



Internet
Society

Plugs, Pipes, and Packets: The Physical Realities of our Next- Gen Future

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RITE 2026, 27 October 2026
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An Recipe for an Internet for Everyone

Open

The open Internet allows people and organizations to mix and match technologies without permission and with minimal barriers.

Globally Connected

The globally connected Internet is inclusive. It allows networks and users to interconnect without geographical restrictions.

Secure

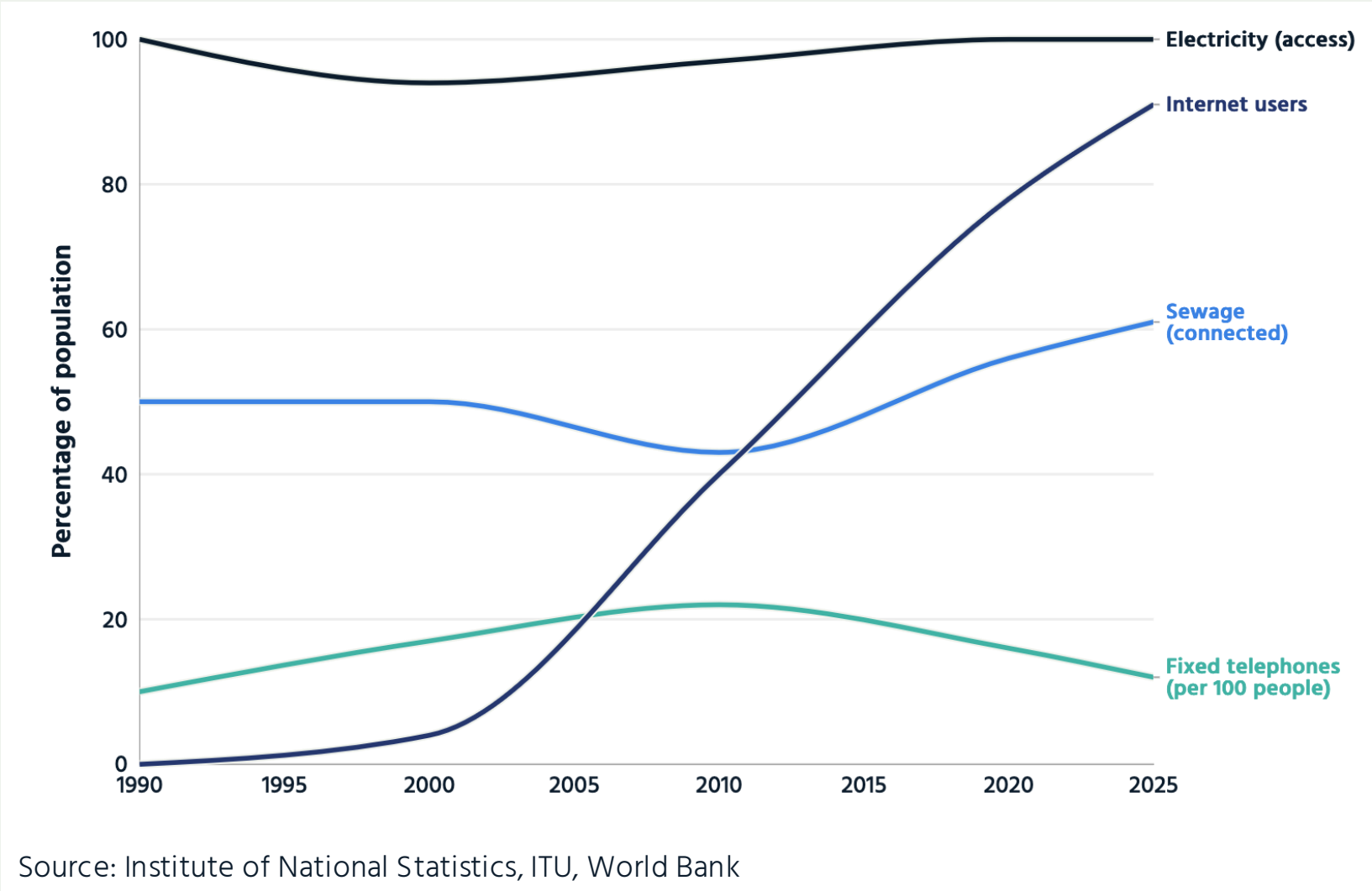
A secure Internet is resistant to attacks on its infrastructure, delivering a robust service to its user community.

Trustworthy

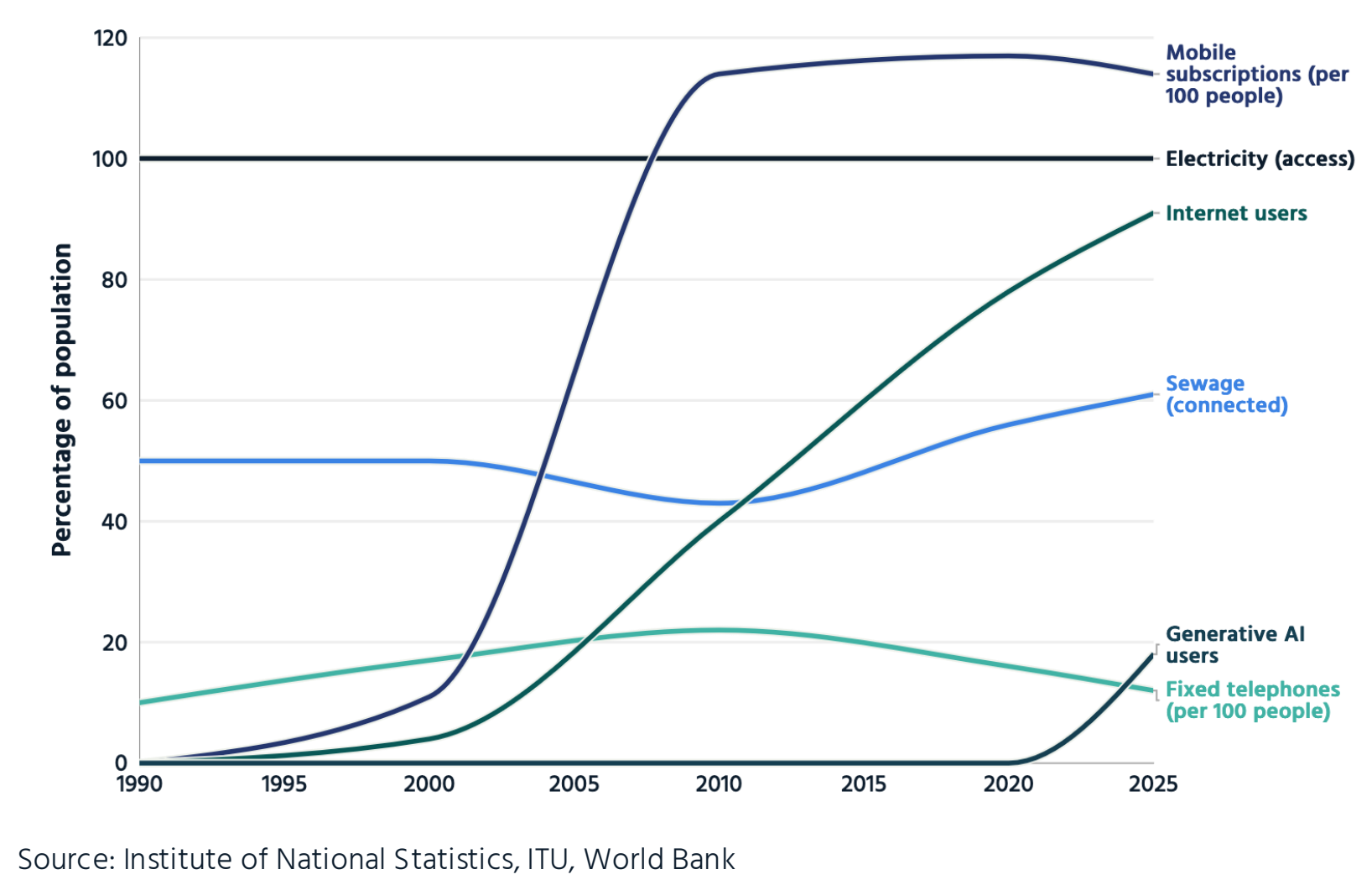
A trustworthy Internet meets the expectations of its users by offering a resilient and reliable base for applications and services.



Romania Utility Access 1990–2025



Romania Utility Access; Mobile and AI Usage, 1990–2025



Not if, but when

Software and CDNs

*** BBC

Websites taken down worldwide as critical cyber-security update issued

The vulnerabilities with PHP, a programming language widely used across the internet, have been described as the most significant ever found...

4 days ago



*** BBC

Cloudflare apologises for outage which took down X and ChatGPT

Cloudflare said the "significant outage" occurred after a configuration file designed to handle threat traffic did not work as intended and...

18 Nov 2025



GI GovInsider

CrowdStrike outage shows soft underbelly of connected IT network

While embracing global IT infrastructure and cloud services, Singapore also needs to invest in building resiliency to ensure quick recovery...

24 Jul 2024



Power outages

South China Morning Post

Electricity lines between Ukraine, Moldova, Romania fail, with mass outages

"Today at 10.42am a technical malfunction occurred, causing a simultaneous shutdown of the 400-kilovolt line between the power grids of Romania..."

31 Jan 2026



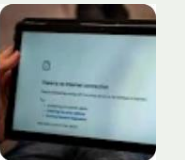
Cable cuts

B Biziday

Operating problems for internet providers in Romania. Part of Vodafone and Digi's customers...

Operating problems for internet providers in Romania. A part of Vodafone and Digi's customers report outages,...

24 May 2024



BGP hijacking and DDoS attacks

Cyber Press

Orange Group Confirms Major Data Breach By HellCat

Orange confirmed the breach originated from a "non-critical back-office application" in its Romanian branch, emphasizing no disruption to...

26 Feb 2025



RI The Romania Journal

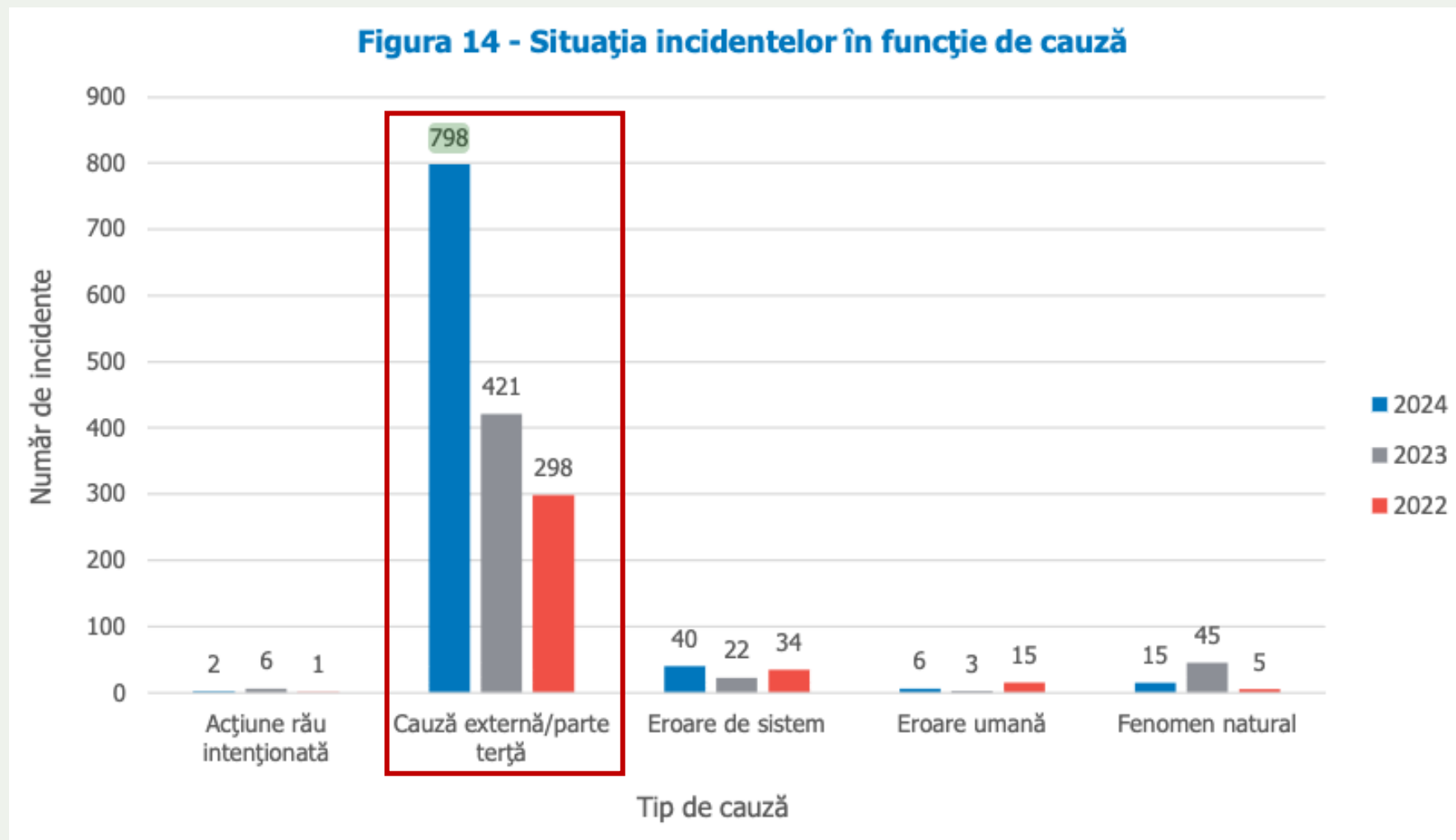
Romania's Cyber Defense Agency Hit by Possible DDoS Attack

DNCS takes additional protective measures. The cybersecurity authority said it intervened immediately after identifying the problem,...

1 month ago

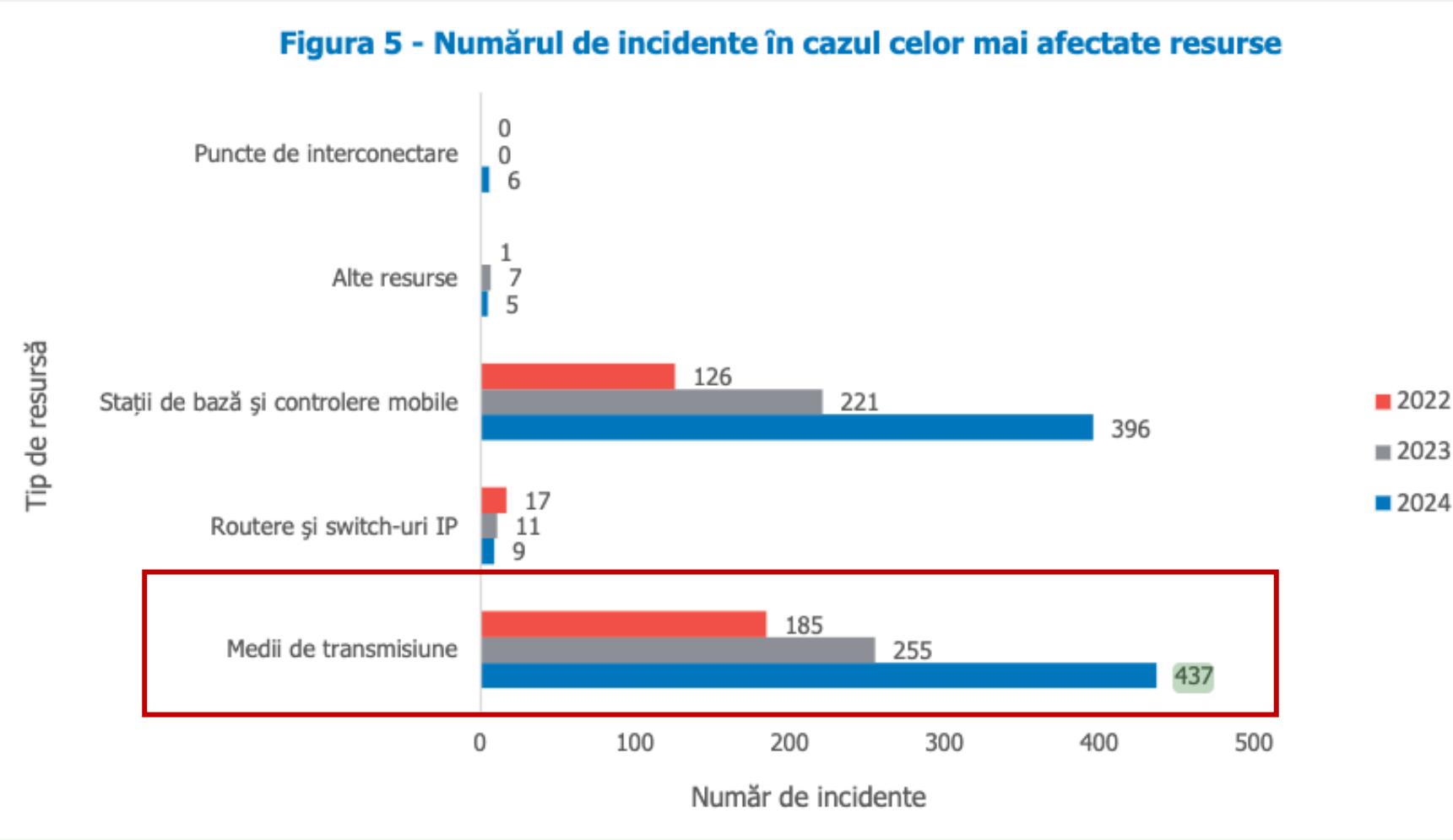
ANCOM Security Incident Report 2024

In 2024, the main cause of incidents continues to be involving a third party with a record number of 798 incidents; a significant increase compared to 421 in 2023 and 298 in 2022.



ANCOM Security Incident Report 2024

Of the 437 incidents affecting transmission media, 201 were caused by accidental or intentional cutting of optical fiber



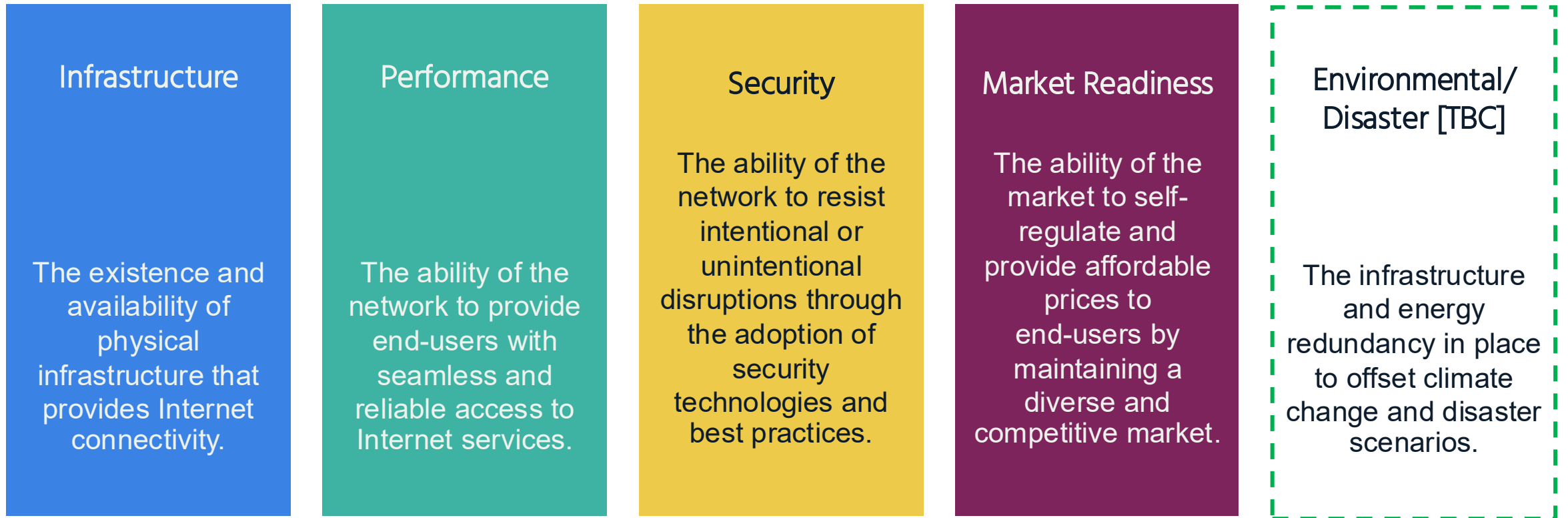
Resilience

A resilient Internet connection maintains an acceptable level of service despite faults and challenges to normal operation.



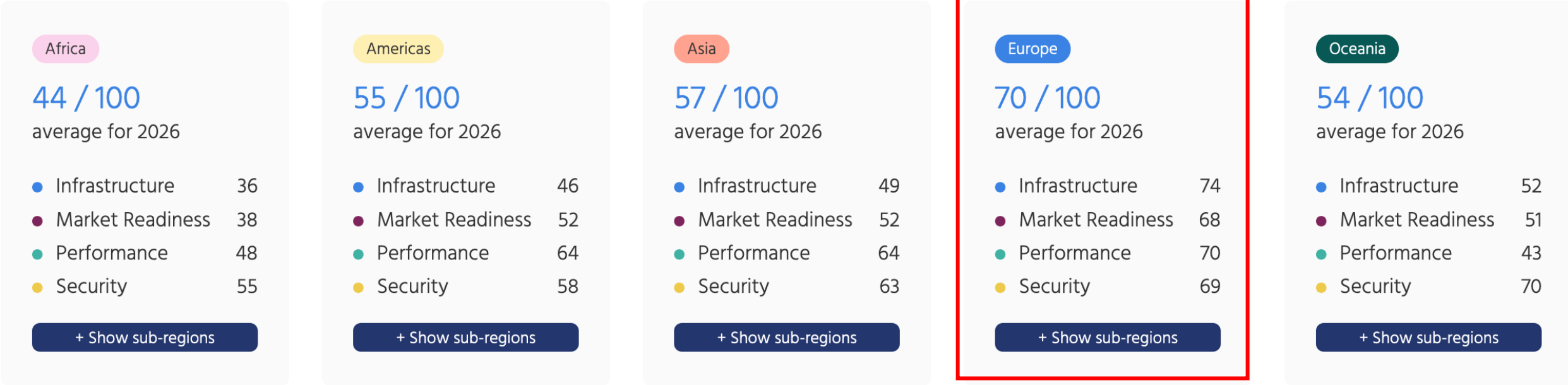
The Internet Resiliency Index (IRI) pulse.internetsociety.org/resilience

The framework collates around 30 sets of public metric data that relate to **four pillars** of a resilient Internet:

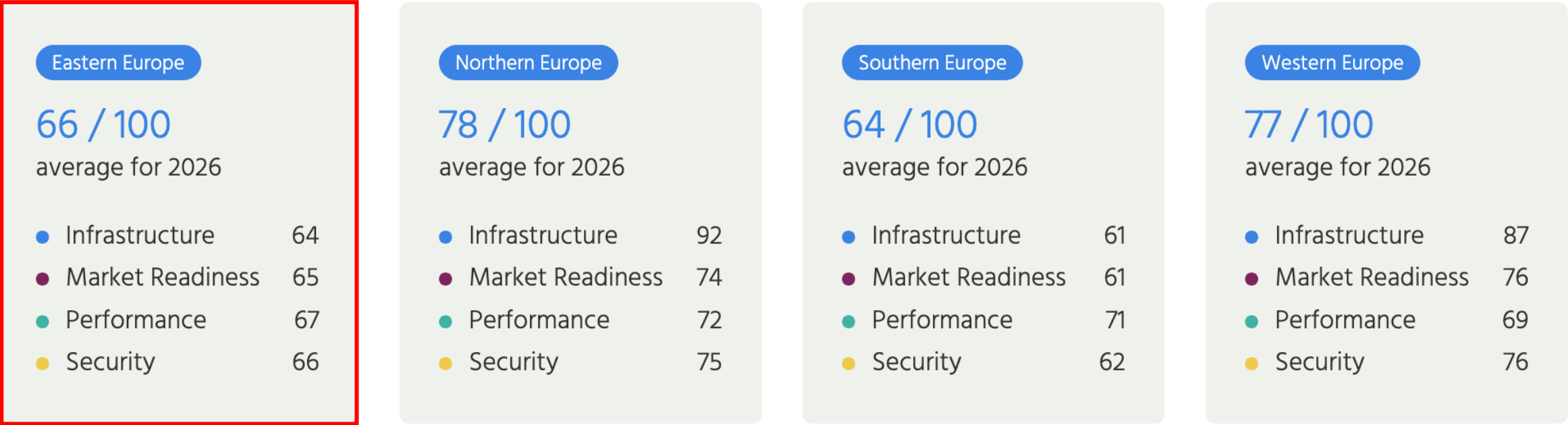


<https://pulse.internetsociety.org/wp-content/uploads/2025/04/Internet-Society-Pulse-IRI-Methodology-Apr-2025-v1.0-Final-EN.pdf>

Overall Internet Resilience — By Region



Overall Internet Resilience — By Sub-Region



Overall Internet Resilience — By Sub-Region

Poland 76/ 100 ● Infrastructure 83 ● Market Readiness 76 ● Performance 69 ● Security 72	Bulgaria 72/ 100 ● Infrastructure 82 ● Market Readiness 60 ● Performance 75 ● Security 72	Czechia 72/ 100 ● Infrastructure 73 ● Market Readiness 74 ● Performance 69 ● Security 72	Slovakia 70/ 100 ● Infrastructure 74 ● Market Readiness 73 ● Performance 70 ● Security 64	Moldova 65/100 ● Infrastructure 61 ● Market Readiness 59 ● Performance 74 ● Security 66
Hungary 65/ 100 ● Infrastructure 52 ● Market Readiness 72 ● Performance 68 ● Security 66	Romania 64/ 100 ● Infrastructure 59 ● Market Readiness 58 ● Performance 74 ● Security 65	Ukraine 64/ 100 ● Infrastructure 66 ● Market Readiness 61 ● Performance 63 ● Security 66	Russia 59/ 100 ● Infrastructure 53 ● Market Readiness 66 ● Performance 53 ● Security 65	Belarus 50/ 100 ● Infrastructure 37 ● Market Readiness 49 ● Performance 60 ● Security 55



Overall Internet Resilience — By Country

Europe

70 / 100

● Infrastructure	74
● Market Readiness	68
● Performance	70
● Security	69

Eastern Europe

66 / 100

● Infrastructure	64
● Market Readiness	65
● Performance	67
● Security	66

Romania

64 / 100

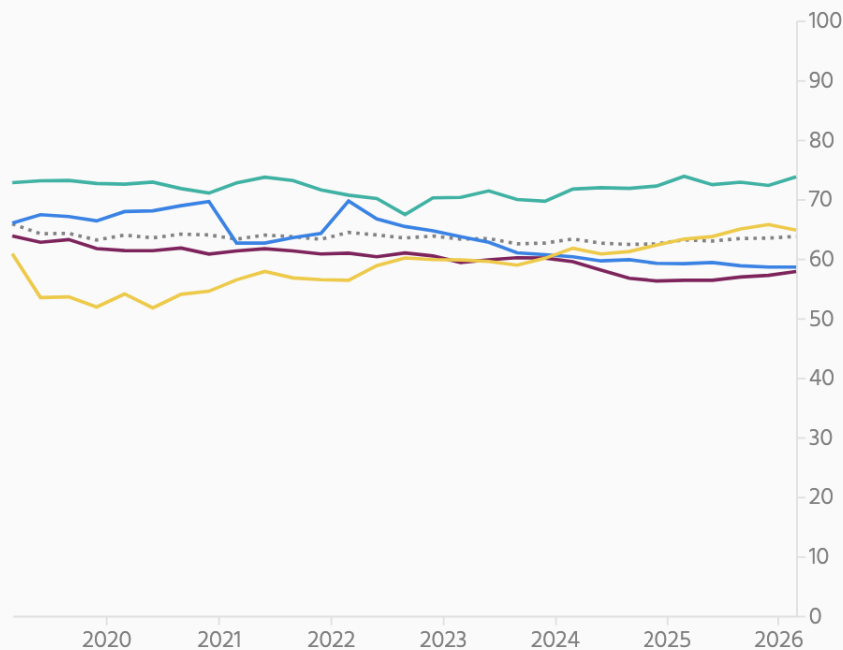
The Internet in Romania is **slightly less resilient on average than other countries in Eastern Europe**, and is **low for Europe**. It ranks **2nd in Eastern Europe for performance**, a category that evaluates how well the network provides seamless and reliable Internet services to consumers. It ranks **35th in Europe for market readiness**, a category that evaluates the overall competitiveness of the market, and the ability to offer affordable prices to consumers.

[View country report for Romania](#)

● Infrastructure	59
● Market Readiness	58
● Performance	74
● Security	65

IRI Score for Romania

● Index Score ● Infrastructure ● Market Readiness ● Performance ● Security



Romania– Internet Resilience Index

Infrastructure

59

Physical infrastructure for Internet connectivity exists, and is available.

Enabling infrastructure

30

Data center coverage

48

Score measured based on data centers per 10 million population. Source: PeeringDB

Internet Exchange Point (IXP) coverage

13

Shows how well large population centers (defined as more than 300,000 people) are served by IXPs. Source: PeeringDB

Mobile connectivity

87

Network coverage

93

Country has mobile network coverage (includes 2G, 3G, and 4G). Source: Composite score provided by GSMA

Spectrum allocation

73

Mobile operators have access to spectrum that allows them to offer sufficient services to customers. Source: Composite score provided by GSMA



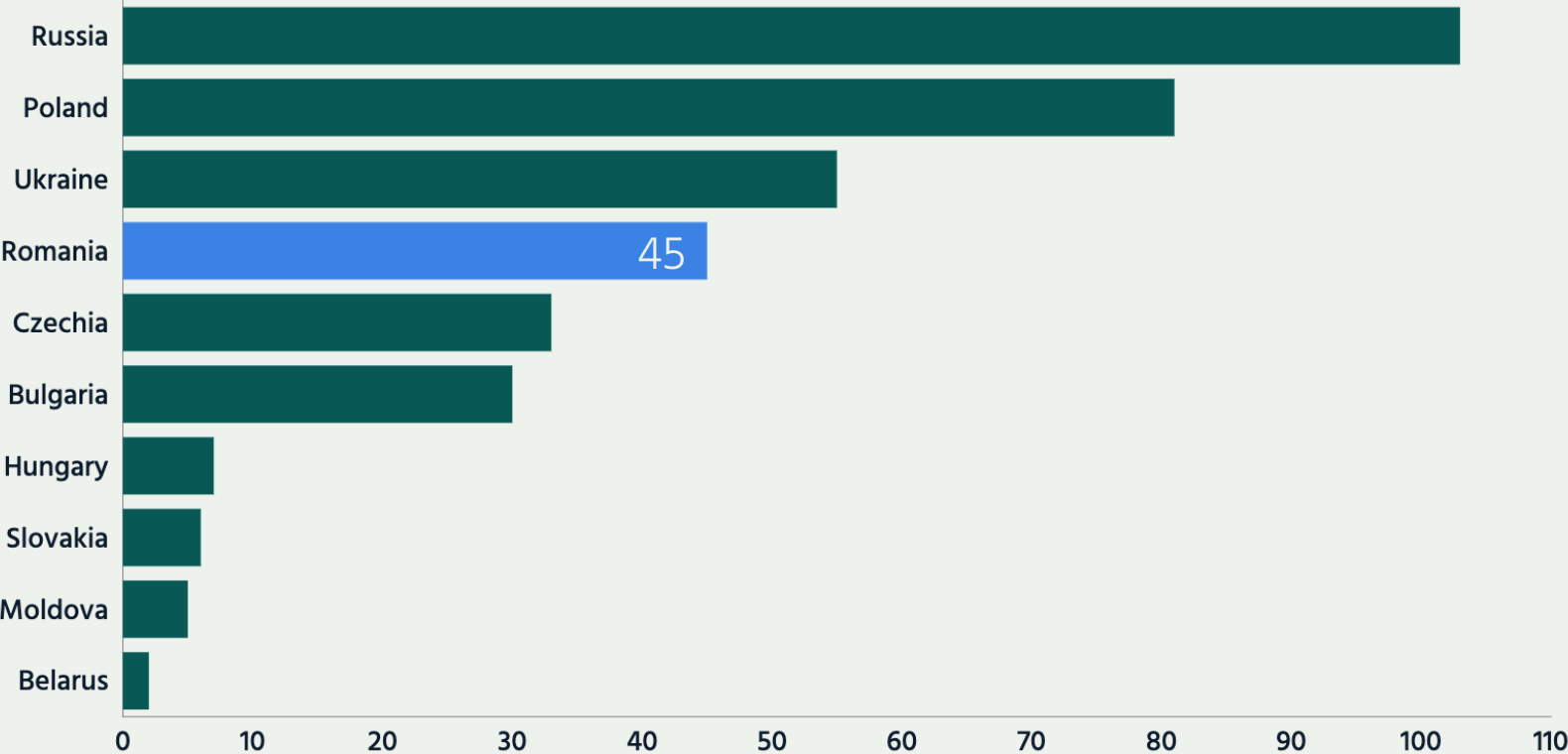
Keeping Traffic Local



Closer Content, Faster Access

45

active data centers
registered in PeeringDB
(as of Oct 2026)

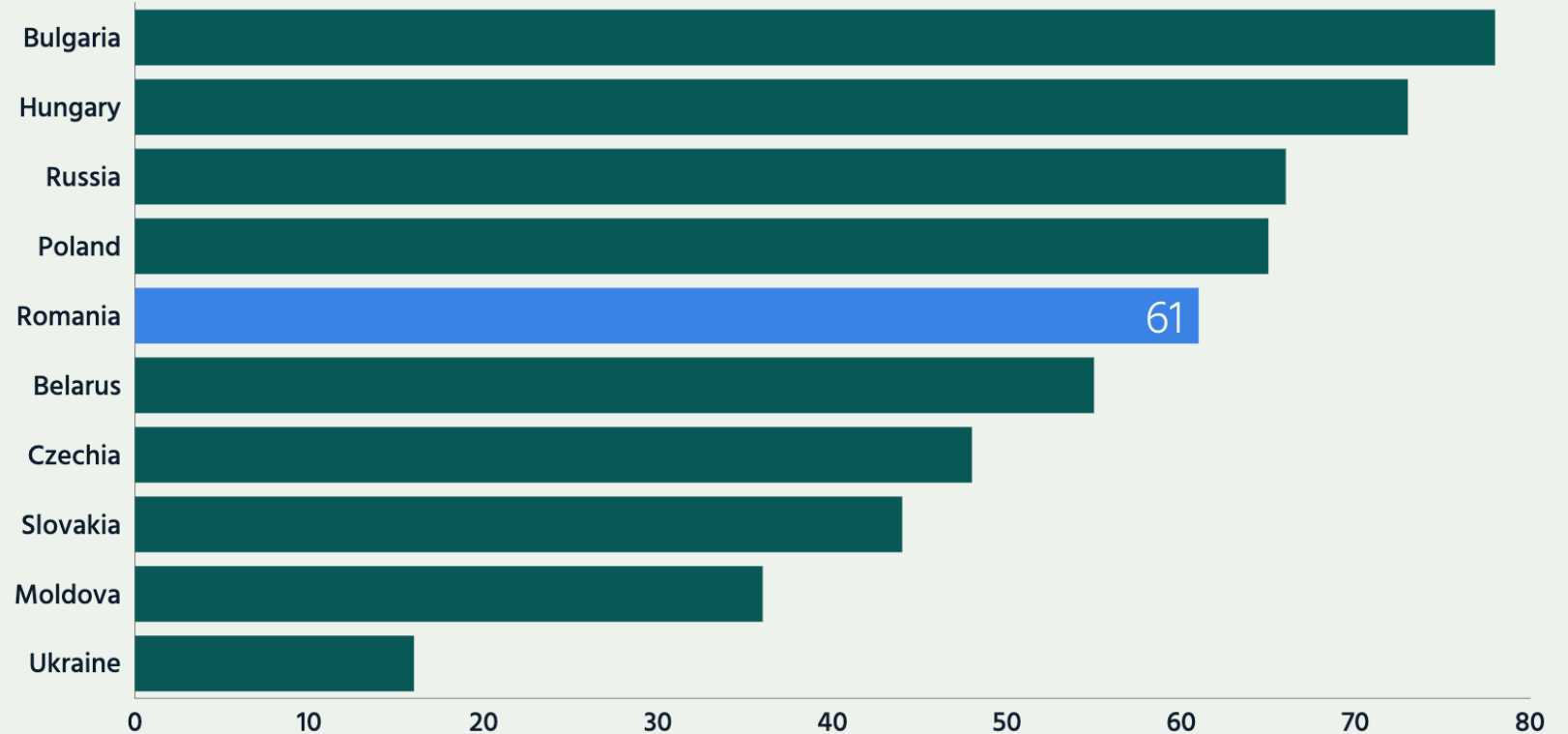


Keeping Traffic Local

50/50 Vision

Working together to keep half of all traffic local in selected economies by 2025

Methodolgy



Closer Content, Faster Access

Locally cached content

61%

of the top 1000 websites in Romania can be accessed through an in-country server or cache

73%

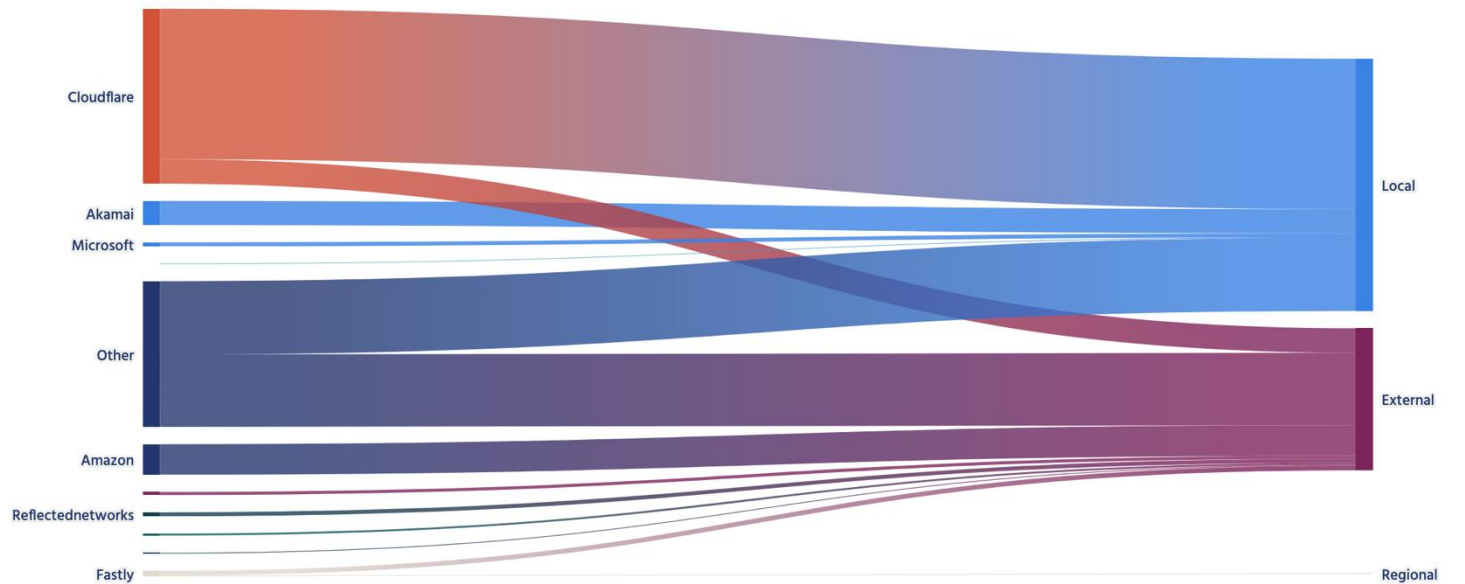
Europe average

2026

Locally Cached Content

Hosting Location of Top 1,000 Websites

🇷🇴 Romania



Source: Internet Society Pulse • Measurements updated every month
Additional data: Google CRuX, FindCDN, IPinfo/Maxmind

Internet Society
Pulse



<https://pulse.internetsociety.org/en/reports/ro/>

<https://public.flourish.studio/visualisation/23462913/>

Sustainable Peering

Internet Exchange Points

4

IXPs in Romania

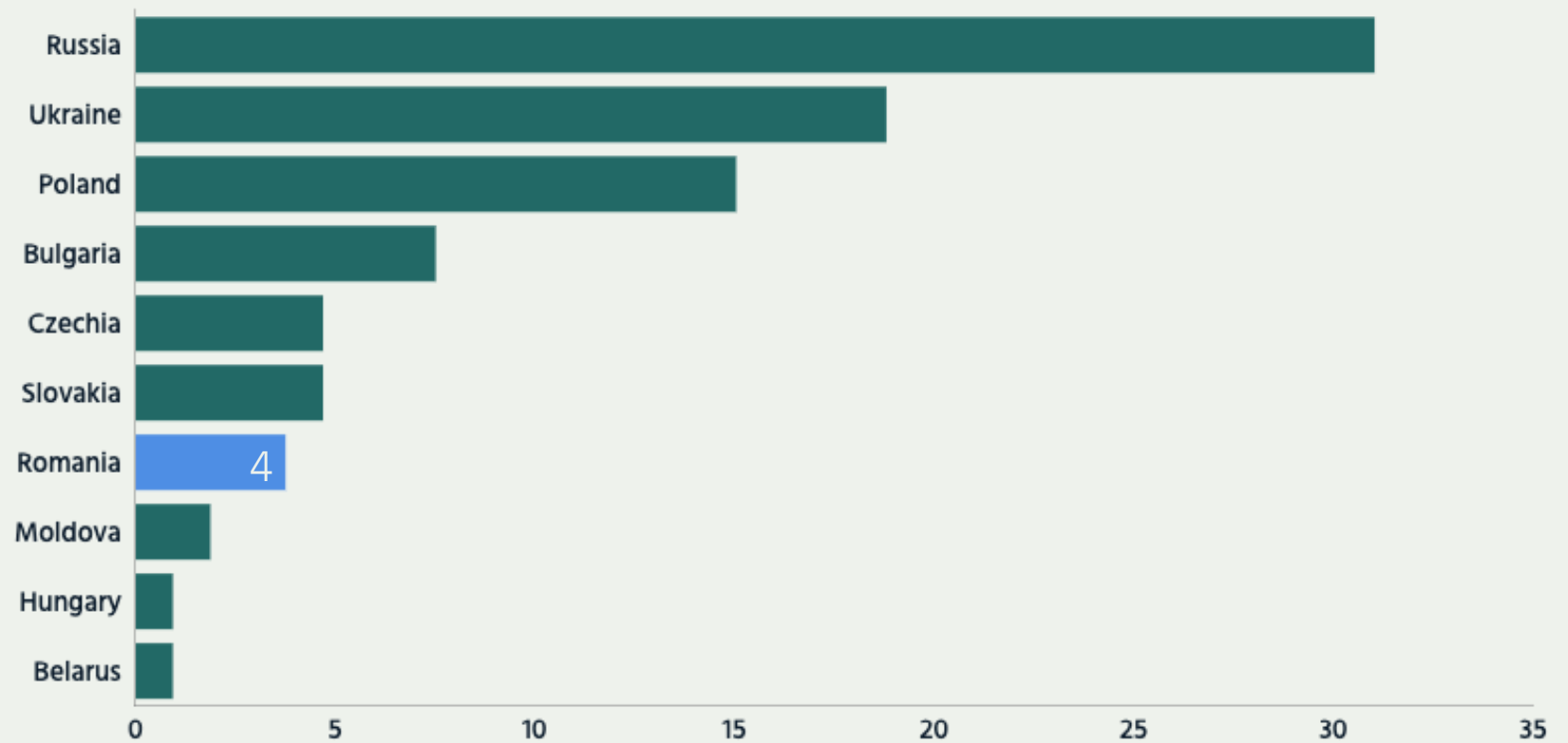
7

Europe average

80% of 919

active networks connect via an IXP

[View Romania in the IXP Tracker](#)



Build it and they (will/might) come?

Internet Exchange Points

4

IXPs in Romania

7

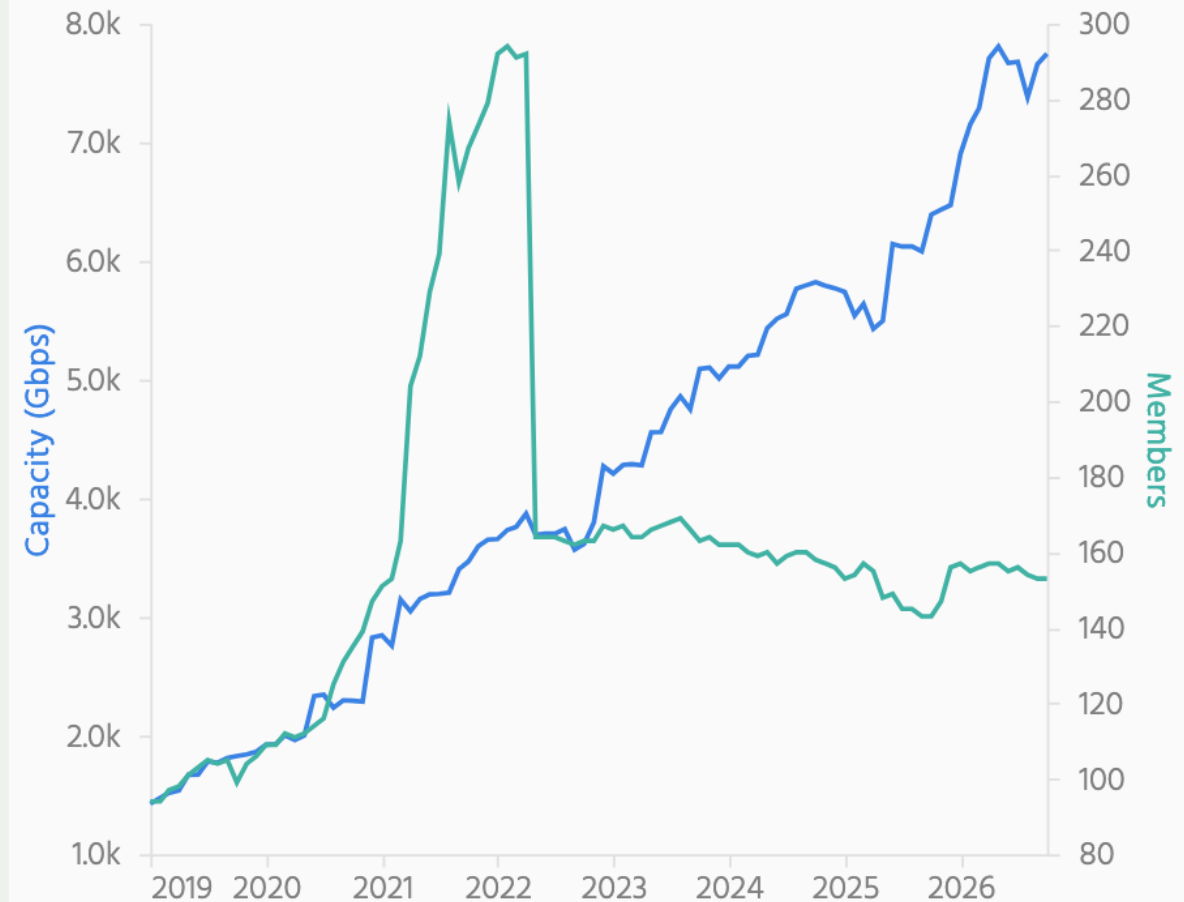
Europe average

80% of 919

active networks connect via an IXP

[View Romania in the IXP Tracker](https://pulse.internet-society.org/en/ixp-tracker/country/RO/)

IXP membership and capacity for Romania

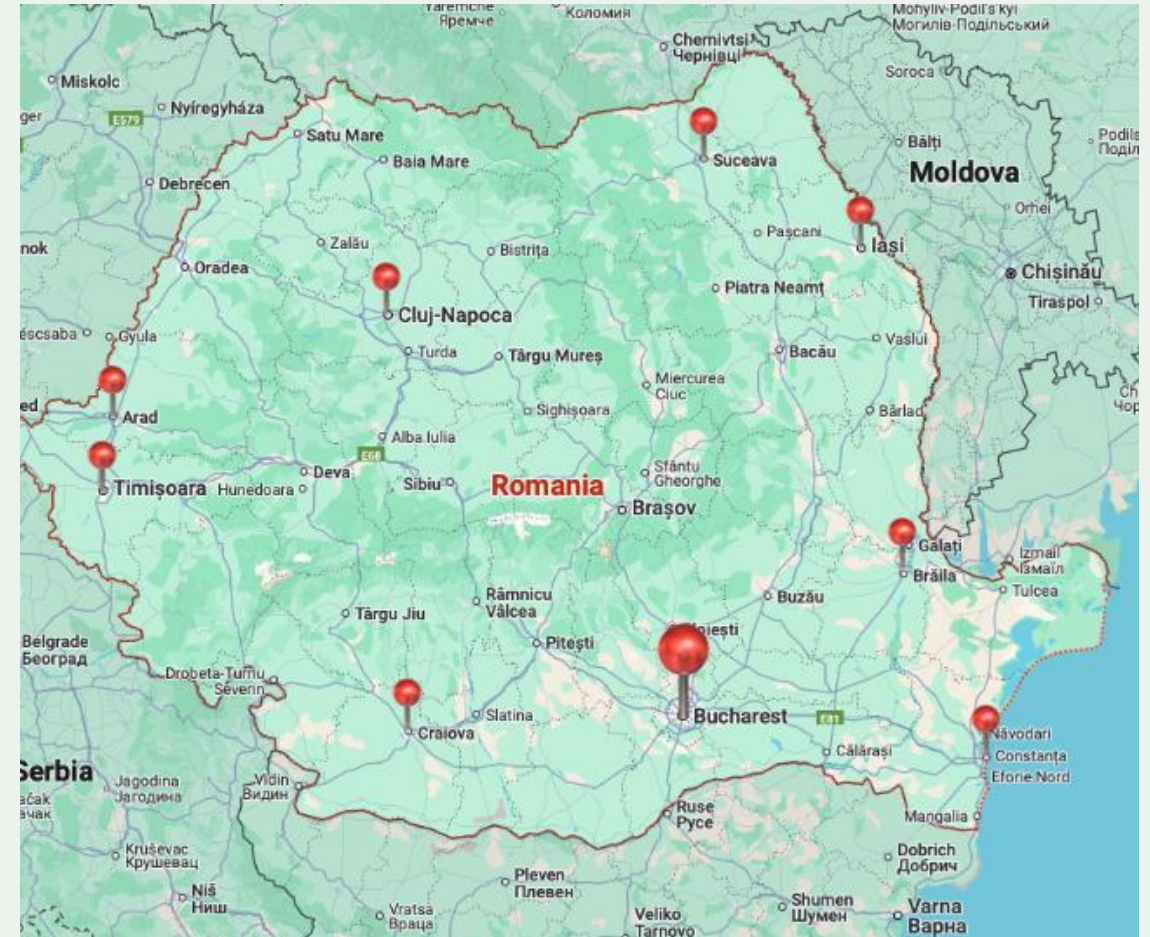


<https://pulse.internet-society.org/en/ixp-tracker/country/RO/>



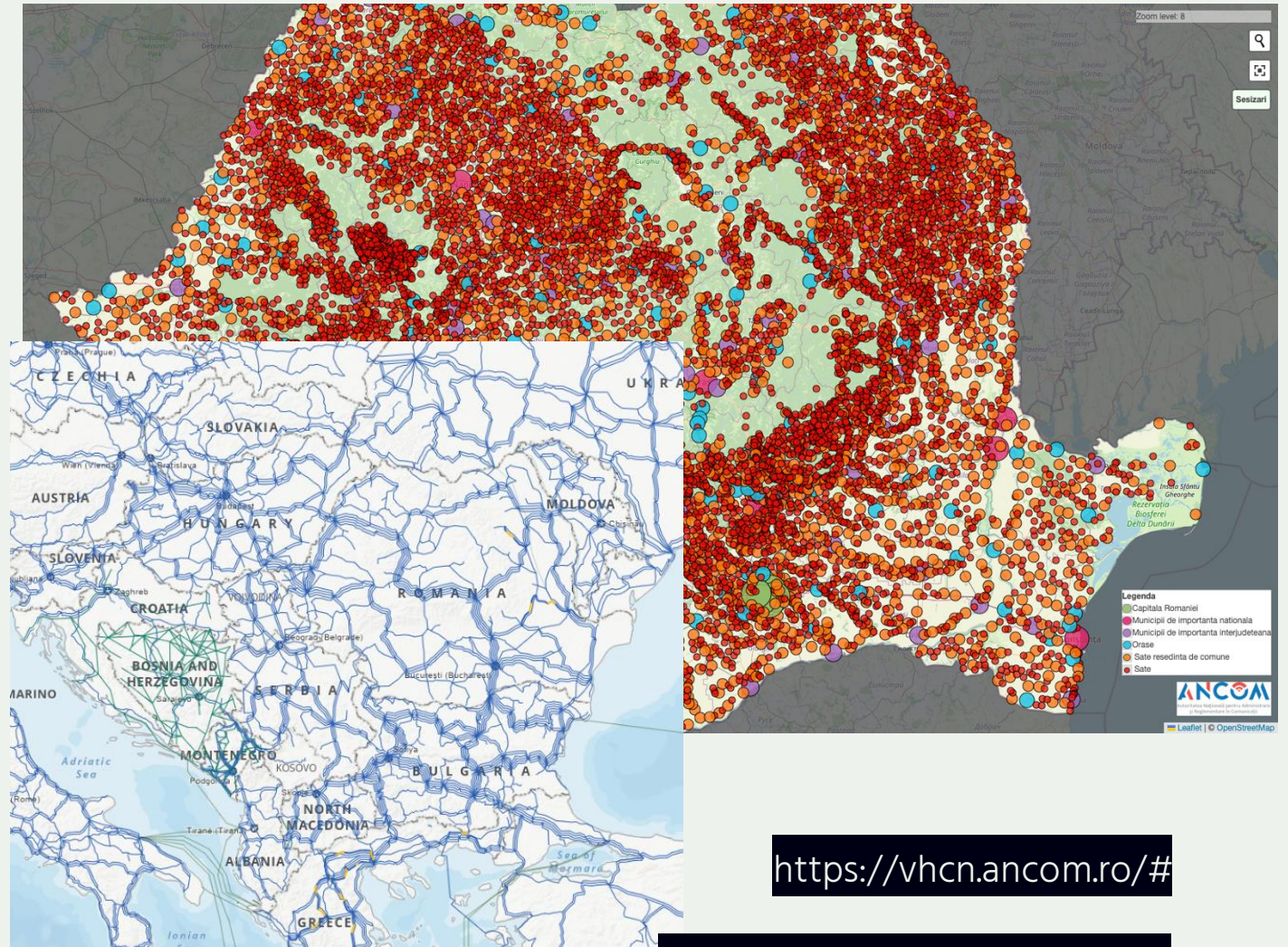
Build it and they (will/might) come?

IXP Name	Location
<u>Balkan-IX</u>	Bucharest
<u>DreamServer</u> <u>InternetExchange - DSIX</u>	Bucharest
<u>InterLAN Internet Exchange</u> <u>Romania - InterLAN-IX</u>	Bucharest, Arad, Cluj-Napoca, Constanta, Craiova, Iasi, Suceava, Timisoara
<u>Romanian Internet Exchange</u> – RoNIX	Bucharest
<u>RO-CIX?</u>	Braila?
<u>Internet eXchange RO-IX?</u>	Bucharest?
<u>Eastern Europe Internet</u> <u>Exchange - EE-IX?</u>	Bucharest?



Measure, Measure, Measure

- Local measurement data is gold
 - Without in-country measurements, it's difficult to validate the data
- Holds services accountable
 - Particularly important if there are monopolies/ duopolies in place
- The key is cadence and consistency
 - These are major limitations of measurement data



<https://vhcn.ancom.ro/#>

<https://bbmaps.itu.int/bbmaps/>

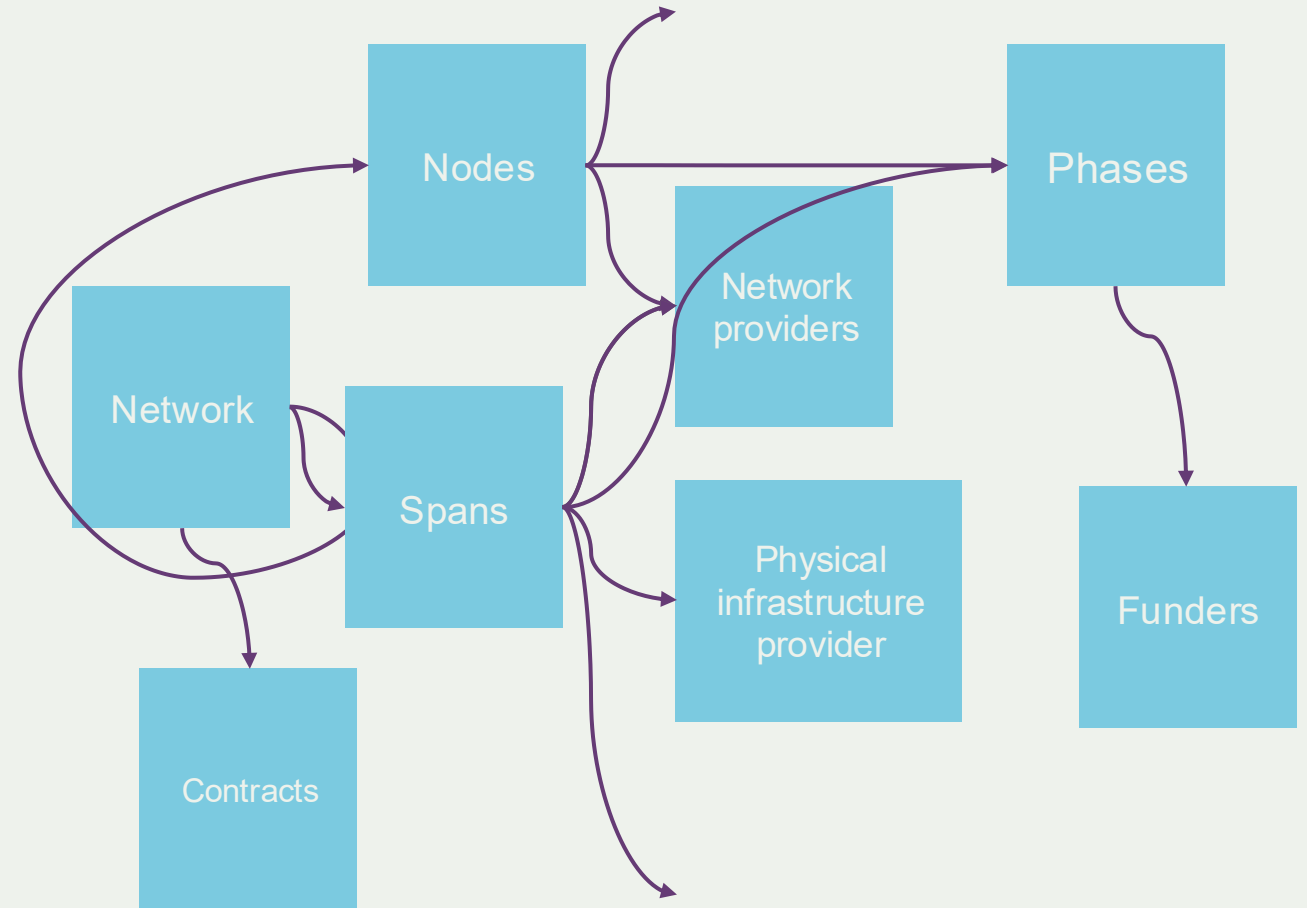


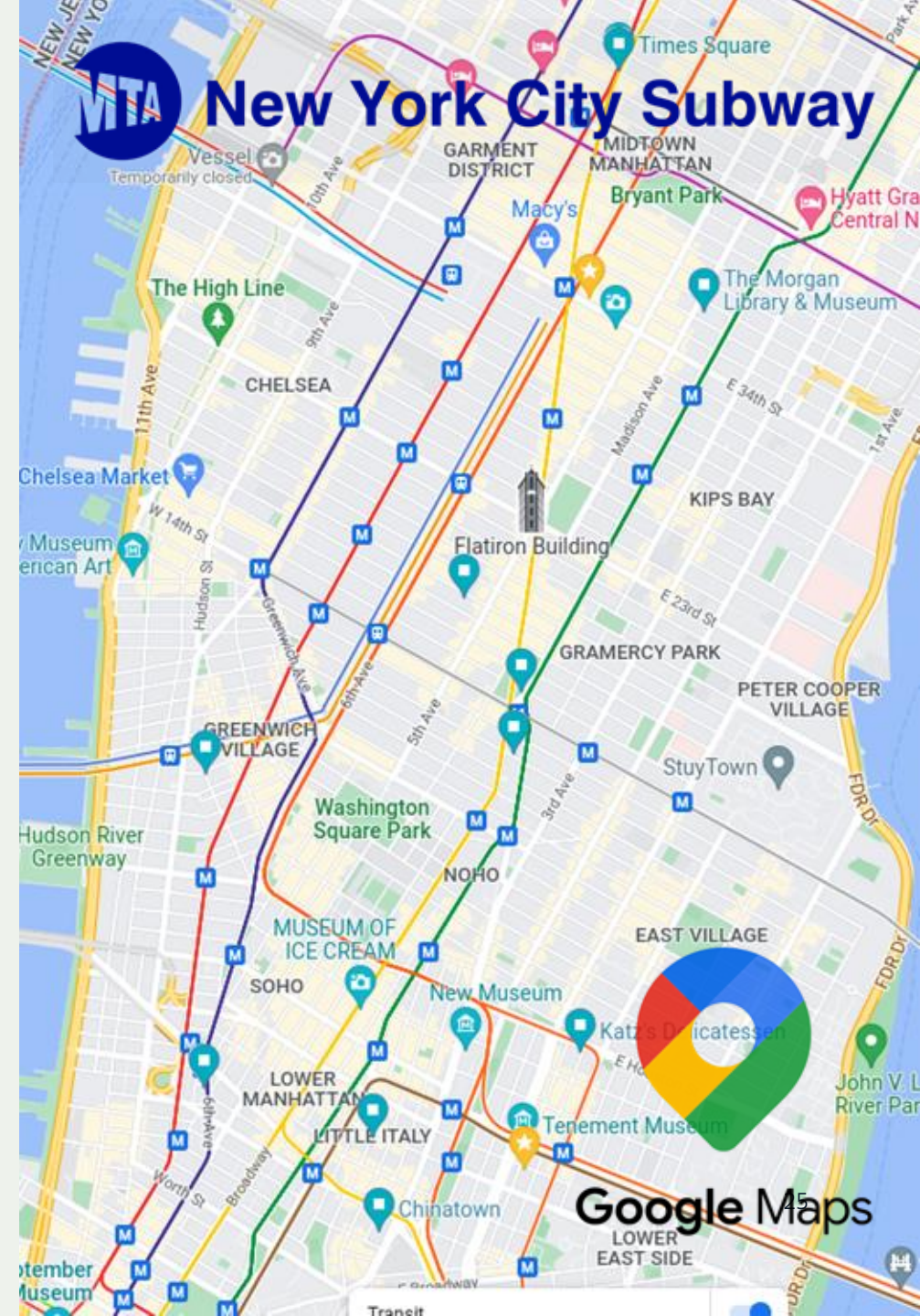
The Open Fibre Data Standard (OFDS) provides a common way to describe terrestrial fibre optic networks, making information from different sources easier to understand and use together.



Open Fibre Data Standard

- ◆ Describes what data to publish about fibre networks
- ◆ Provides a vocabulary and structure for fibre network data
- ◆ Offers guidance and software tools for publishers and users





Multistakeholder initiative

At a recent workshop in Geneva, an Interim Governance Committee for the standard was established, consisting of members listed here.

We worked with the Open Data Services (ODS) , who were contracted by the World Bank to provide technical support in the development of the standard. ODS are international experts in data standards



Get involved

- **OFDS Workshop Romania, 28 October**
- OFDS Train-the-Trainer Workshop, Istanbul, 26-27 November
- Mailing list: <https://elists.isoc.org/mailman/listinfo/ofds-discuss>
- Email: outreach@ofds.info



We're all in this together



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methodology

