# Netflix in CEE

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# **Open Connect Partner Engagement EMEA**

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### Partnership Ecosystem

#### COOPERATION PARTNERSHIP WIN-WIN

- Netflix is an entertainment company
- Online services and internet networks depend upon each other
- Open Connect invests in reducing cost for ISPs
- As an internet citizen, we care about how ISP's traffic navigates through the network to reach our content
- We have an Open Peering policy and deploy OCAs on first come first serve basis



#### | Value of Open Connect

#### **Power Efficient**

It takes just 560 w to power a 130Gbps Storage

#### **Network Efficiencies**

Bring content closer to the end user and decrease long haul connections

#### **Best in-class Encoding**

5 Mbps to stream one movie 200% increase in number of hours streamed with 1 Gbps over 5 years

# Open Connect

#### Timing is everything

Take advantage of the off-peak hours to load content which saves time, congestion and doesn't cost network a thing

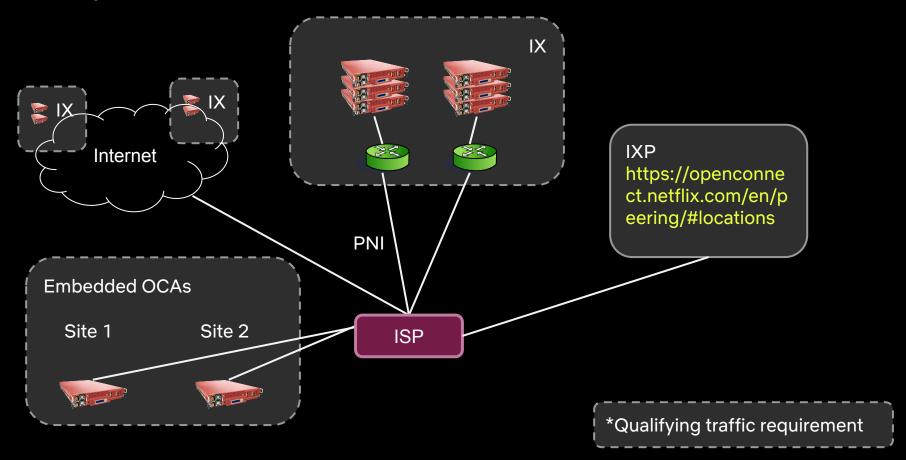
#### **Small but mighty**

A country's entire Netflix library first into about half a rack of servers A half rack can serve 200,000 streams simultaneously

#### **Fault tolerance and Resiliency**

Localization limits impact of incidents and eliminates single point of failure

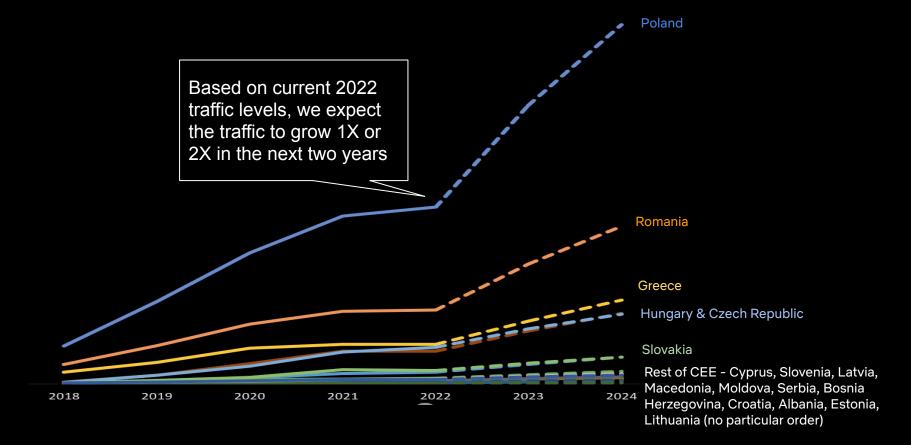
# **ISP Options**





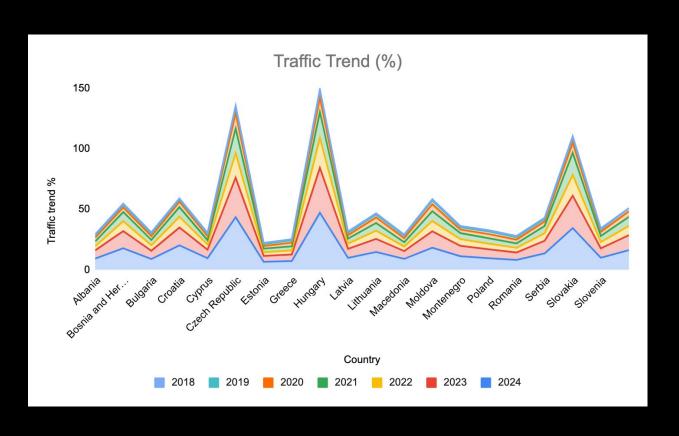
#### Traffic Growth in CEE Countries (absolute)

As seen by Open Connect

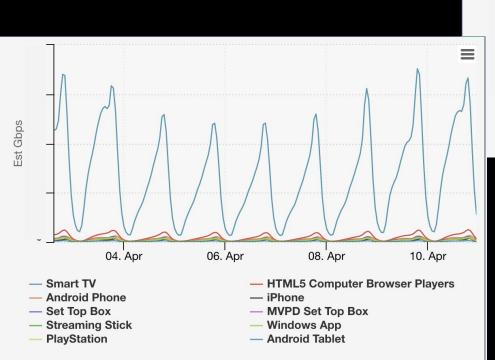


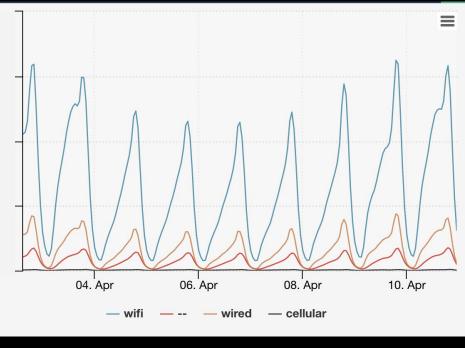
# Traffic Growth in CEE Countries (relative)

As seen by Open Connect



### | Traffic Sources





Est Gbps

# | CEE Traffic Summary

#### Total Peak Traffic 8 Tbps

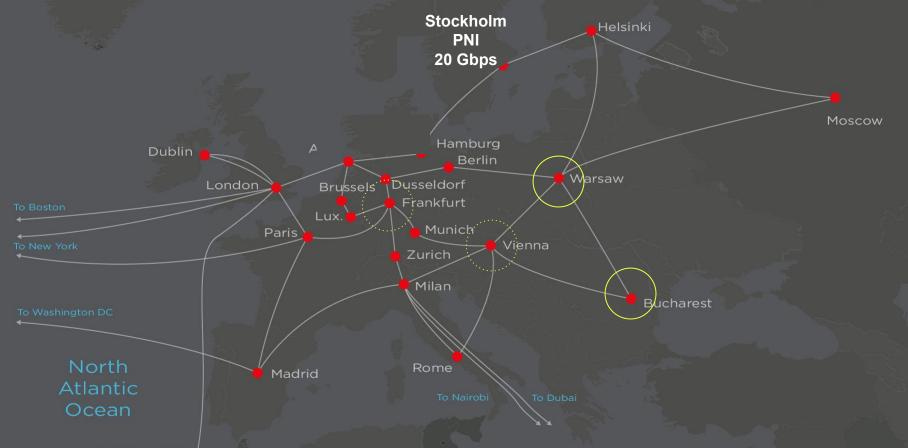
Embeds OCAs	PNI	IXP	Transit
69%	24%	6%	1%

#### Top PNI Sources

- Warsaw (1.1Tbps)
- Vienna (600Gbps)
- Bucharest (250Gbps)
- Frankfurt (125Gbps)

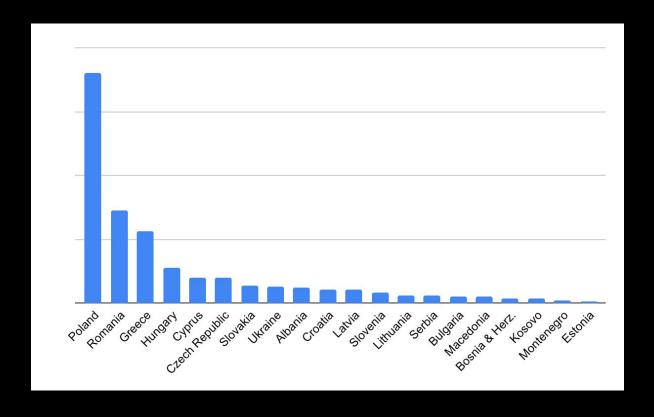
# **Netflix IX Locations**





#### OCAs Penetration

- 450+ OCAs
- New deployments in 2021
  - Croatia
  - Macedonia
  - Bosnia & Herz.
  - Kosovo
  - Montenegro



# Main Challenges

- IPV6 adoption
  - Smart TVs older than 3 year
  - Partner Networks IPV6 readiness
- Expanding Speed Index to more CEE countries
  - ispspeedindex.netflix.net
- Scaling in the CEE

# Thank You.

