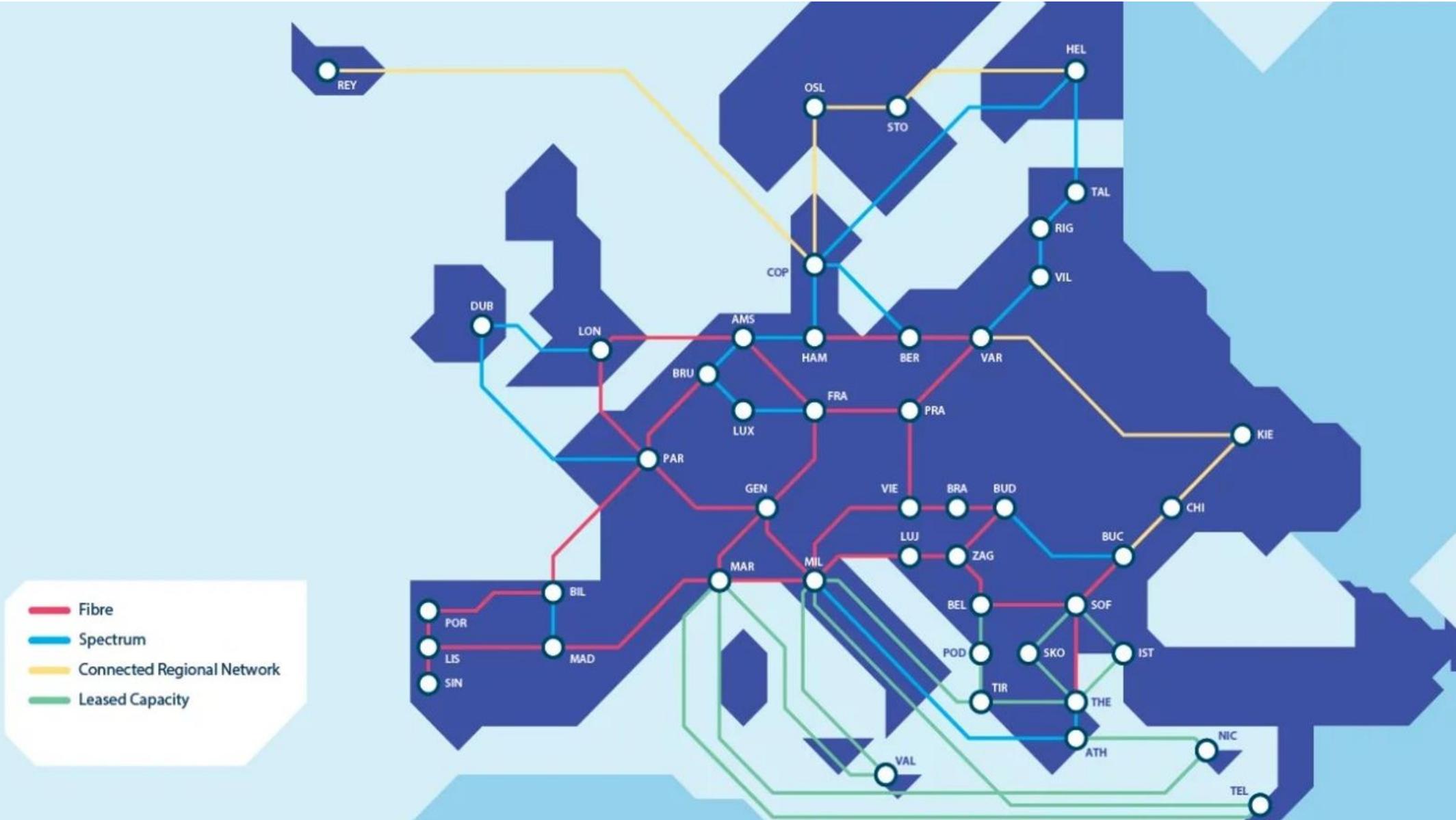


# RASH NETWORK TOPOLOGY

RASH established an optical fibre network linking all public HEI's in Albania. The basis of this topology is a ring, consisting of 4 main PoPs (Point of Presence), which communicate with a 10 Gb/s speed on two paths.



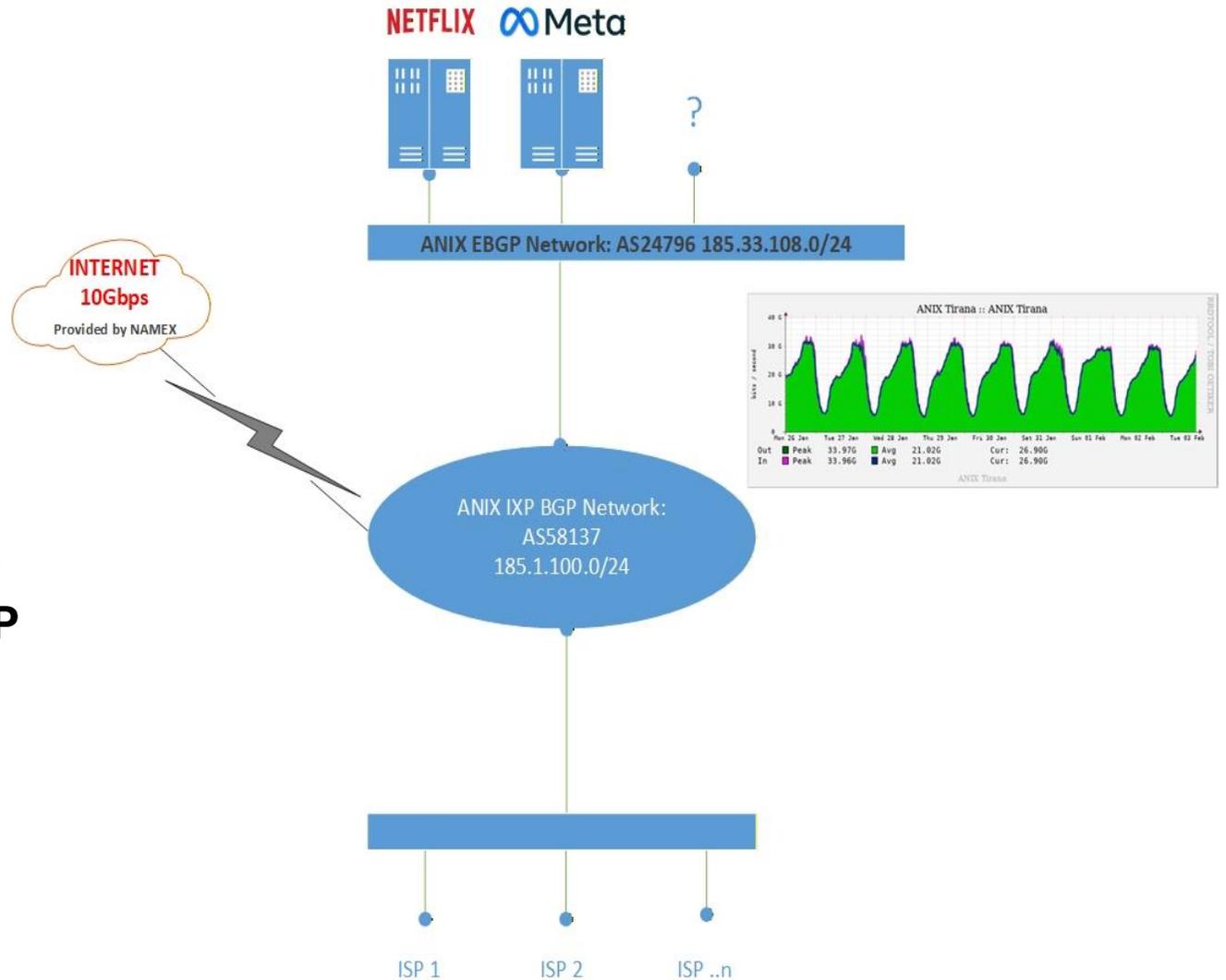
## RASH Interconnection to Europe



- Fibre
- Spectrum
- Connected Regional Network
- Leased Capacity

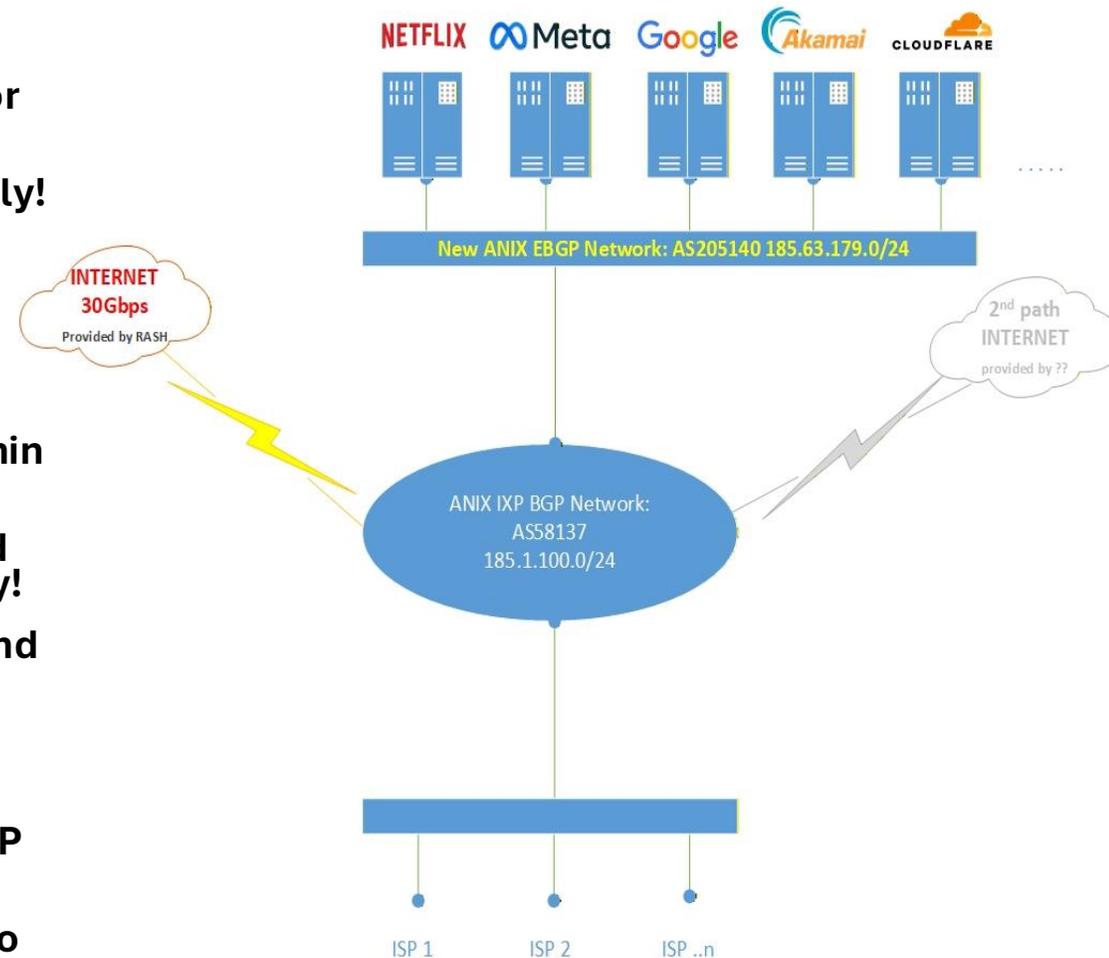
## ANIX AS-IS

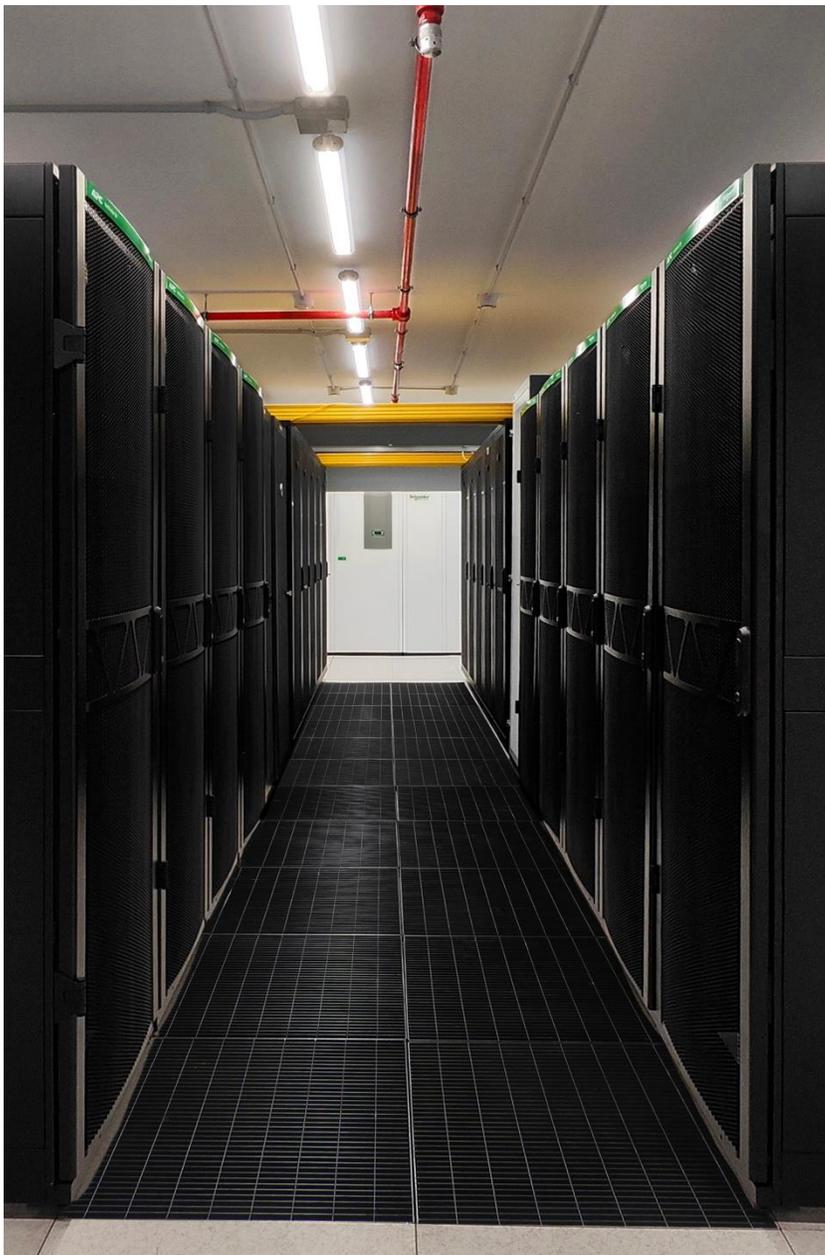
- **10Gbps IP Transit.**  
**Not enough!!!**
- **Approx. 35Gbps Routed.**
- **META and Netflix CDNs** already installed. Need for more CDN requires more IP Transit capacity!
- **ASN and IP Addressing** allocated temporary from NAMEX resources.



## ANIX AS-TO-BE

- ANIX needs to be powered enough to support more CDNs.
- 30Gbps IP Transit provided by RASH. Enough for starting, but maybe not for too long !!!
- 2<sup>nd</sup> path for IP Transit would become necessarily!
- 3<sup>rd</sup> 100KW UPS installed for electrical power backup.
- Cloudflare already has installed the Node Cluster at ANIX.
- Akamai and Google are willing to join ANIX within 2026.
- META and Netflix CDNs already installed. Need for more CDN requires more IP Transit capacity!
- Possibility for more Tier 1 Service Providers, and CDNs to join ANIX data center.
- Content Providers will join ANIX: KLANI IM already installed the CDN.
- ASN and IP Addressing for EBGP services and IP Transit will be allocated from RASH to ANIX.
- Estimation of >70% of Albania Internet Traffic to be locally Routed by ANIX IXP members.

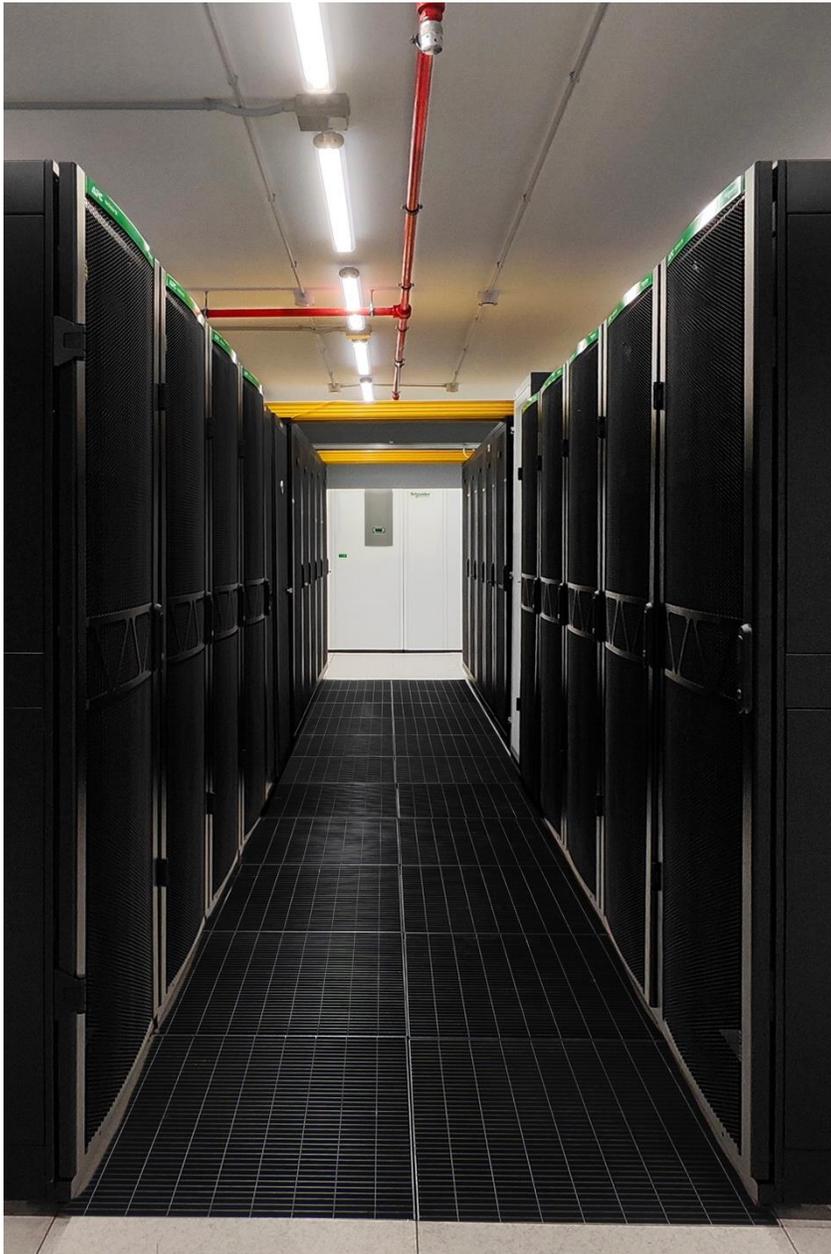




## ANIX DataCenter

- Server room 1 upgraded to 22 Rack
- New 100 KVA UPS added to the power system. New Racks connected with 3-Phase PDUs.
- 2 International links of 100Gbps active.
- Termination to MIX DataCenter (Milano) and to Equinix (Sofia).
- 30Gbps uplink from Cogent via MIX. Up to 50Gbps available.
- Up to 80Gbps available from Sofia link.
- Optical fibre entry point to be organized and dedicated ports for ISPs.
- 5 Racks dedicated to ANIX. Power and cooling offered to ANIX.
- 2 more Racks will be needed by ANIX for the upcoming CDN providers.





## ANIX Future

- Server room 2 planned, ready by 2027
- New 100 KVA UPS projected to be installed. 3-Phase PDUs for each Rack.
- New cooling equipment required.
- Prediction is that 50Gbps uplink, or more, will be needed to maintain IXP cache filling.
- Connection to a Tier 1 Global Network via MIX with 100Gbps dedicated.
- Other Tier 1 will be added and provide services for the members from alternative route.
- Charging scheme to be consulted and customized to cover all the IXP expenses.
- The Euro / ALL situation. Changings to charging scheme are needed.





# Thank You!

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