

euro-IX

—

13th EGTI meeting

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EURO-IX MEMBERS



ARISTA

cira 

 EQUINIX
WHERE OPPORTUNITY CONNECTS

 Extreme[®]
networks

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A DIGITAL REALTY COMPANY

 Internet
Society

JUNIPER[®]
NETWORKS

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smartoptics

 SOLID OPTICS
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Membership Association of IXPs



Events

- Two Membership events per year hosted by our Members
- Workshops & hackathons
- Online/ virtual workshops



Services

- Reports
- Newsletters
- Mailing list
- Keeping the community connected – Virtual events



Tools & Community Projects

- Internet eXchange Point Database – IXPDB
- Peering Toolbox
- Fellowship & Mentor-IX
- Route Server Large BGP Communities list
- A new IXP Film

The IXP {DB}



The Internet eXchange Federation – IX-F



The IXP {DB}

- Allows IXPs to report their data in a standard format
- It includes data sets on:
 - The IXP participants
 - IXP locations
 - Hardware used at IXPs
 - Port Prices
 - Route Servers
- The data sets have been agreed by the community

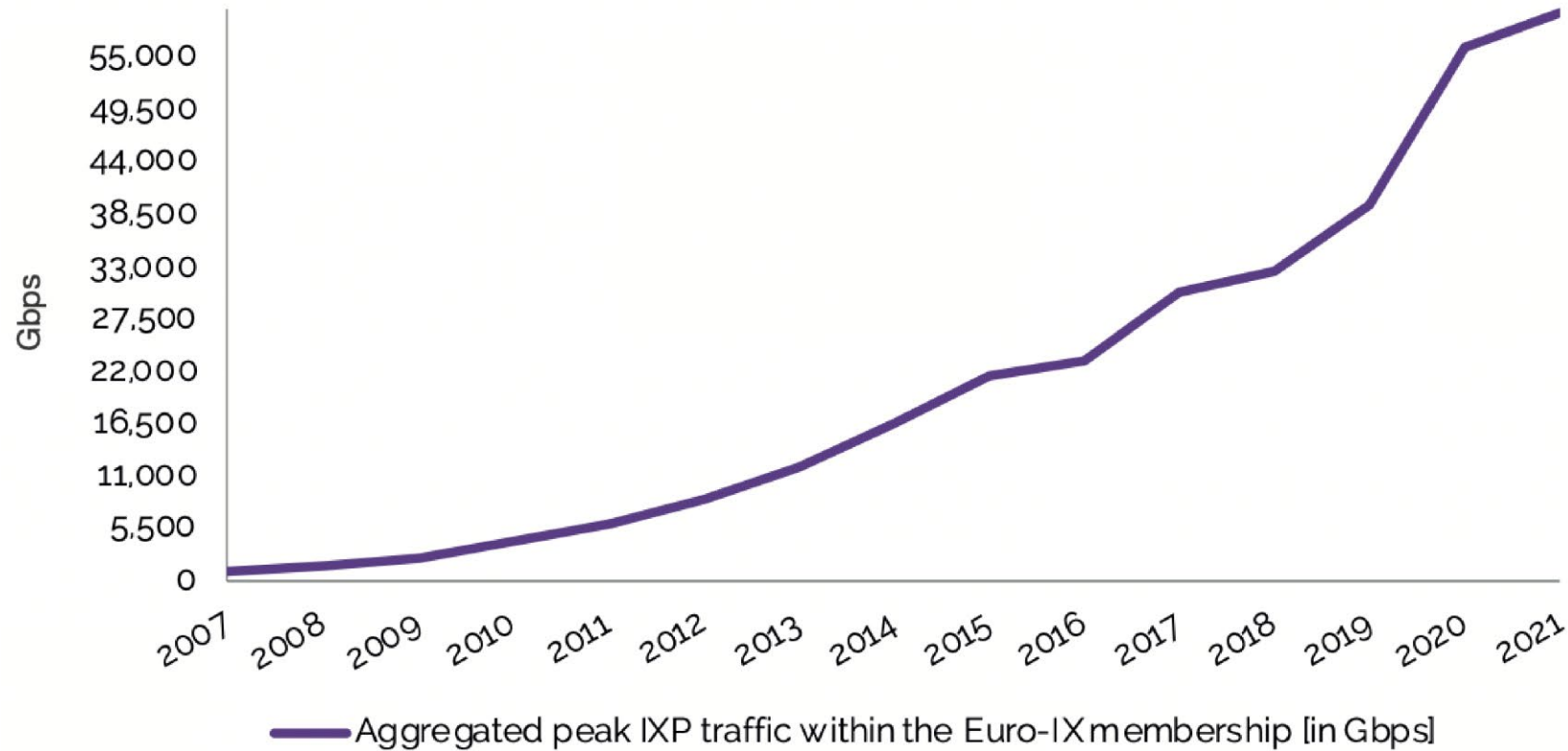
IXP {DB} Key Features

- Automated data collection
 - Organisational
 - Infrastructure
 - IXPs & facility locations
 - Peering LAN prefix(es)
 - Hardware
 - Connected networks
 - Ports and speeds
 - MAC & IP address(es)
 - Port prices
 - (Prefixes announced – coming soon)
 - Aggregate traffic
- Easy integration
 - Standardised JSON template
 - Automatic export from IXP Manager / Asteroid
- Incorporates third party data sources
 - MANRS
 - PeeringDB
 - Telegeography (coming soon)
- Web-based GUI
 - Search interface
 - Data tables & visualisations
 - Comparison tools for IXPs & ASNs
 - User accounts for manual data entry

IXP by Number of Networks

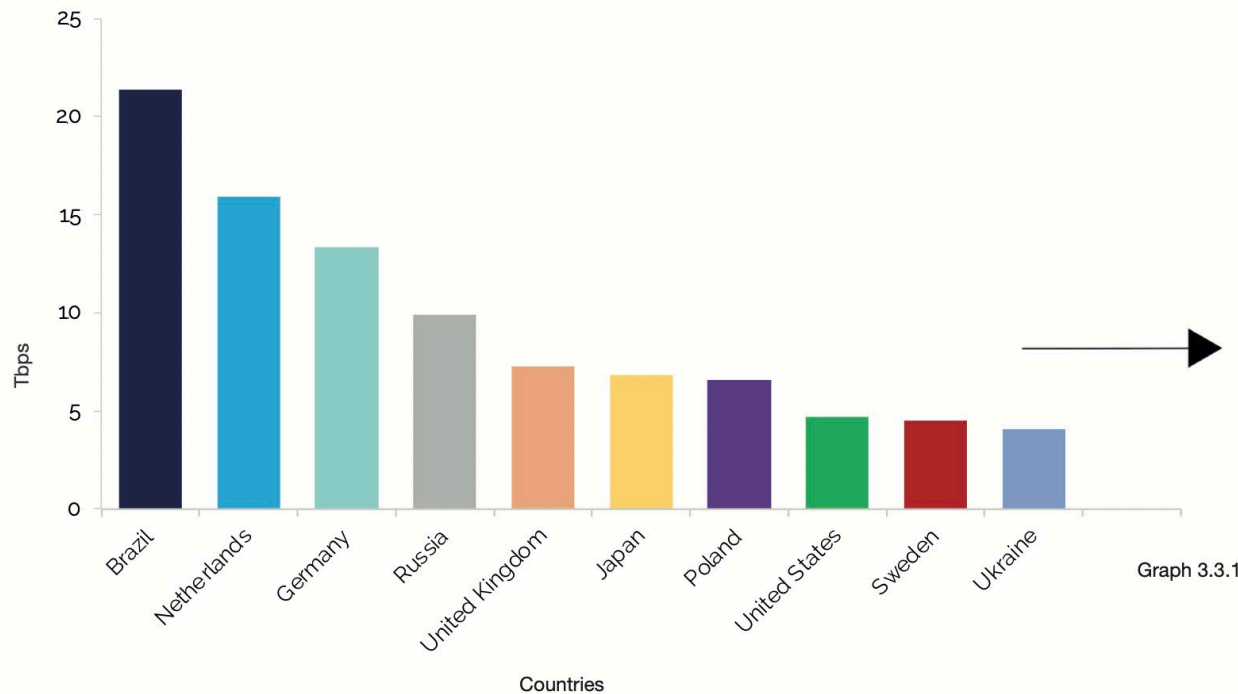
	IXP	Number of listed ASNs
1	IX.br São Paulo	2,413
2	DE-CIX Frankfurt	1,065
3	AMS-IX	868
4	LINX LON1	811
5	EPIX	561
6	NAPAfrica IX Johannesburg	502
7	EPIX Warsaw	475
8	IX.br Fortaleza	474
9	IX.br Rio de Janeiro	470
10	DataIX	467

Aggregated Traffic growth since 2007

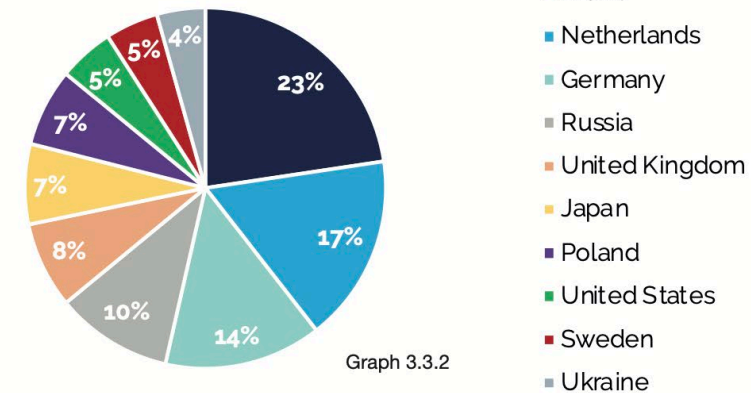


Top 10 Countries with the most IXP Traffic

» Top 10 countries with the most IXP traffic in the world in 2021 - all regions (in Tbps)

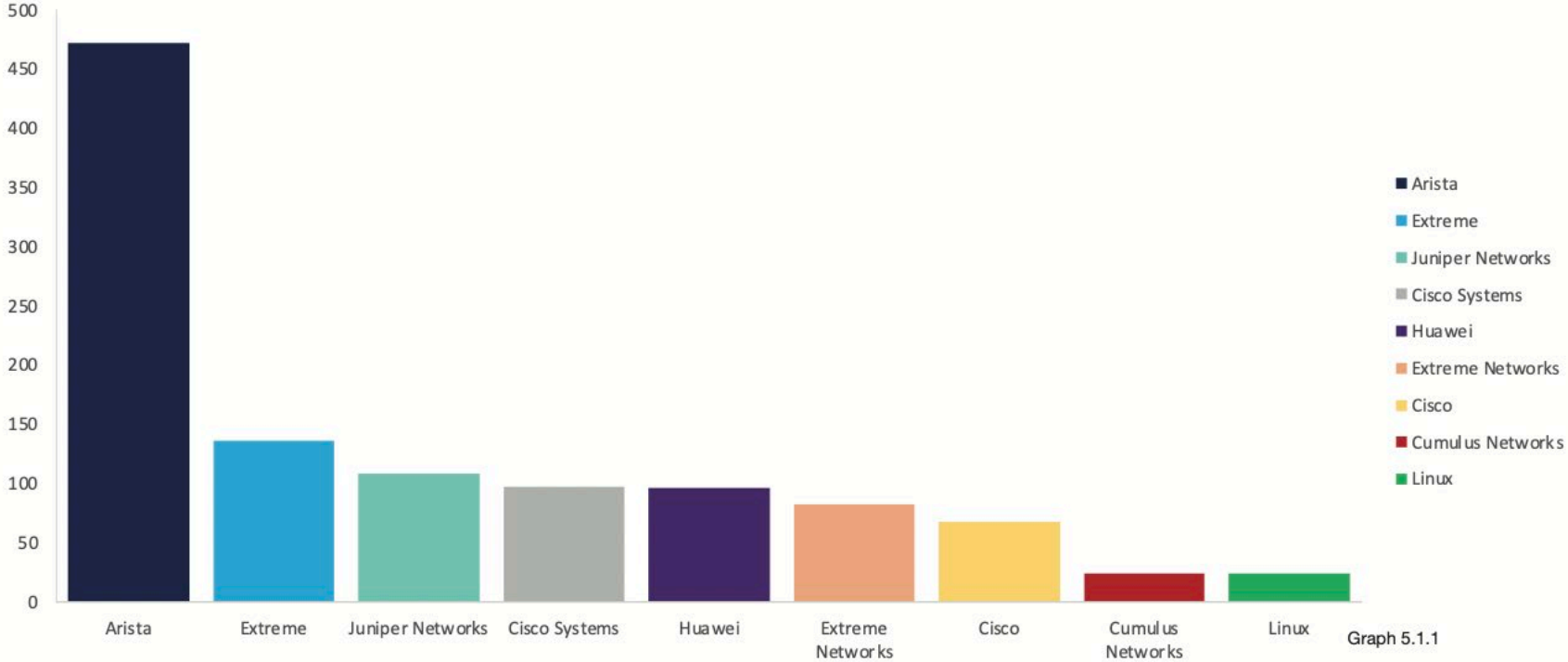


» Market share of the traffic



Hardware used by IXPs

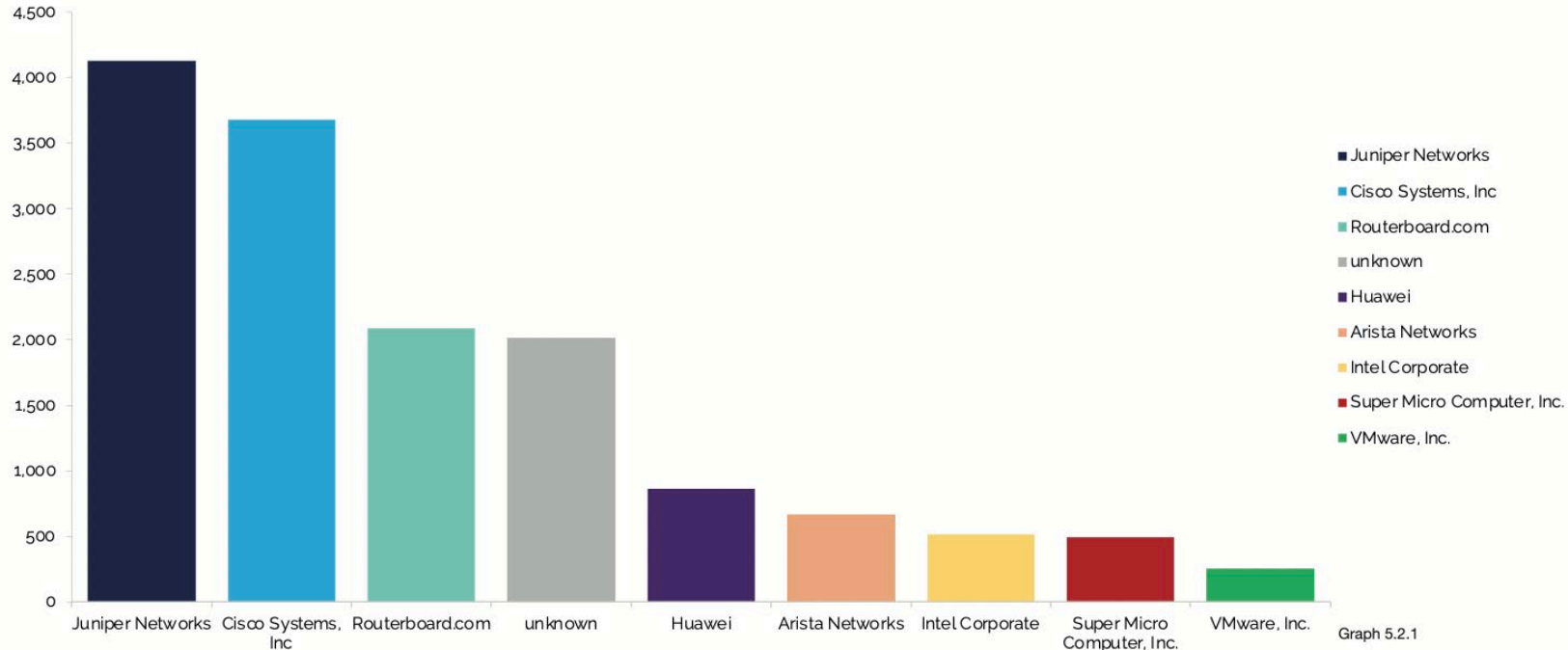
» Number of switches in use - *Data source: IXP{DB}



Hardware used by IXP Participants

5.2 Network Peering Hardware

» Hardware used by the IXP participants - *Data source: IXP{DB}
*Work is being done to identify the unknown vendors



Graph 5.2.1

Euro-IX Benchmarking

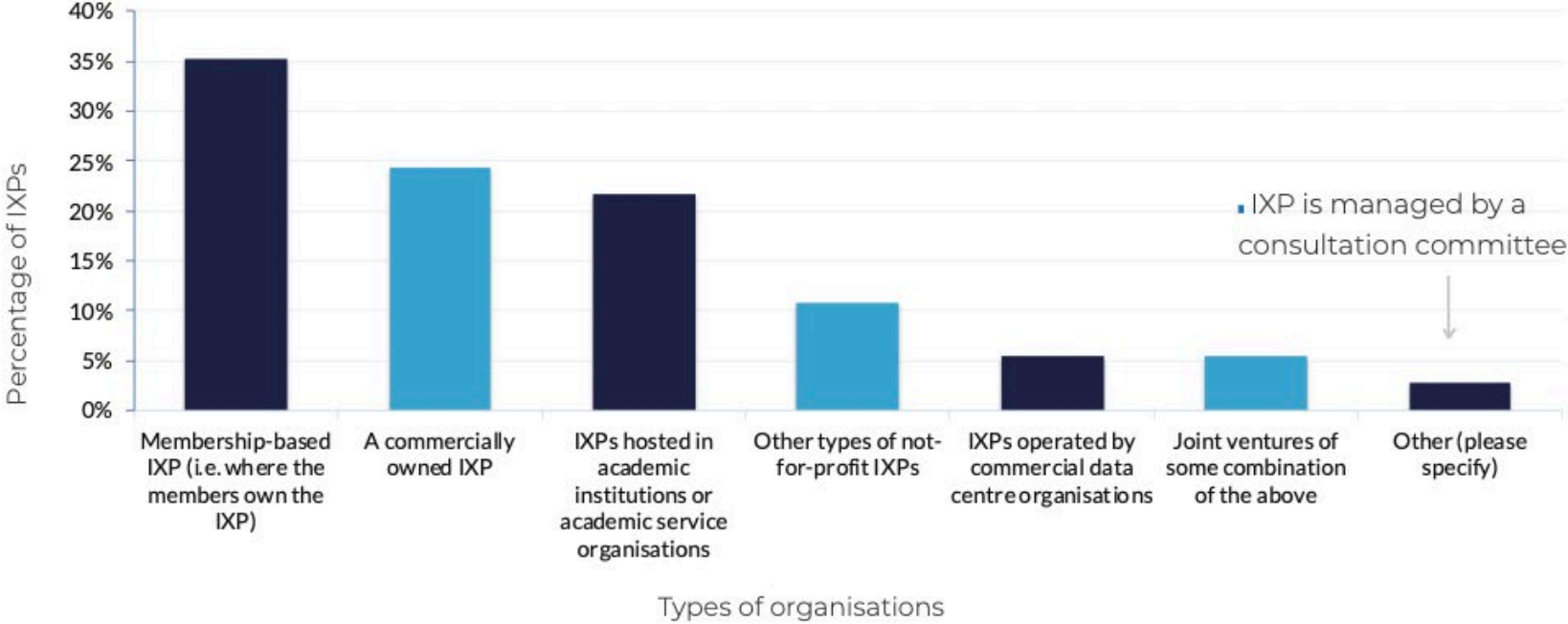
Euro-IX Benchmarking

- Since 2004 – now in round 17
- Three sections
 - Operational
 - Staff
 - Traffic
 - Tools
 - Infrastructure
 - Commercial
 - Organisation types
 - Services offered

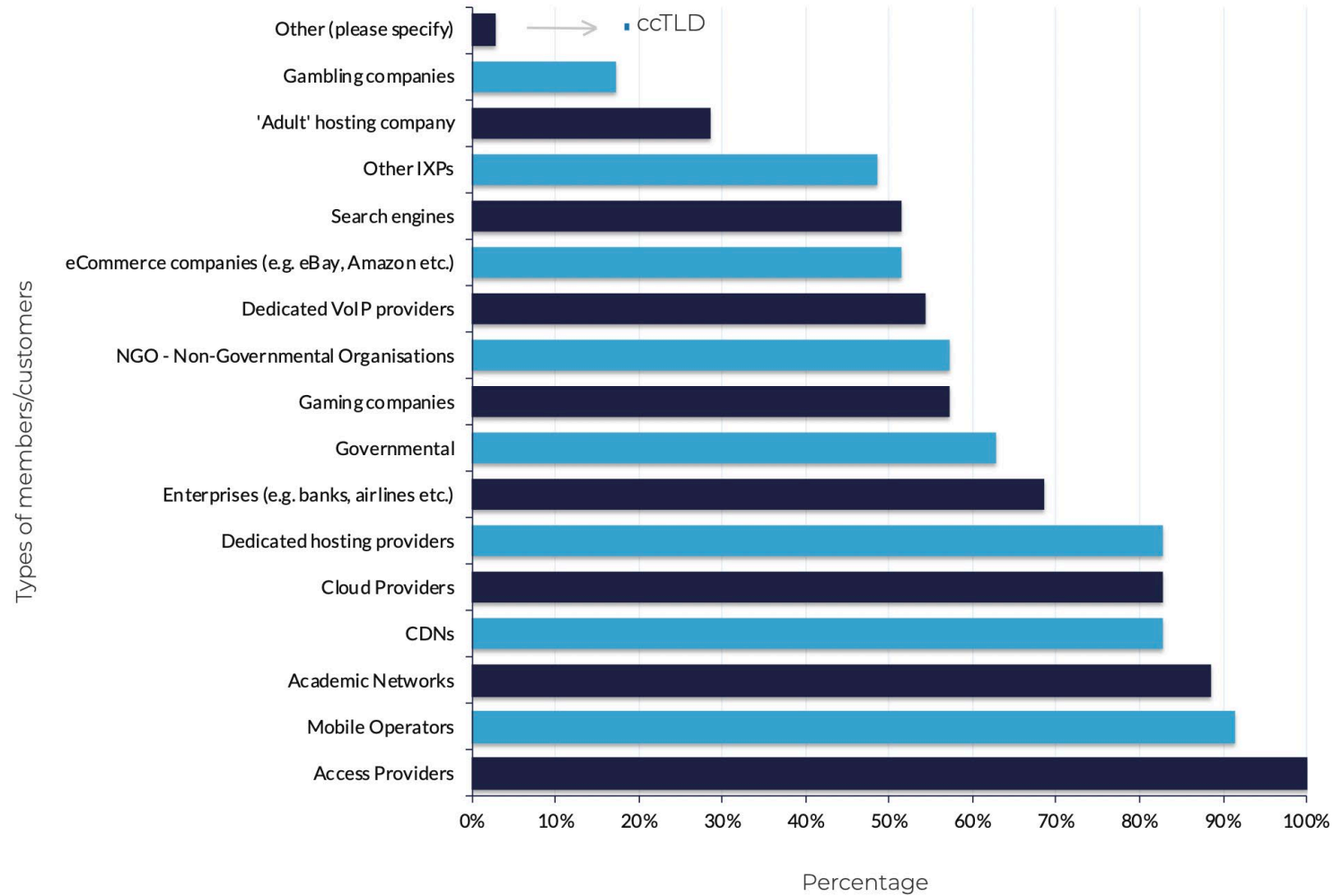
Euro-IX Benchmarking

- Commercial cont.
 - KPIs used
 - Growth
 - Types of members
- Finance
 - Port prices
 - Fees
 - Annual Turnover
 - Cost spend details

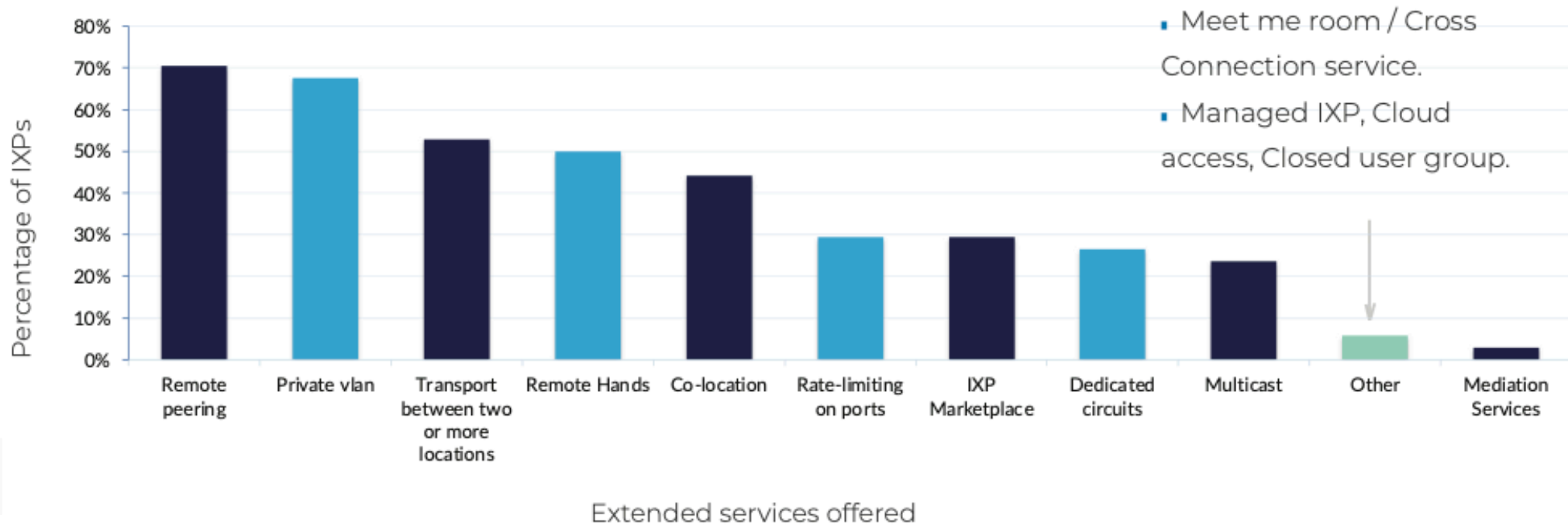
Kind of organisation managing IXPs



Types of Networks that connect to IXPs



Extended Services Offered at IXPs



Other Information

- Euro-IX Website / reports - <https://www.euro-ix.net>
- IXP {DB} Website - <https://ixpdb.euro-ix.net/en/>

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