

The background of the slide is a photograph of a modern, multi-story building with a curved facade and large glass windows. The building is set against a grey, overcast sky. In the foreground, there is a paved area with some white architectural elements.

Thailand Internet Peering Environment

The THAILANDIX logo is centered on the slide. It features the word 'THAILANDIX' in a bold, white, sans-serif font, with a stylized orange and yellow 'X' at the end. The logo is set against a black rectangular background.

THAILANDIX



CAT Telecom Public Company Limited

1977

- Establishment of Communication Authority of Thailand (การสื่อสารแห่งประเทศไทย)
- Postal & Telecom Services

14 August 2003

- Divided into 2 companies : Thailand Post (ThaiPost) and **CAT Telecom (CAT)**

2019

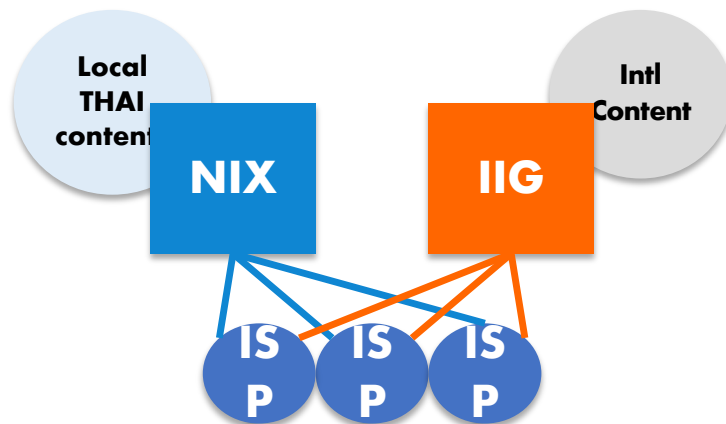
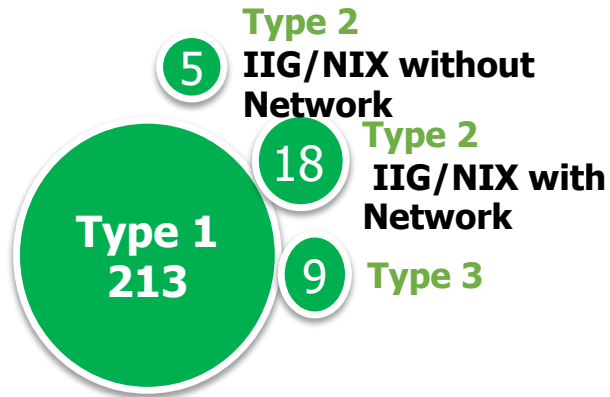
- 100% shared by Ministry of Finance & Governed by Ministry of Digital and Economy (DE)
- Core business : Mobile/Broadband/International Telecom/Cloud&Digital services
- 2018 year end revenue 1,977 millionUSD



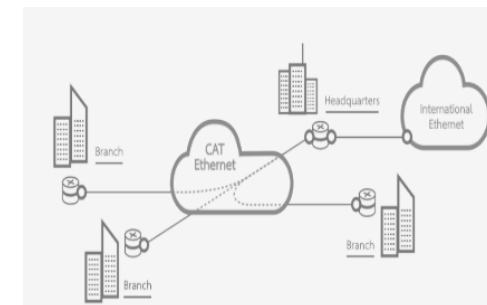
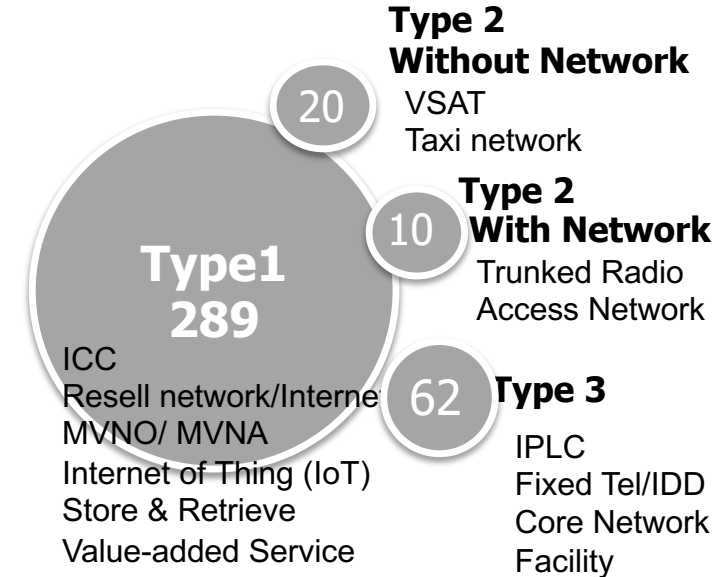
Ms Ubonpan Chuenchom has worked for CAT Telecom more than 20 years. With network engineering background, she had many year experiences of working with NOC ,product development and Sale&Marketing, mostly with international data and Internet gateway services. Her roles for product development was during the liberalization period in Thailand, This has made CAT revolved and redefined the product and marketing strategy. She is now the ***Vice President of International business development*** and responsible for both IPLC & Internet Gateway product and marketing. With the dynamic change in wholesale business, her mission is to maintain the leading role of CAT in international business as much as collaboration with partners.

NBTC Telecom License Scheme

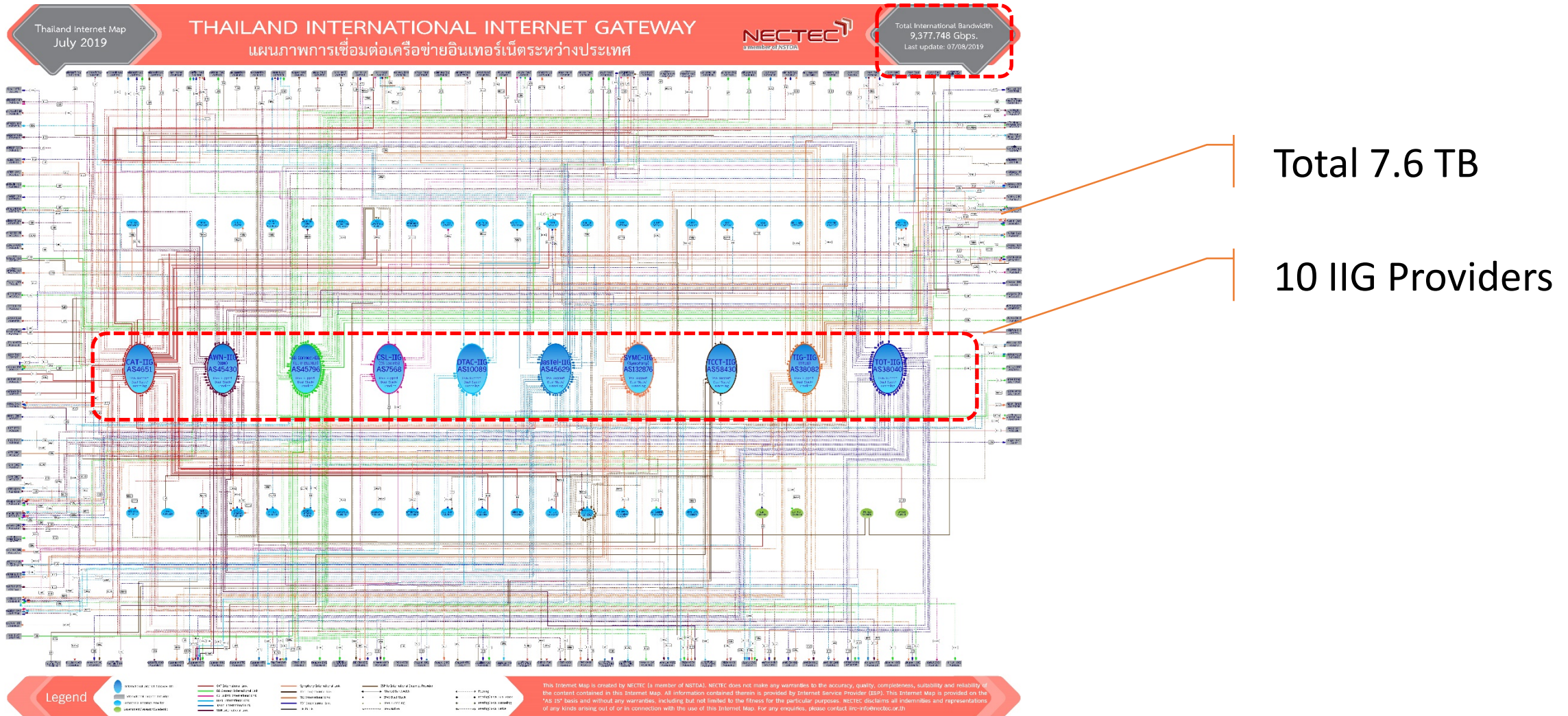
Internet Service Providers



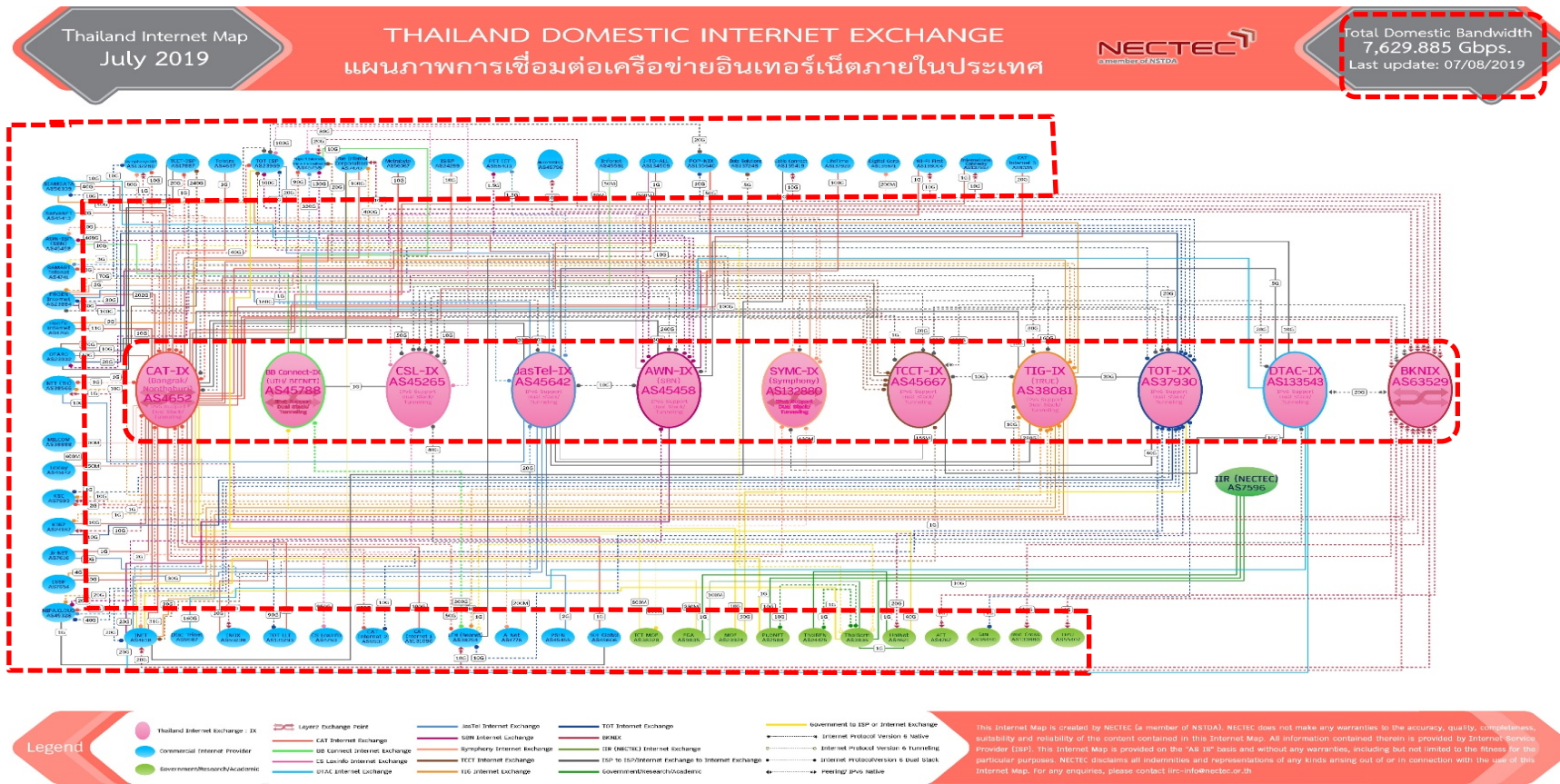
Telecom Service Providers



Thailand International Internet Bandwidth (IIG)

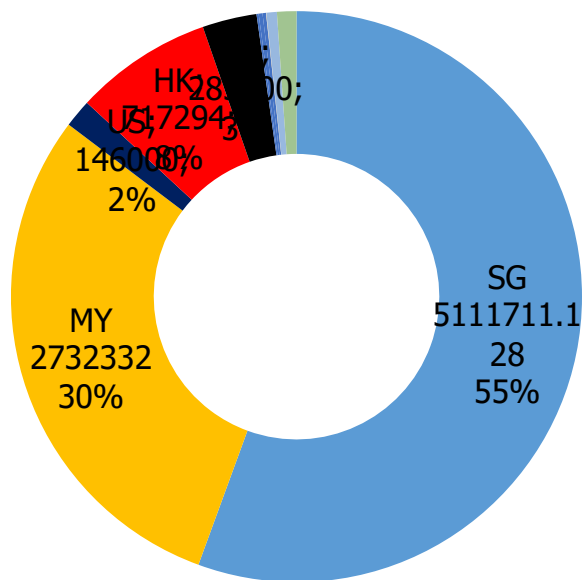


Thailand National Internet Exchange (NIX)

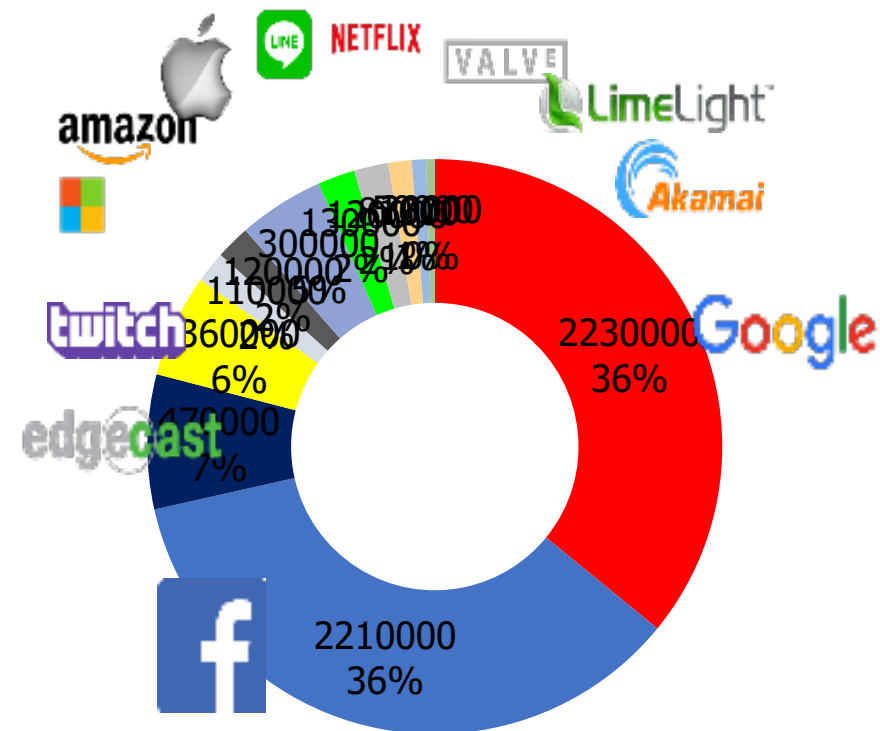


- Total 7.6TB
- 11 NIX Providers
- 58 Members

Thailand International Bandwidth by destination



Thailand OTT Bandwidth

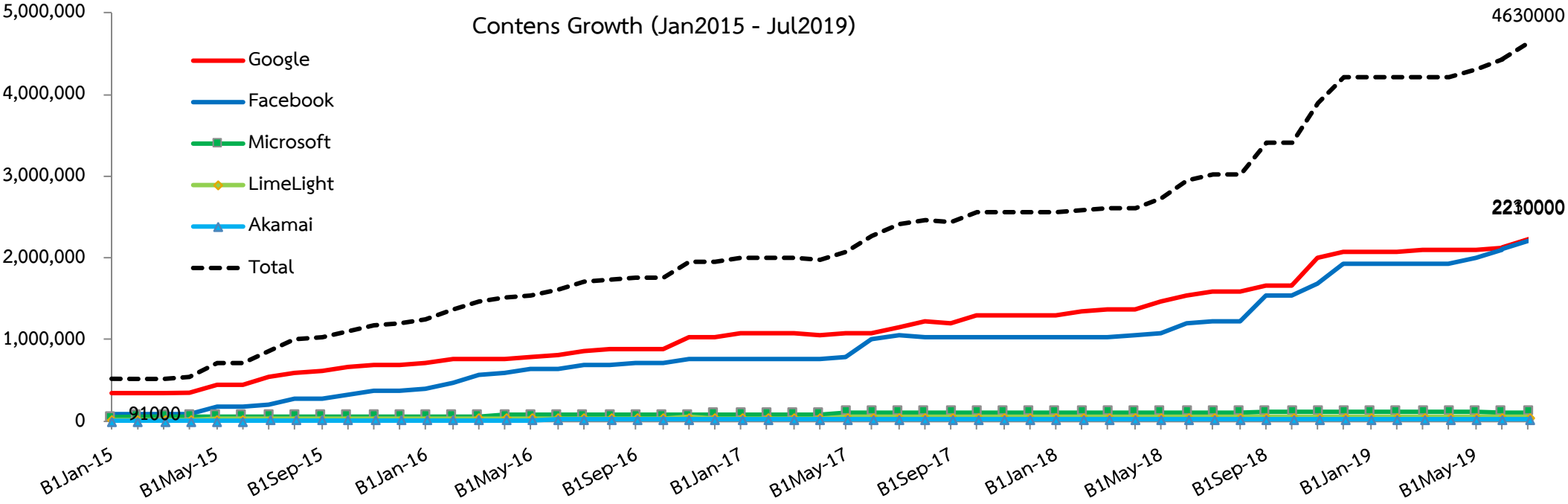


Unit: Mbps

Year : 2019

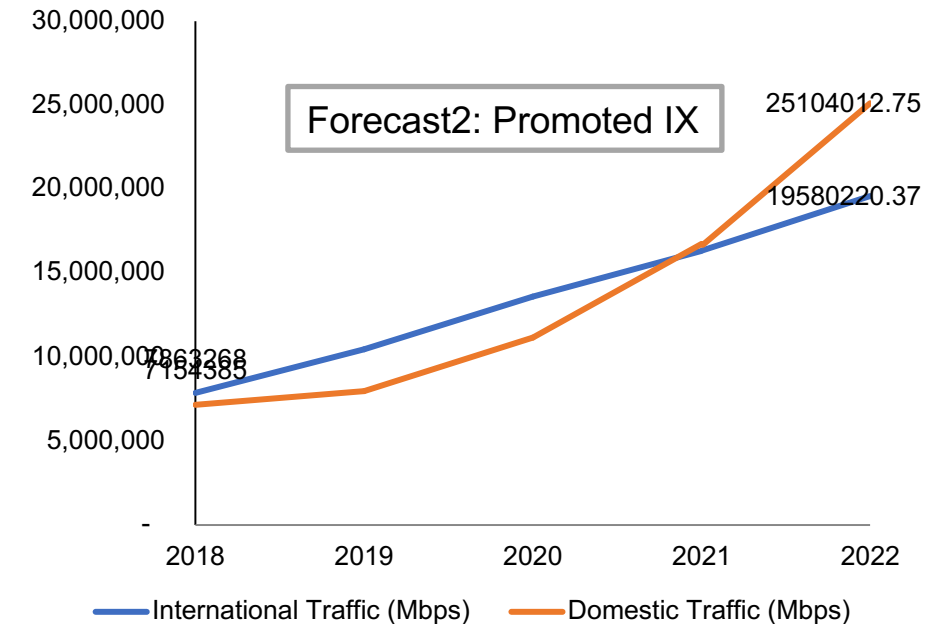
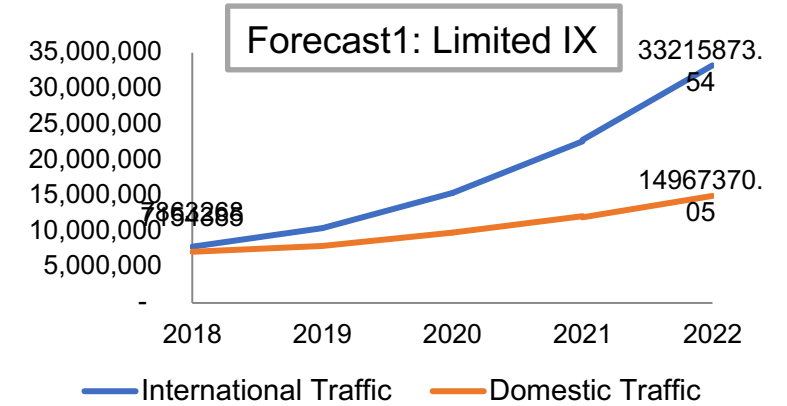
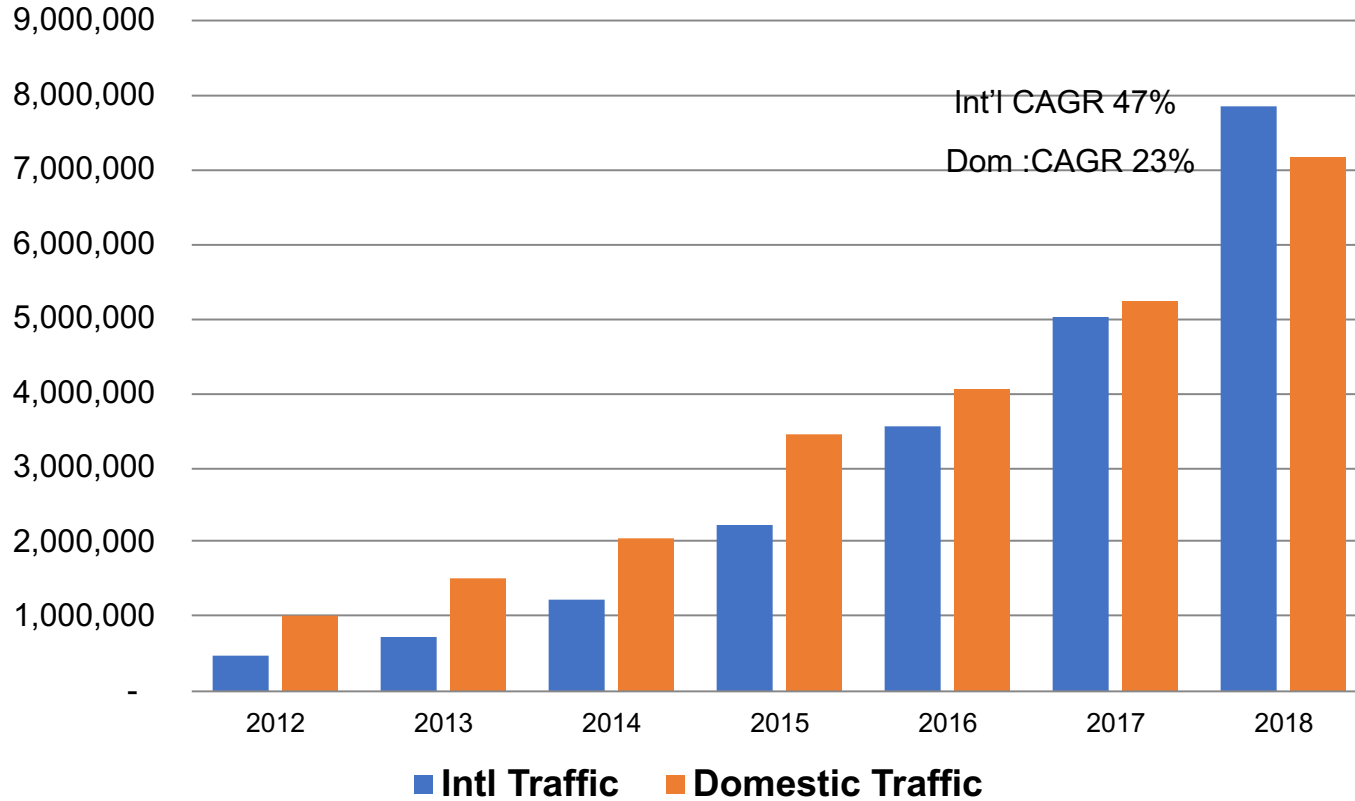
Ref : www.nectec.or.th

OTT Bandwidth Growth in Thailand



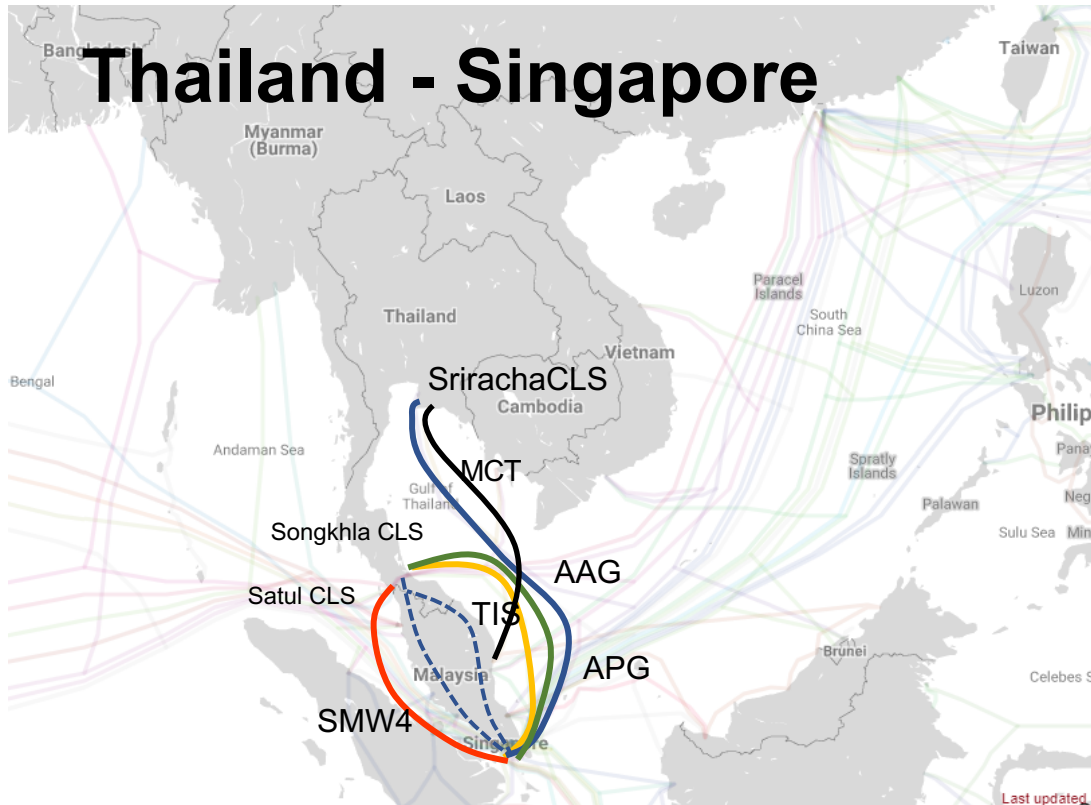
NIX&IIG Bandwidth Growth in Thailand

History IIG & NIX traffic

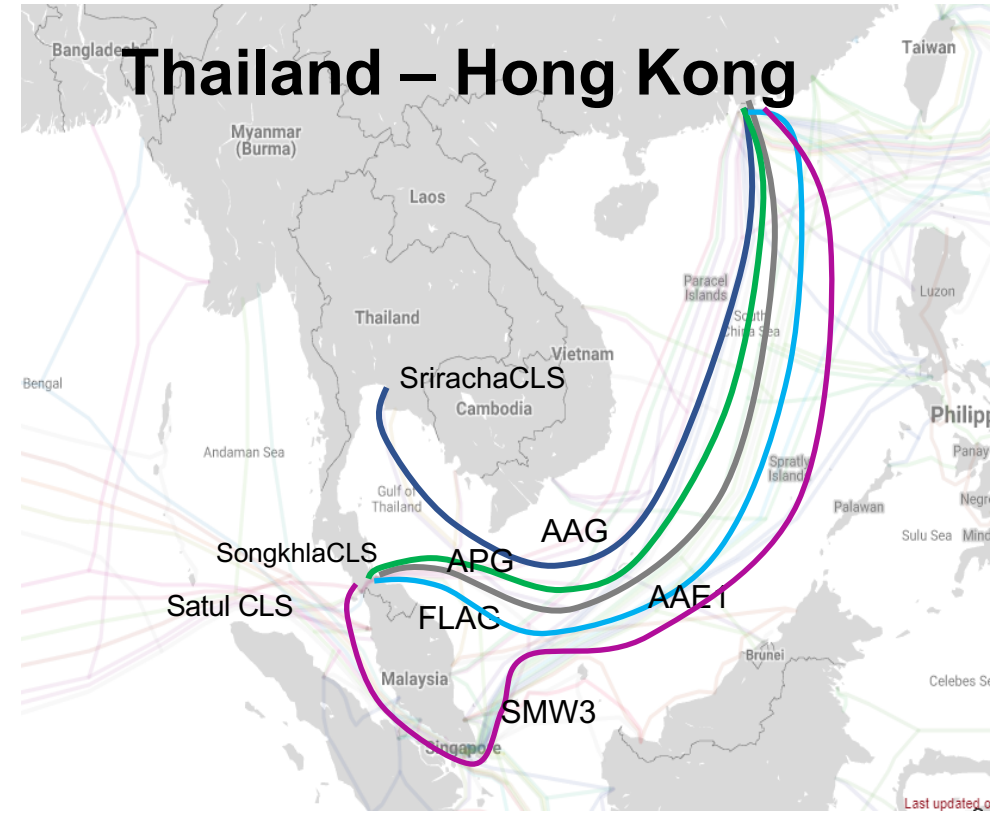


Thailand International submarine & terrestrial network

Directed to Singapore & Hong Kong

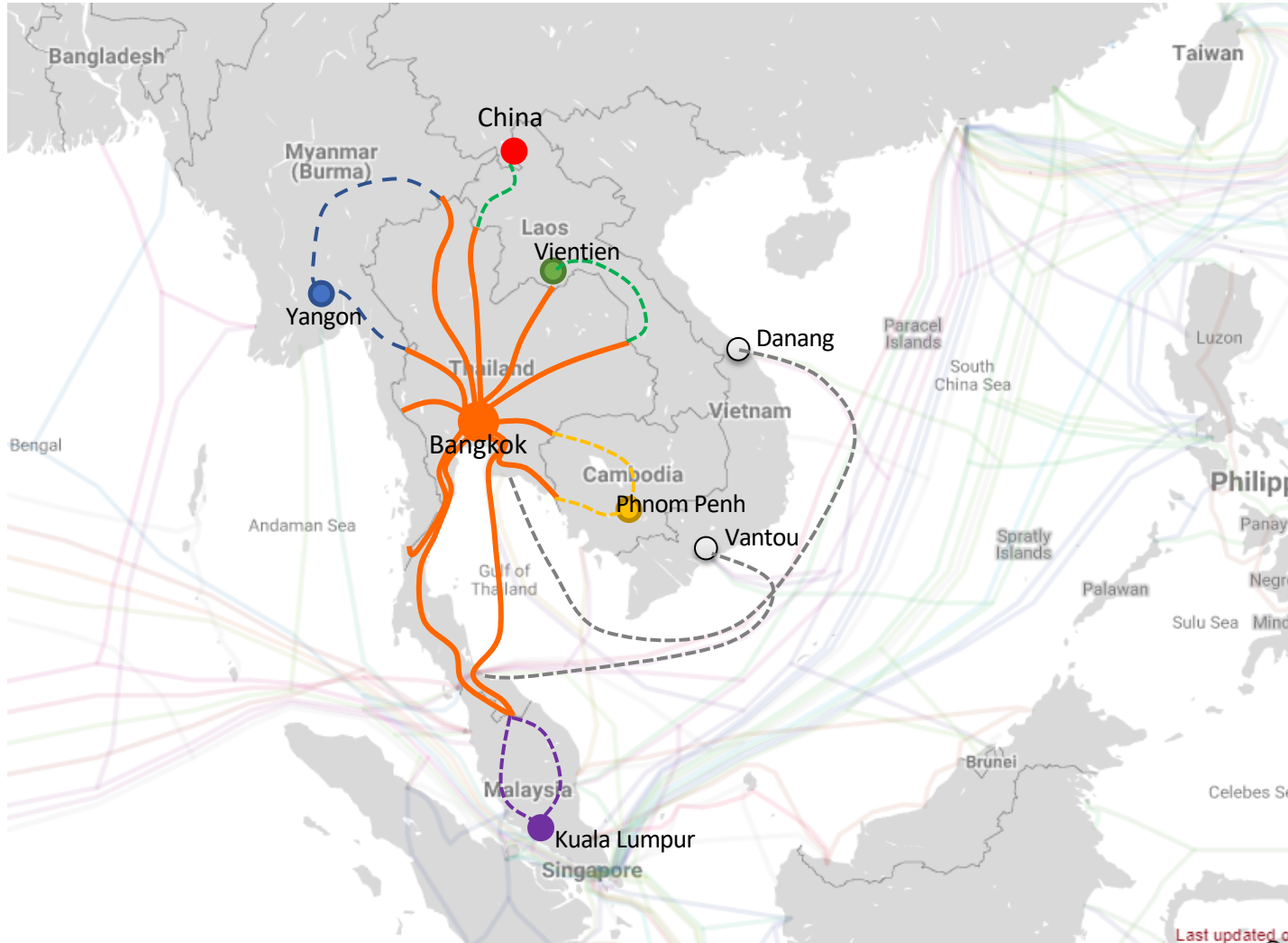


TH-SG route has 4 diversified submarine systems (SMW4/TIS/APG/AAG) from 3 different CLS in Thailand (Satul / Songkhla/Sriracha)



TH-HK route has 4 diversified submarine systems (APG/AAG/FLAG/AAE1) from 4 different CLS in Thailand (Songkhla/Sriracha).


Thailand as a transmission Hub of CLMVT



- Thailand connects neighboring countries with 10+ border interconnection points over terrestrial and submarine network systems.
- With full mesh and diversified network routes makes Thailand as a complete hub of S.E Asia.



THAILANDIX



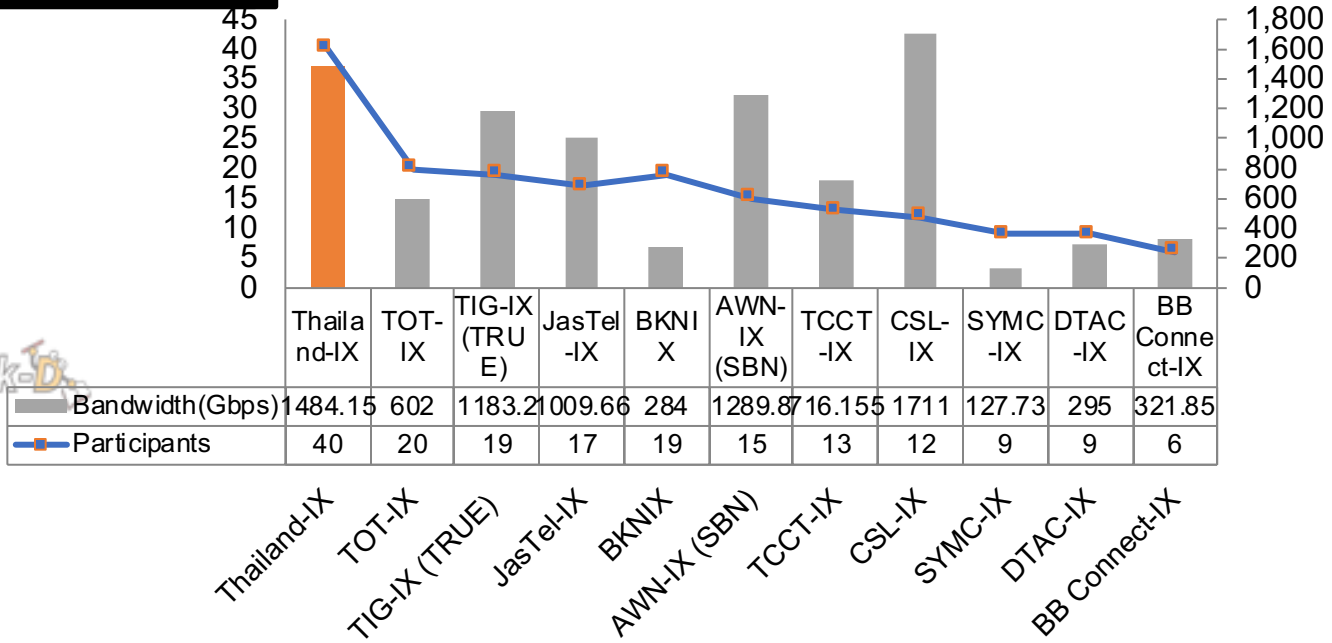
<http://www.th-ix.net>

THAILAND IX

No.1
Peering Participants
IX in Thailand



IX of Thailand Statistic



Ref : <http://internet.nectec.or.th/webstats> (July19).

TH-IX Peering :Technical Guide

List	Support	Apply
1.	Layer2 IX	✓
2.	IPV4, IPV6	✓
3.	Interface - 1G - 10G - 100G	✓ ✓ ✓
4.	Route Server	✓
5.	Traffic Monitoring	✓
6.	24x7 NOC	✓
7.	Smart Hand Service	✓
8.	Diversity of TH-IX • CAT Tower 72 Charoen Krung Rd., Bang Rak, Bangkok • Nonthaburi Telcom Center 299 Tiwanon Rd., Tambon Bangkrasor, Amphoe Mueang, Nonthaburi	✓

TH-IX : Standard Price

List	Interface	Price MRC (Baht)
1.	1G	7,500
2.	10G	50,000
3.	100G	350,000

X-connect : Standard Price

List	Interface	Price MRC (Baht)
1.	Intra-floor	2,000 Baht/Fiber Pairs
2.	Inter-floor	4,000 Baht/Fiber Pairs

THAILAND IX

Thailand IX Member Lists

1	POPNIIX	135063	25	CAT IDC	9335
2	TELSTRA (THAILAND)	4637	26	TIG (TRUE INTERNET GATEWAY)	38081
3	TENCENT	132203	27	TCC TECHNOLOGY	45667
4	PACNET	4765	28	TCC TECHNOLOGY	17887
5	MICROTHAI PLUS	136952	29	CATISP	9931
6	TOT	23969	30	AWN (AIS)	45458
7	SIAMDATA	56309	31	CDN PLUS	133496
8	ISSP	24299	32	CS LOXINFO	45265
9	ISSP	7654	33	MINISTRY OF FINANCE (ICT)	38328
10	UNINET	4621	34	INET	4618
11	KIRZ	24187	35	JINET	7616
12	INCAPSULA	19551	36	KSC	7693
13	EGA (GIN)	38450	37	NTT (THAILAND)	38566
14	CAT BROADBAND	131090	38	ONE TO ALL	134509
15	SAMART	4741	39	OTARO	23932
16	INOX	59238	40	PROEN	23884
17	LIFETIME	137920	41	SERVENET SOLUTION	45413
18	NIPA	45328	42	SYMPHONY COMMUNICATION	132280
19	3BB	45758	43	TOT	131293
20	WIFI FIRST	138004	44	TRUE INTERNET	7470
21	METRABYTE	56067	45	UIH	38794
22	JASTEL	45642			
23	INTERNATIONAL GATEWAY	137557			
24	ONDE	133065			



THAILANDIX

Transmission providers @CAT Tower Data Center



CAT Telecom

TOT

AWN

Symphony



TRUE

JASTEL

ALT

UIH

Interlink

Standard In-house wiring Services

Intra-floor 2,000 Baht/Fiber Pairs

Inter-floor 4,000 Baht/Fiber Pairs

[Domestic Network : 9 providers/ Int'l Network : 8 providers]

Carrier Neutral and Data Center with CAT Telecom



CAT data center Nonthaburi II

With Trusted Site Infrastructure (TSI) Certificate - Level 3

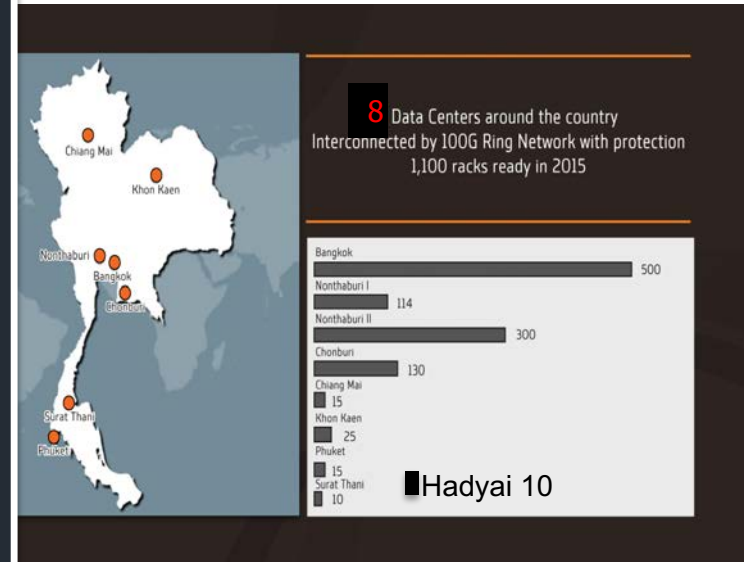


CAT data center

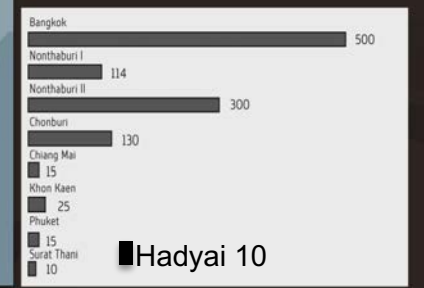
@ CAT Tower

Floor: 13-14
8 & 16 (Planned)

Certified ISO 27001 : 2013



8 Data Centers around the country
Interconnected by 100G Ring Network with protection
1,100 racks ready in 2015





THAILANDIX

<http://www.th-ix.net>