

A QUICK LOOK AT INTERNET TRAFFIC IN ROMANIA

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A QUICK LOOK: SOURCES



Analysis of Romanian Internet traffic/trend using public sources/data:

Starting from RIPE NCC Report: “Unlocking Digital Growth: The role of Internet Exchange Points (IXPs) in South East Europe” (link [here](#))

- **ISOC (Internet Society) Pulse**
IXP Tracker (link [here](#)), Internet Resilience Index (link [here](#)),
- other public sources (RIPE NCC, NetSense NMS, PeeringDB, ...)
- **InterLAN-IX** ([IXPManager](#)–based) traffic data/stats



IXPs traffic presentation during last SEE 14 (link [here](#))



Internet Service Provider

Tier III Datacenter
Colocation, Cloud
Managed Services
6 ISO certifications
ACN qualification

www.naquadria.it

Internet Exchange Point

Free membership
Free 1 / 10 / 100 Gbps port
Layer 2 PCIX-VSIX, PoPs
K-root node, **I-root node**
MS cache, Netskrt cache, ...

www.pcix.it



ROMANIA AND BORDERING COUNTRIES



source: Google maps



BORDERING COUNTRIES RECAP

country	sub region (*)	population [M]	# IXP (**)	nominal capacity (**) [Tbps]
BG	Eastern Europe	6.433	8	36.88
RS	Southern Europe	6.549	1	4.01
HU	Eastern Europe	9.514	1	6.85
UA	Eastern Europe	38.980	24	47.85
MD	Eastern Europe	2.360	2	0.62
RO	Eastern Europe	19.020	6	7.79

(*) UN M49 Standard (link [here](#))

(**) sources: RIPE NCC, ISOC Pulse (link [here](#)), NetSense NMS, PeeringDB,

ISOC PULSE INTERNET RESILIENCE INDEX



*The Pulse **Internet Resilience Index (IRI)** draws from a range of data sources, to track some of the key building blocks that underpin the Internet. The IRI enables comparison between countries, regions, and sub-regions, with a balanced set of metrics that accounts for the Internet's complex ecosystem and varied landscape. Each country is assigned an Internet Resilience Score, calculated out of 100.*

It reflects four broad pillars, each representing a range of different components that contribute to the overall resilience of the Internet.



(link [here](#))



Infrastructure

Physical infrastructure for Internet connectivity exists, and is available.

45 / 100

global average



Market Readiness

The ability of the market to offer affordable prices to consumers by maintaining diversity and competition.

51 / 100

global average



Performance

Consumers have seamless and reliable Internet services.

57 / 100

global average



Security

Technologies and best practices support a network's ability to resist disruptions.

61 / 100

global average

IRI (INTERNET RESILIENCE INDEX) EUROPE



+ Europe

+ Eastern Europe

+ Northern Europe

+ Southern Europe

+ Western Europe

Europe

69 / 100

● Infrastructure	72
● Market Readiness	68
● Performance	66
● Security	68

UN M49 Standard (link [here](#))

Romania

Bulgaria

Serbia

Hungary

Ukraine

Moldova

Eastern Europe

Eastern Europe

Southern Europe

Eastern Europe

Eastern Europe

Eastern Europe

Western Europe

76 / 100

● Infrastructure	86
● Market Readiness	76
● Performance	66
● Security	76

Eastern Europe

64 / 100

● Infrastructure	61
● Market Readiness	66
● Performance	65
● Security	66

Southern Europe

62 / 100

● Infrastructure	58
● Market Readiness	61
● Performance	67
● Security	62

Northern Europe

77 / 100

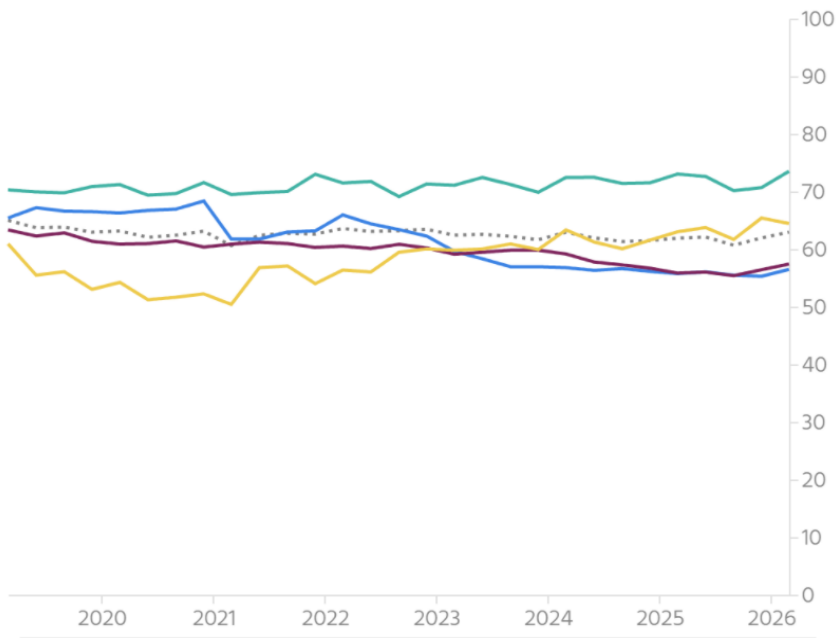
● Infrastructure	93
● Market Readiness	74
● Performance	68
● Security	75

IRI (INTERNET RESILIENCE INDEX) ROMANIA



IRI Score for Romania

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



Romania
64 / 100

Infrastructure	59
Market Readiness	58
Performance	74
Security	65

Eastern Europe

64 / 100

Infrastructure	61
Market Readiness	66
Performance	65
Security	66

Europe

69 / 100

Infrastructure	72
Market Readiness	68
Performance	66
Security	68



- The Internet in Romania **has similar resilience scores to other countries in Eastern Europe**
- It ranks **3rd in Eastern Europe for performance**
- It ranks **35th in Europe for market readiness**

Romania
64 / 100

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

Eastern Europe

64 / 100

● Infrastructure	61
● Market Readiness	66
● Performance	65
● Security	66

Europe

69 / 100

● Infrastructure	72
● Market Readiness	68
● Performance	66
● Security	68

IRI RO 1Q2026 AND BORDERING COUNTRIES



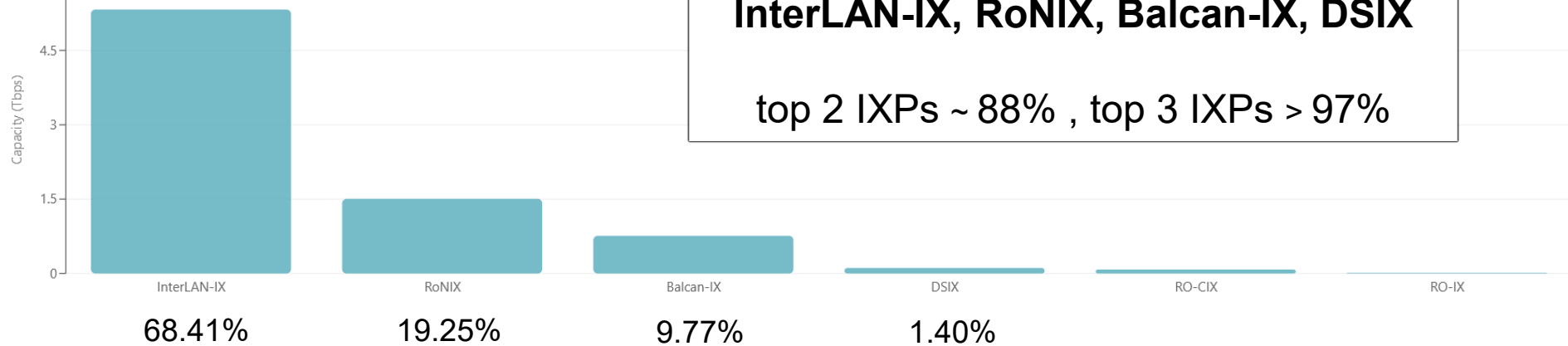
country	P Infrastructure	P Market Readiness	Mobile Connectivity	Network coverage	P Performance	Fixed Networks	Mobile Networks	P Security
BG	0.8143	0.5930	0.9035	0.971	0.7431	0.7937	0.7094	0.7160
HU	0.4941	0.7207	0.8881	0.9315	0.6806	0.7948	0.6045	0.6571
MD	0.5469	0.5860	0.6635	0.7739	0.7343	0.8866	0.6328	0.6545
RO	0.5554	0.5740	0.8157	0.8701	0.7350	0.9184	0.6127	0.6444
RS	0.4482	0.5421	0.6337	0.7649	0.7237	0.7495	0.7066	0.6463
UA	0.6026	0.6092	0.5588	0.6519	0.6298	0.8349	0.4931	0.6582

Source: ISOC Pulse IRI report **1Q** 2026 (link [here](#))

[RO] IXPS (NOMINAL) CAPACITY



Top 6 IXPs by capacity



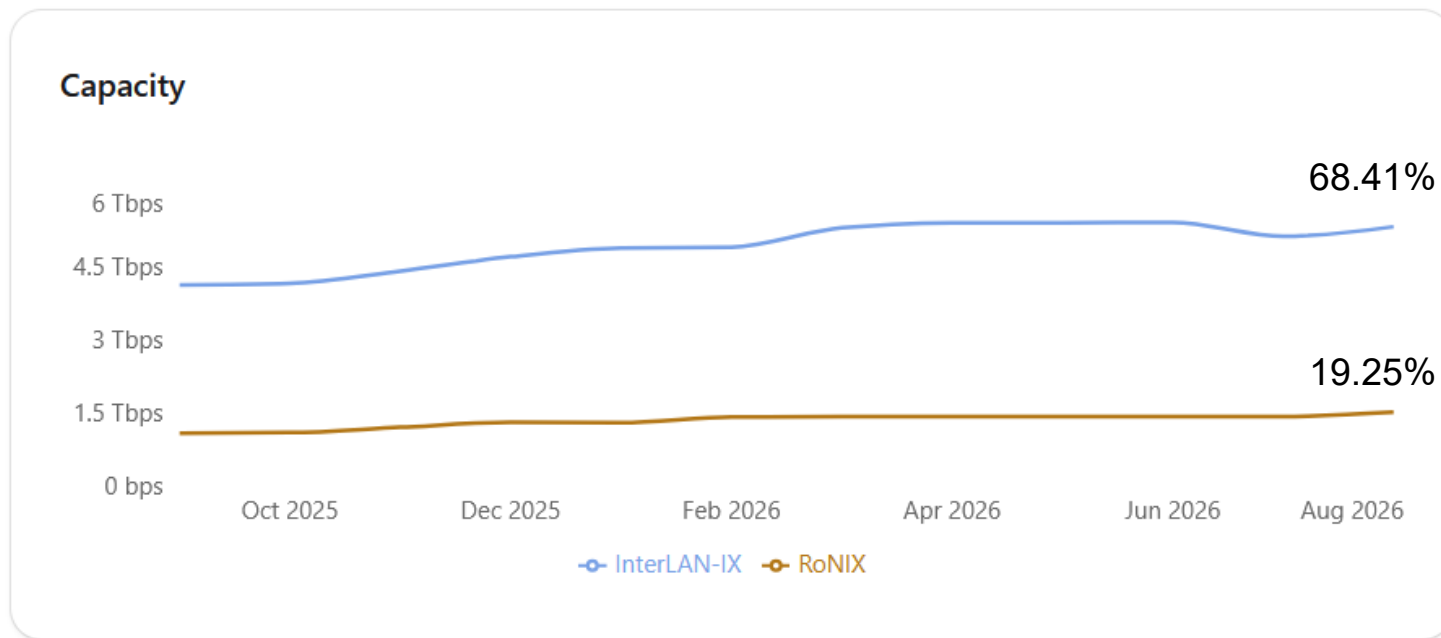
4 active IXPs (Internet Exchange Points)
have more than 10 members:

InterLAN-IX, RoNIX, Balcan-IX, DSIX

top 2 IXPs ~ 88% , top 3 IXPs > 97%

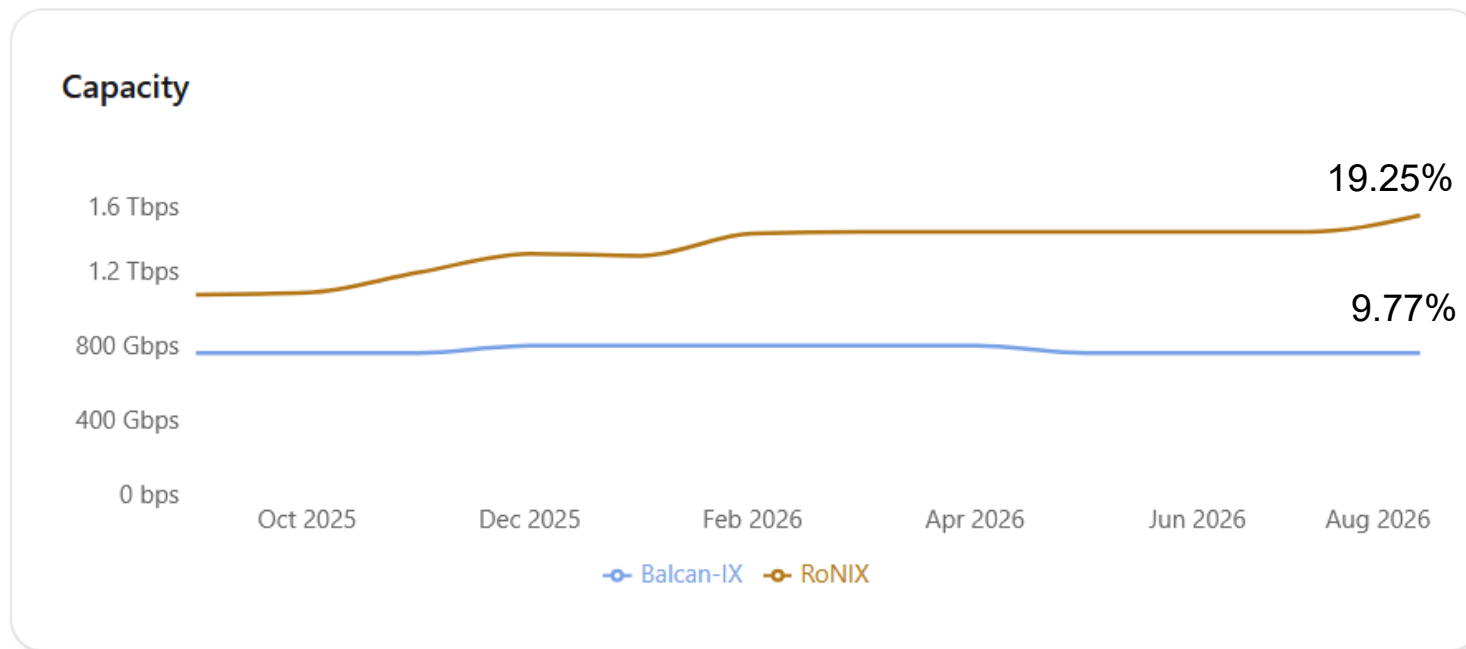
sources: NetSense NMS (link [here](#)), PeeringDB,

[RO] TOP 2 IXPS NOMINAL CAPACITY



Source: NetSense NMS (link [here](#))

[RO] 2ND,3RD IXPS NOMINAL CAPACITY

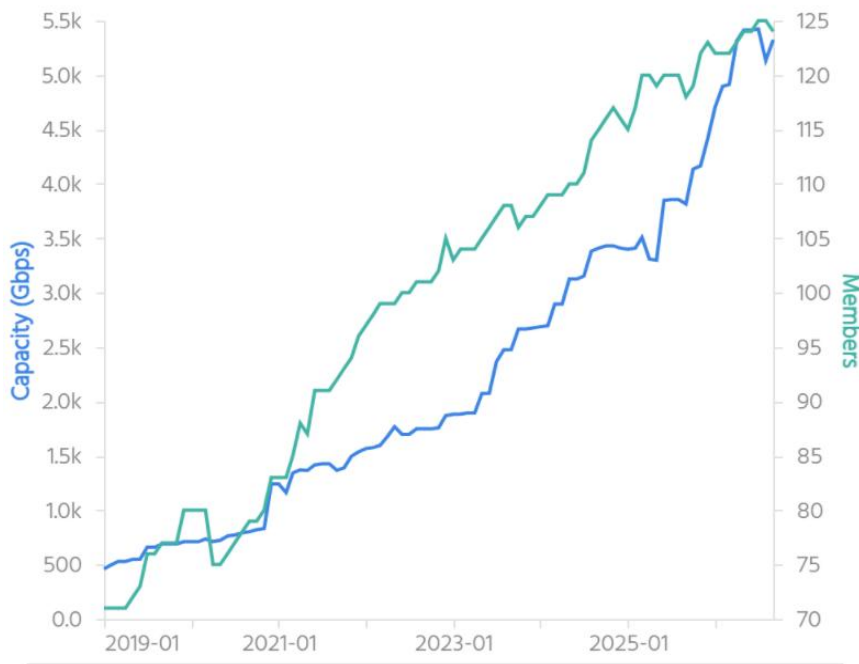


Source: NetSense NMS (link [here](#))

INTERLAN-IX MEMBERS AND CAPACITY



Membership and Capacity for
InterLAN Internet Exchange Romania - InterLAN-IX



members/capacity data for
InterLAN-IX
(as shown in PeeringDB in Sept 2026)

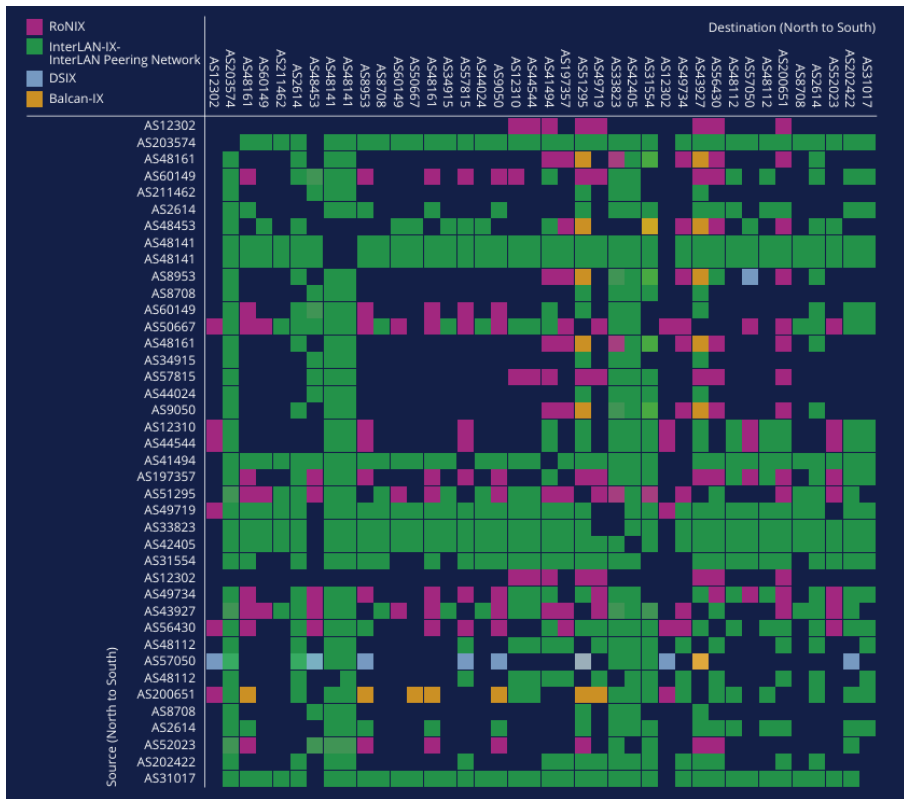
Significant nominal capacity
increase during 2025

~5.33 Tbps (nominal) capacity

source : ISOC Pulse IXP tracker
country: Romania / IXP: InterLAN-IX (link [here](#))



RO INTRA-COUNTRY PATHS



“InterLAN, and RoNIX to a lesser extent, do facilitate **local traffic exchanges**.”

“InterLAN was created when a big number of small ISPs in Romania decided to start an IXP to exchange traffic between themselves and to attract foreign content by creating a critical mass when it comes to volume of data exchanged.”

“successful in attracting and hosting [...] **global players** [...] **high density of content peering at InterLAN-IX followed by RoNIX and Balcan-IX**”

source: RIPE NCC SEE IXP report link [here](#)

IXPS SHARED OPERATORS [GBPS]



	Meta AS32934	Microsoft AS8075	HE AS6939	Google AS15169	ByteDance AS396986	Cloudflare AS13335	SOX AS13004	Netflix AS2906	M247 AS9009	NAV Com AS6718	FiberX RO AS215230	STS AS31313
InterLAN-IX	200	200	400	200	100	100	200	100	100		110	100
RoNIX	200		100	40	100	100		100	10	200	10	100
Balcan-IX	200	200	10			10	20		60	10		

sources: InterLAN-IX, RoNIX, Balcan-IX, NetSense NMS, PeeringDB,



OUT-OF-COUNTRY PATHS

	Total paths	Out-of-country paths	Out-of-country paths (%)
Albania	72	19	26.39
Bosnia and Herzegovina	28	3	10.71
Serbia	455	31	6.81
Greece	754	27	3.58
Romania	1544	29	1.88
Slovenia	418	6	1.44
Croatia	592	6	1.01
Bulgaria	2031	15	0.74
North Macedonia	25	0	0.00

“... the SEE region hosts more than twenty active IXPs, improving regional connectivity and reducing reliance on costly international transit routes ... while smaller markets typically operate a single exchange.”

“Given our data, we assume that a majority of the paths remain within the national territory. For instance, **in Romania, only 1.88% of the observed 1544 paths actually went outside Romania.**”

“there is a good part of local traffic being exchanged outside of IXPs without leaving Romania.”

source: RIPE NCC SEE IXP report link [here](#)



IXPMANAGER-BASED IXPS



RO: InterLAN-IX, RoNIX,
Balcan-IX, DSIX, ...

HU: BIX, SI: SIX, HR: CIX

AL: ANIX, BA: BHNIX

IT: MIX, NAMEX, MINAP, ...,

PCIX, GE-DIX, ...

GR: GR-IX, NetIX,

AT: VIX, SAIX, AAIX, ...



source: IXP Manager Community world map [here](#)

IXP MANAGER TRAFFIC API



`https://ixp.example.com/grapher/{graph}[?id=x][&period=x][&type=x]...`

current traffic [bps]
(300s average)



```
{
  "class": "ixp",
  "urls": {
    "png": "https:\\\\www.inex.ie\\ixp\\grapher\\ixp?period=day&type=png&category=bits",
    "log": "https:\\\\www.inex.ie\\ixp\\grapher\\ixp?period=day&type=log&category=bits",
    "json": "https:\\\\www.inex.ie\\ixp\\grapher\\ixp?period=day&type=json&category=bits"
  },
  "base_url": "https:\\\\www.inex.ie\\ixp\\grapher\\ixp",
  "statistics": {
    "totalin": 15013439801606864,
    "totalout": 15013959560329200,
    "curin": 158715231920,
    "curout": 158713872624,
    "averagein": 125566129180.59367,
    "averageout": 125570476225.09074,
    "maxin": 222438012592,
    "maxout": 222348641336
  },
  "params": {
    "type": "json",
    "category": "bits",
    "period": "day",
    "protocol": "all",
    "id": 1
  }
}
```

See IXP Manager API docs ([here](#))

IXP MANAGER TRAFFIC API / 2



10m sampling
144 samples / day
1008 samples / week
~ 53k samples / year

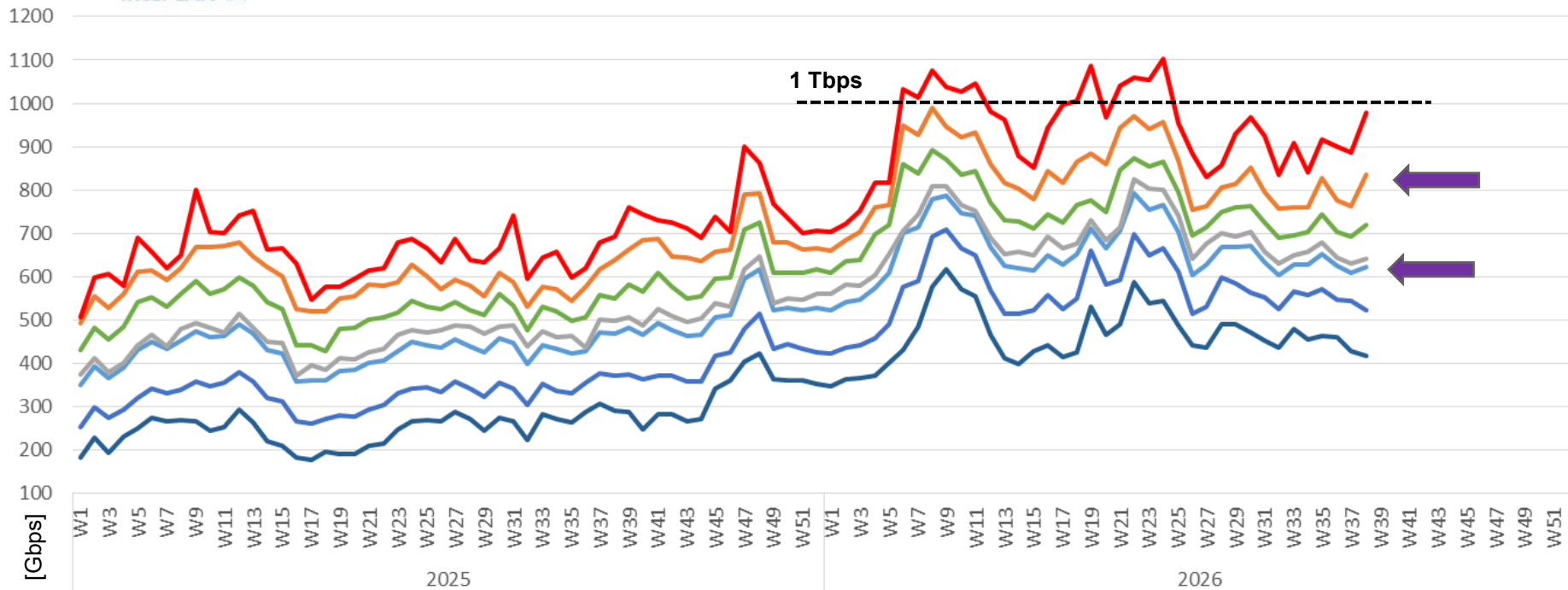
```
▼ statistics:
  totalin:      18553775624851200
  totalout:     18574859820993600
  curin:        187859791184
  curout:       188403157184
  averagein:    1553 1755652.0201
  averageout:   1555 8340209.32663
  maxin:        3582 8403480
  maxout:       3559 3849680
  maxinat:      "202-09-27T19:50:00.000000Z"
  maxoutat:     "202-09-27T19:50:00.000000Z"
▼ params:
  type:         "json"
  category:     "bit"
  period:       "day"
  protocol:     "all"
  id:           1
```

e.g CSV dataset record: **YYYYMMDDThhmmssZ,187859791184,188403157184[...]**

INTERLAN-IX 2025-2026 WEEKLY METRICS

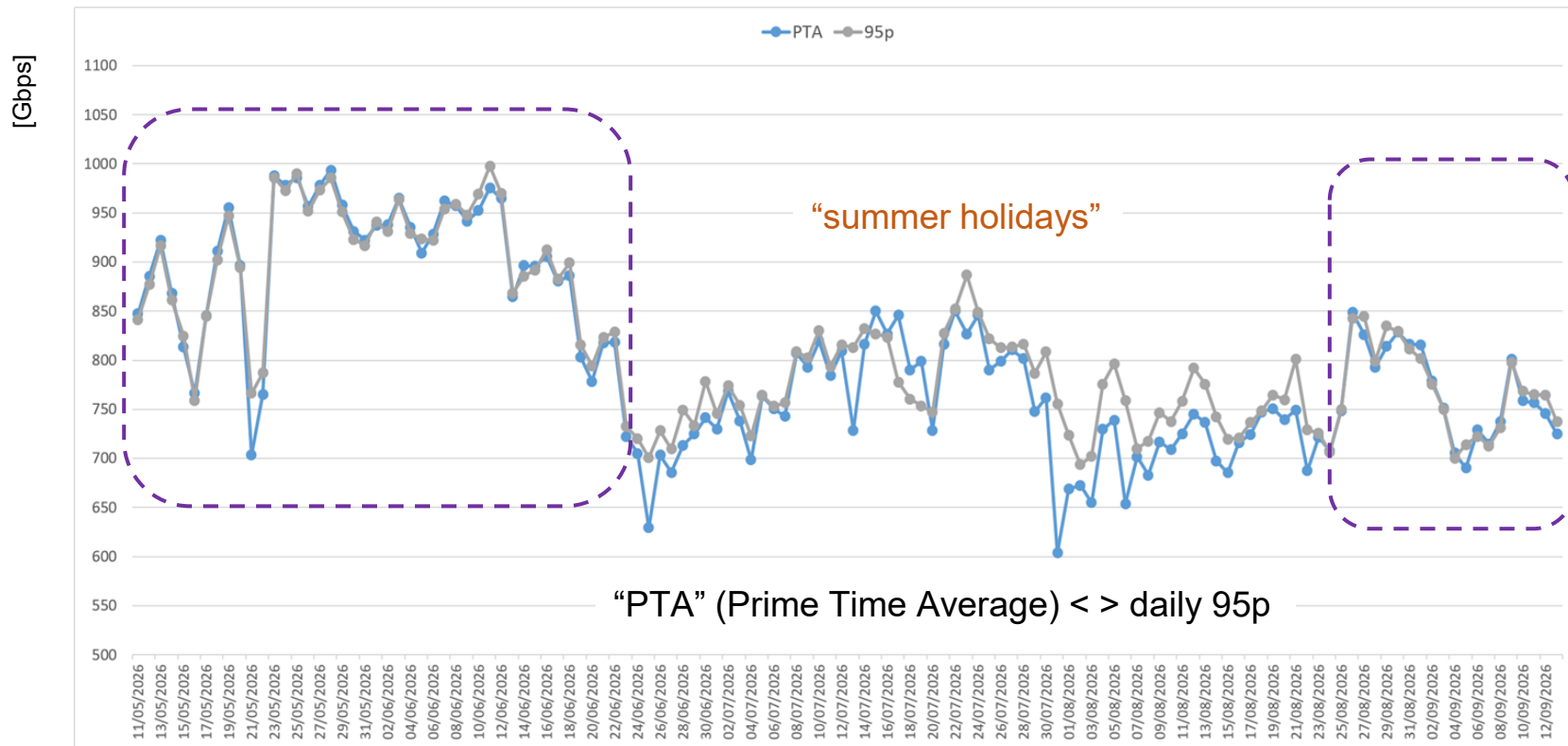


W avg W 95p W median W max W 1Q W 3Q W 10p



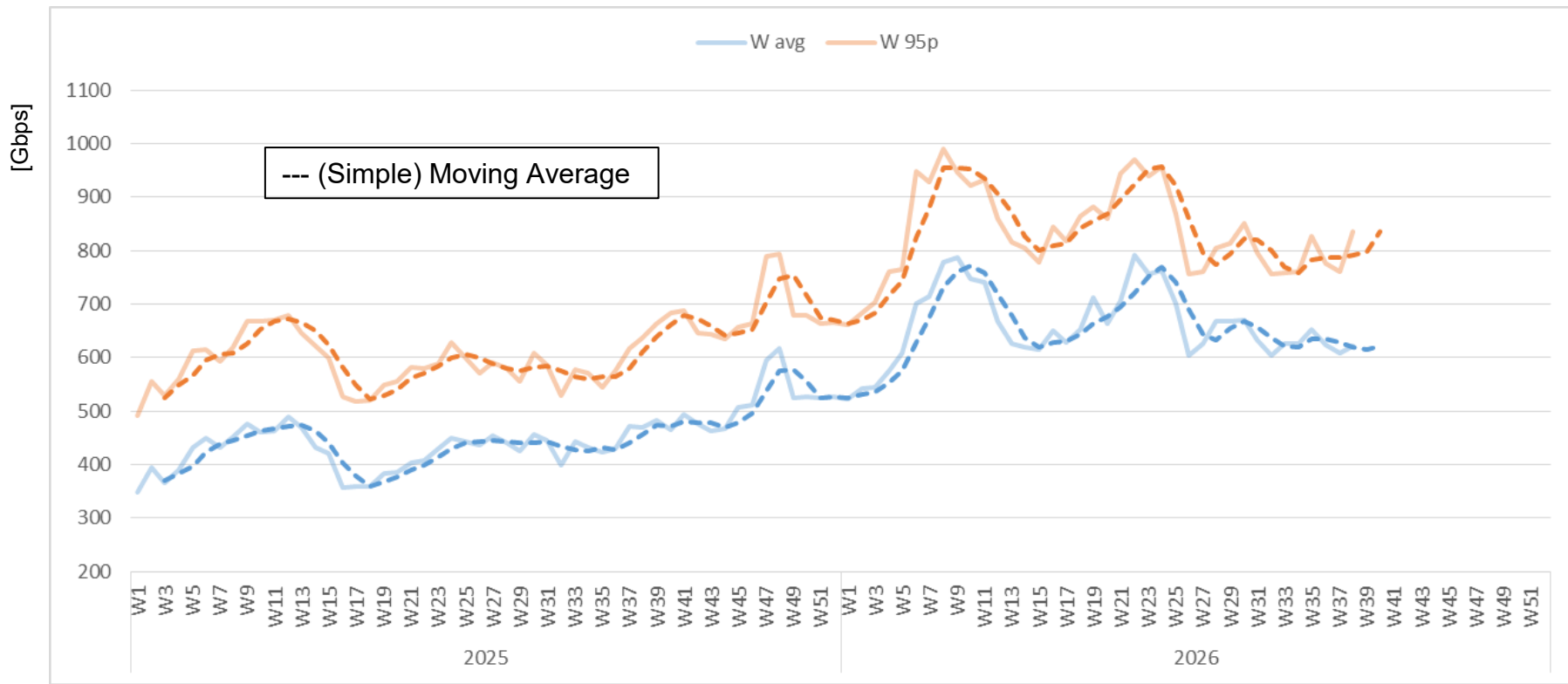


INTERLAN-IX 2026 W20-W37 PTA<>95P

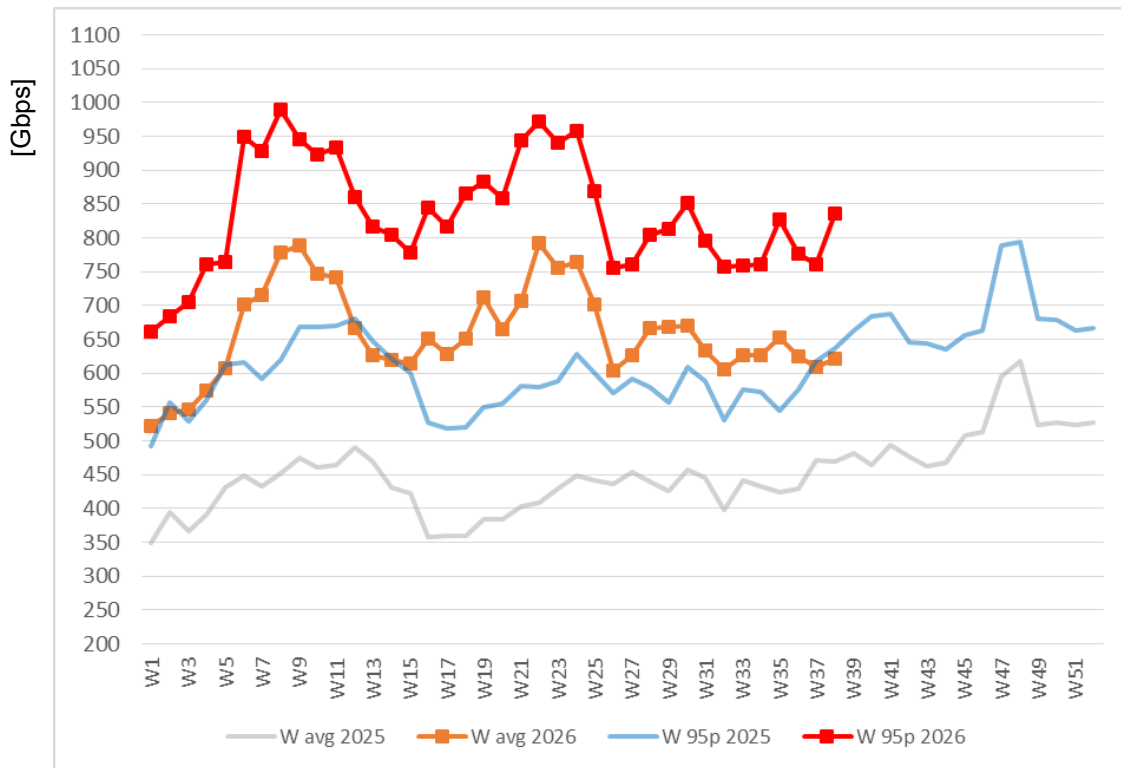




INTERLAN-IX 2025-2026 AVG/95P TREND



INTERLAN-IX 2025-2026 W1-W38 Y2Y



Y2Y W1-W38

95p +42.36%

W22 +67.68%, W18 +66.48%

W21 +62.45%, W19 +60.80%

...

W37 +23.37%, W2 +23.06%

AVG +55.55%

W22 +94.12%, W19 +85.97%

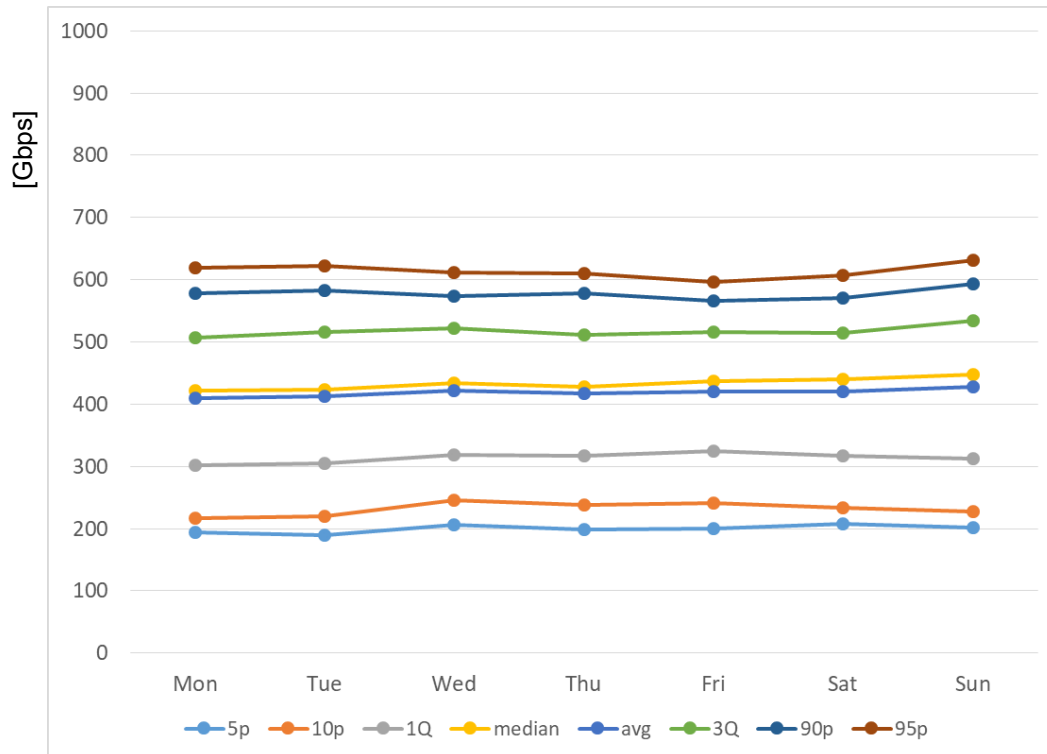
W16 +82.00%, W18 +81.06%

...

W38 +32.57%, W37 +29.16%



INTERLAN-IX DAILY 1H2025 (W1-W26)



1H2025 W1-W26

Top (95p, 90p) almost flat

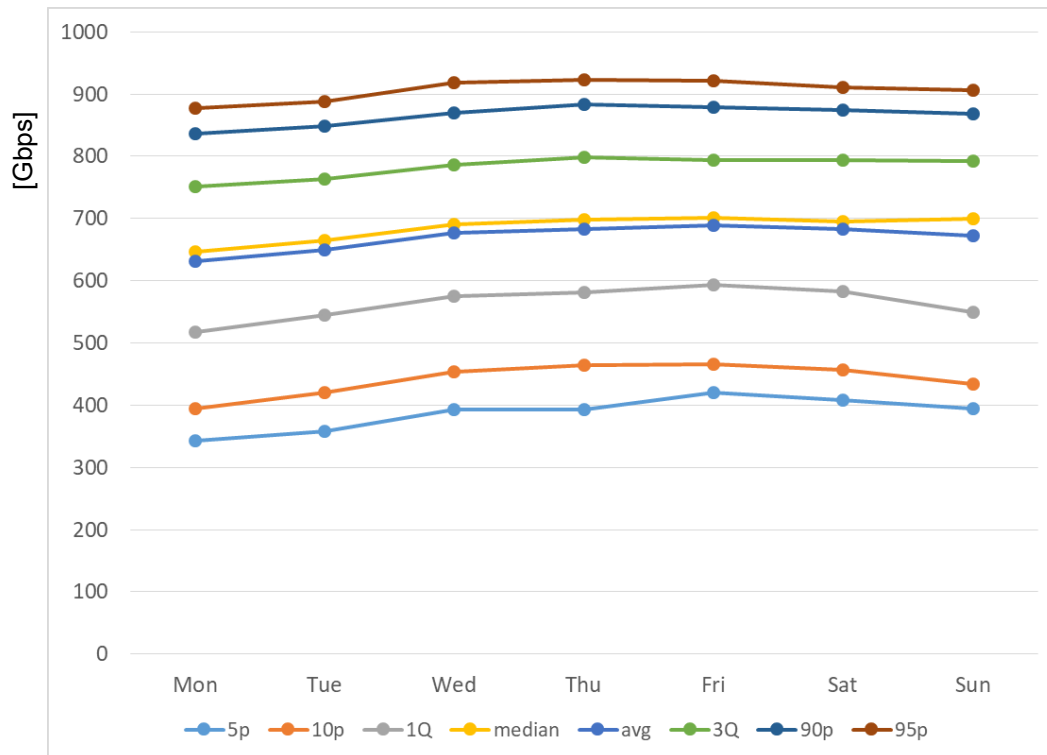
IQR (=3Q-1Q):
“steady” during weekdays
a bit wider on Sun

average/median “close”
(z-score <> modified z-score)

“flat” night minimum



INTERLAN-IX DAILY 1H2026 (W1-W26)



1H2026 W1-W26

Top 95p on Wed-Thu-Fri

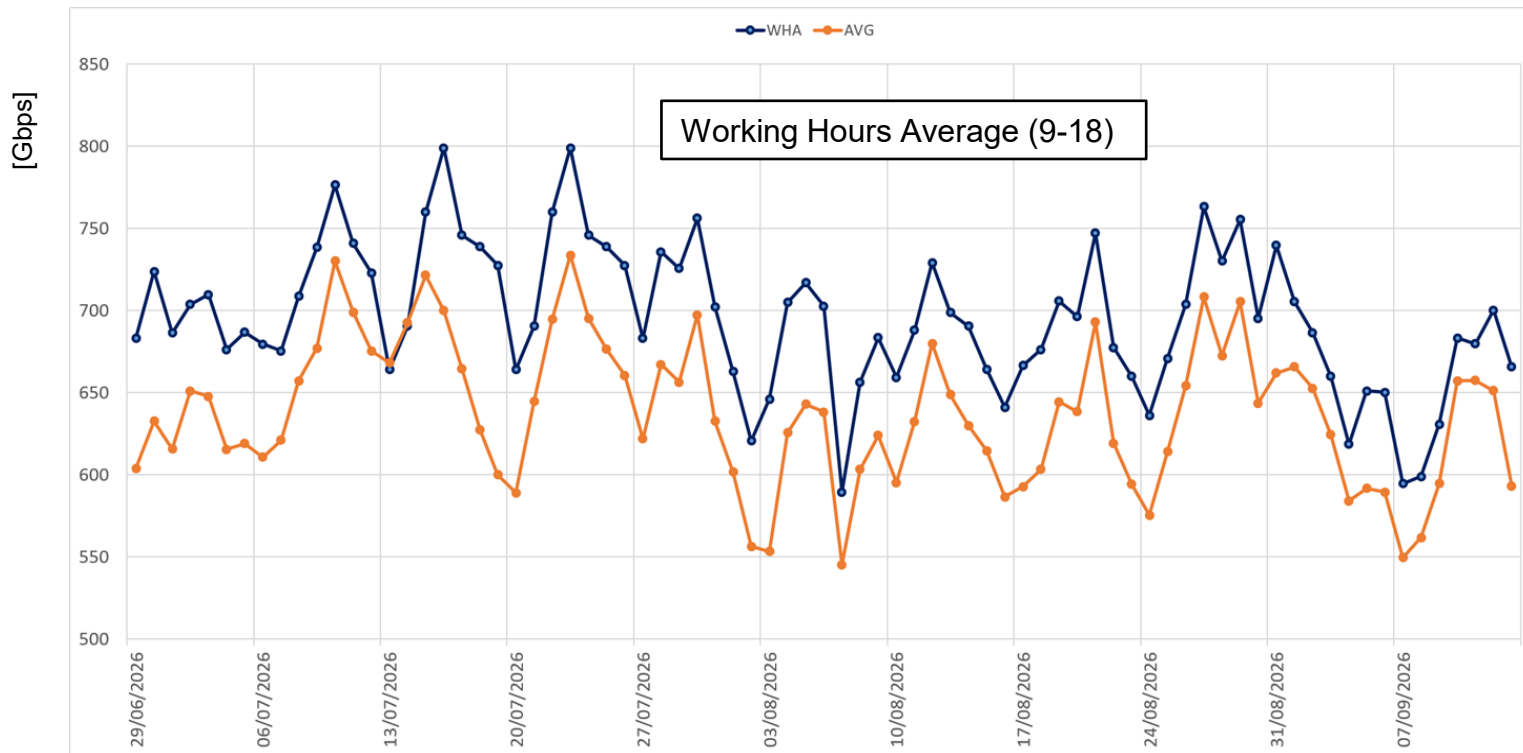
**IQR (=3Q-1Q):
similar values during weekdays
wider on Sun**

**average/median “close”
(z-score <> modified z-score)**

“deeper” night min



INTERLAN-IX AVG<>WHA W27-W37





**QUESTIONS?
COMMENTS?
SUGGESTIONS?**

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**THANK YOU
FOR YOUR ATTENTION**

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