

PH INTERNET LANDSCAPE

Achie Atienza

APRICOT 2023
Sofitel Philippine Plaza Manila
28 February 2023

DISCLAIMER



PH IN NUMBERS

7,641
Islands
(high tide)

2,000
Inhabited (26%)
3 Major Island groups

113.44M (as of Feb 2023)

MANILA Capital

10

International Submarine
Cable systems

670

Autonomous System Number (ASNs)

10

Local Internet eXchange Points (IXPs)

9

International Cable Landing Stations (CLS)

14

Data Center (DC)
Facilities

Reference: APNIC, Google
Note: additional info, not yet publicly available



La Union/Luna (1+2):

AAG

Nov 2009

SEA-H2X

2024

<u>ALC</u>

Q3 2025

Batangas(3+1):

SJC

Jun 2013

APCN2

Dec 2001

SMW3

Sep 1999

ADC,

Q4 2022

Cavite: EAC/C2C

Nov 2002



INTERNATIONAL CABLE SYSTEMS

Subsea Cables: 9+10*

CLS: 7+2

Ballesteros:

TGN-IA

Mar 2009

<u>Aurora (2):</u>

PLCN

JAN 2022

APRICOT

Q4 2024

Daet:

JUPITER

2020

ASE

Aug 2012

Pandemic Effect?

10/19 cables starting 2020

9/10 cables during/post Pandemic

Davao(1+3):

SEA-US

Aug 2017

Bifrost Q2 2024 <u>APRICOT</u>

Q4 2024

ACC-1

Reference: https://www.submarinecablemap.com/#/country/philippines



Majority of IPv4 space still managed by Globe and PLDT, but growth and demand drives good competition (or vice versa)

10,240

10,240

9.984

9,216

		ASN	RETWORK	IFS
PLDT <		AS9299	Philippine Long Distance Telephone Company	3,023,616
		AS4775	Globe Telecoms	679,168
		AS6648	Bayan Telecommunications, Inc.	365,568
		AS132199	Globe Telecom Inc.	314,368
		AS17639	Converge ICT Solutions Inc.	297,728
		AS9658	Eastern Telecoms Phils., Inc.	267,520
		AS10139	Smart Broadband, Inc.	176,384
		AS7629	EPLDT	173,568
		AS23944	SKYBroadband SKYCable Corporation	131,072
		AS3550	Ateneo de Manila University	63,488
		AS17970	SKYBroadband SKYCable Corporation	49,152
		AS55821	RADIUS TELECOMS, INC.	47,104
		AS23930	IP-Converge Data Center, Inc.	38,144
		AS18190	SunValley New Oriental	29,440
		AS45754	Clear Path Networks Inc	17,408
		AS9927	A Multihomed ISP Company	17,408
		AS56207	ComClark Network & Technology Corp	16,384
		AS4759	TEXTRON CORPORATION	16,384
		AS17895	Globalreach eBusiness Networks, Inc.	16,128
		AS56099	Asian Vision Cable	15,360
		AS135607	Infinivan Incorporated	14,080
		AS17894	AyalaPort Makati, Inc. / Data Center Operator	13,312
		AS38325	WTP	13,056
		AS134707	RoyalCable Flash	11,264
		AS18187	Source Telecoms Inc.	10,240

Philippine Telegraph and Telephone Corporation,

Department of Science and Technology

Internet Service Provider and Data Center

Cablelink & Holdings Corp.

AS18233

AS9821 AS38553

AS45499

New Players / Rebrand / Expansion

DITO AS139831 (3rd Player)

Cable TV Providers
Offering Internet Services

Radius (Power utility)
Wifi City = SourceTel)
PT&T... Fiber

Reference: https://ipinfo.io/countries/p Whois

Ph ISPs by local function

Te co ISPs Multi-service providers / Mobile Operator

SPs Internet Service Providers

Cable TV cable TV providers offering Internet Services

Enterprise Managed infrastructure (Businesses)

Academe Managed infrastructure (Schools/Research)

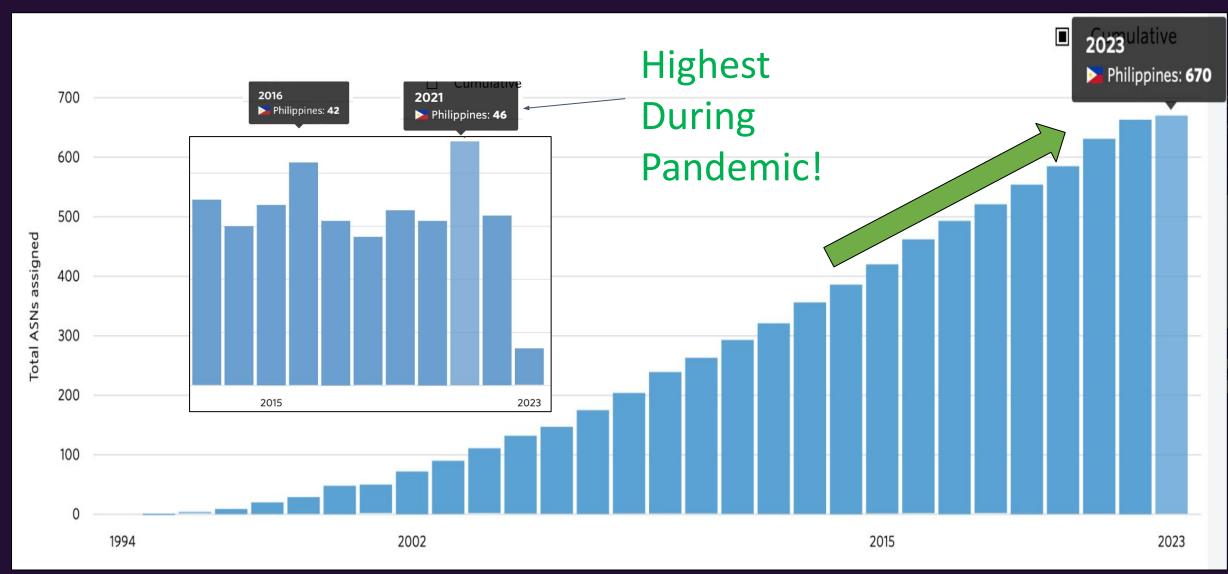
Government Managed infrastructure (Government)

PAPTELCO Managed Infrastructure (Private)

Philippine Association of Private Telecommunications Companies



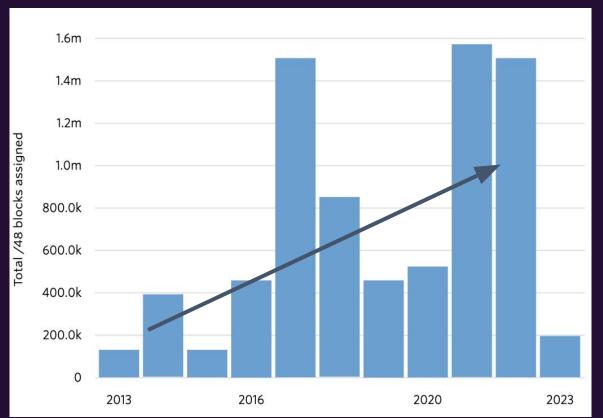
Continuous growth of new networks "Driven by Peering!"



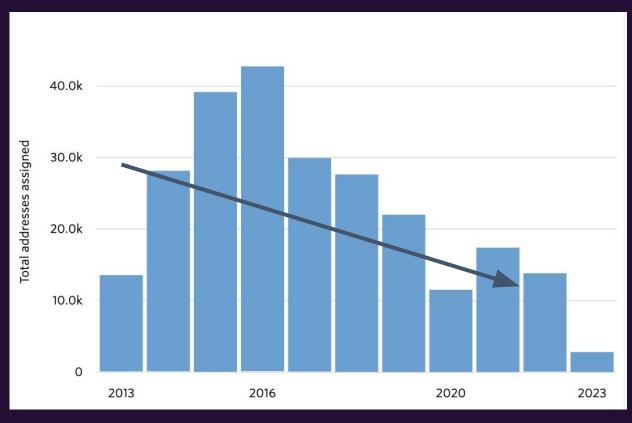


Dual stack for "IPT, Broadband & Mobile Services"

IPv6



IPv4



IXPs

Manila(9)**

ComclarkIX
MIX
GETAFIX
GIX/NIGX
PCTA-IX
PHIX
PhOpenIX
VIX
DE-CIX

Cebu(4)

GETAFIX GIX PhOpenIX VIX

*Davao(3)

GETAFIX
GIX
PhOpenIX
**more soon



IXP & DC LANDSCAPE

IXPs (9+1*), DCs (11+3)

Data Centers

Luzon(11+3)

Bee Info Tech

Comclark

DataOne

Digital Edge

Eastern Communications

FlowDigital*

IP Converge

VST-ECS

Globe Telecom

PHCOLO

PLDT

STT

Tech Global

TIM

Visayas - Cebu(2+1)

Globe Telecom

PLDT

STT

Mindanao - Davao(2+1)

Globe Telecom

PLDT

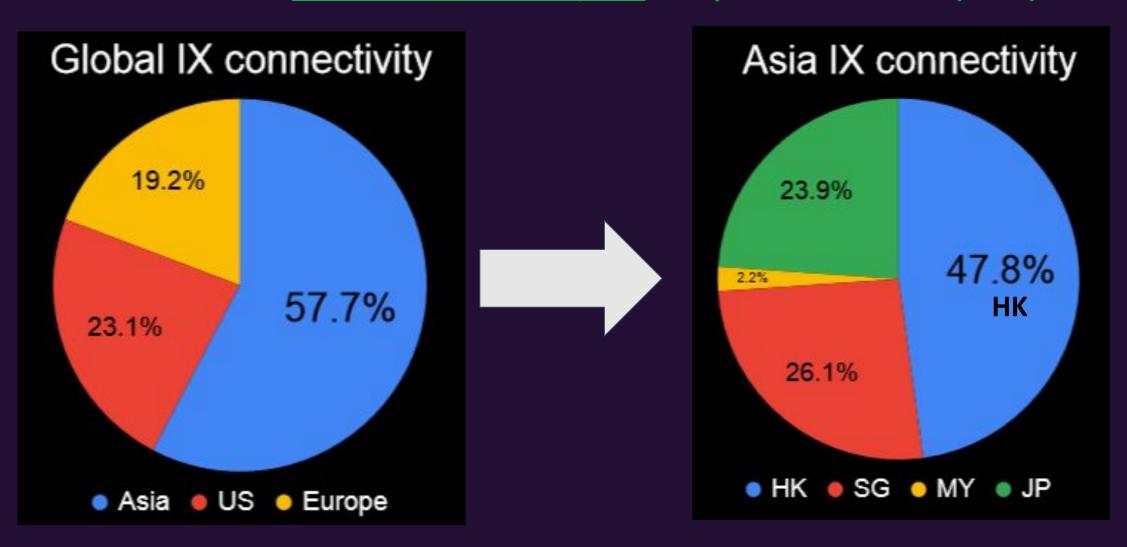
STT

*soon

Reference: https://www.submarinecablemap.com/#/country/philippines

GLOBAL IX CONNECTIVITY

Traffic remains Asia centric (Historically US) - PNI port size increases (100G)



KEY LOCAL TRENDS ... OR LESSONS

Ph Positioned as Alternative/New Regional hub New players (New ASNs) from Cable TVs

Port size - growing to 100Gs (or nx100)

Policy - more open to Peering ("learned" the benefits)

Expansion - IXP connectivity, link diversity, multiple sessions

Geo politics - still BAU but increasing demand for clean pipe services Regulatory - Anti Child porn (RA 9775) Top Traffic - Social Media/OTT and own content

KEY LOCAL TRENDS ... OR LESSONS

<u>Increasing International collaboration</u>

Data Center: Globe Data Center & STT

New DCs (Digital Edge, FLOW)

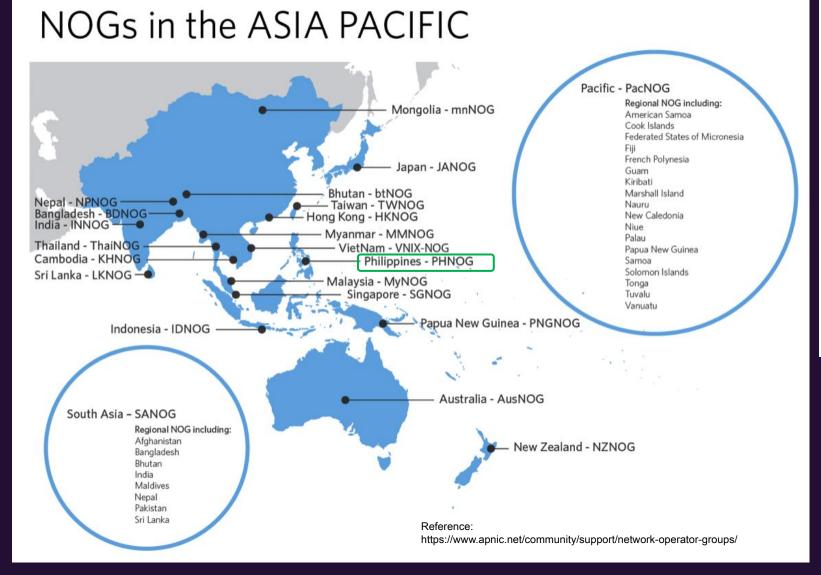
IXP: GETAFIX & DE-CIX...more coming

Cable System: New subsea links (9)

Satellite: Starlink

Community: US AID/Beacon, AORA (Open RAN)

PEOPLE NETWORK: Community (PhNOG)





Neutral Ground
Knowledge sharing
Collaboration

ANO NA?

" Diskarte "

We'll find a way :)

WALANG KATAPUSAN...

- No Finish Line -

Konsyensya

Internet of Conscience

MARAMING SALAMAT!

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PH %: 96.75

ROAD TO 100% ...