

HKIX Updates at APIX #20

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www.hkix.net

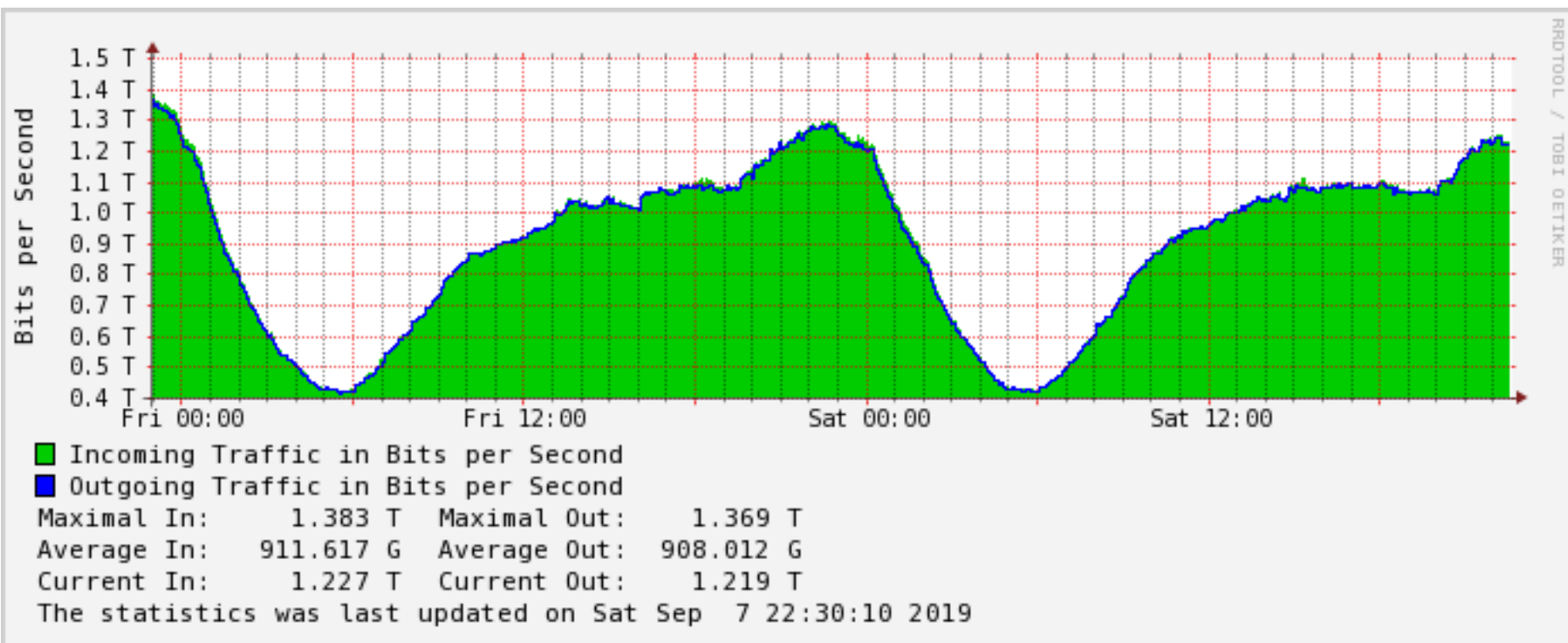
9 Sep 2019, Chiang Mai

HKIX Today

- Supports both MLPA (Multilateral Peering) and BLPA (Bilateral Peering) over layer 2
- Supports IPv4/IPv6 dual-stack
- More and more non-HK participants
- 310+ different networks (autonomous systems) connected
- 520+ physical connections in total
 - 50 **100GE**, 320+ **10GE** & 150+ **GE**
- 1.39+Tbps (5-min) total traffic at peak
- Annual Traffic Growth **~30%**

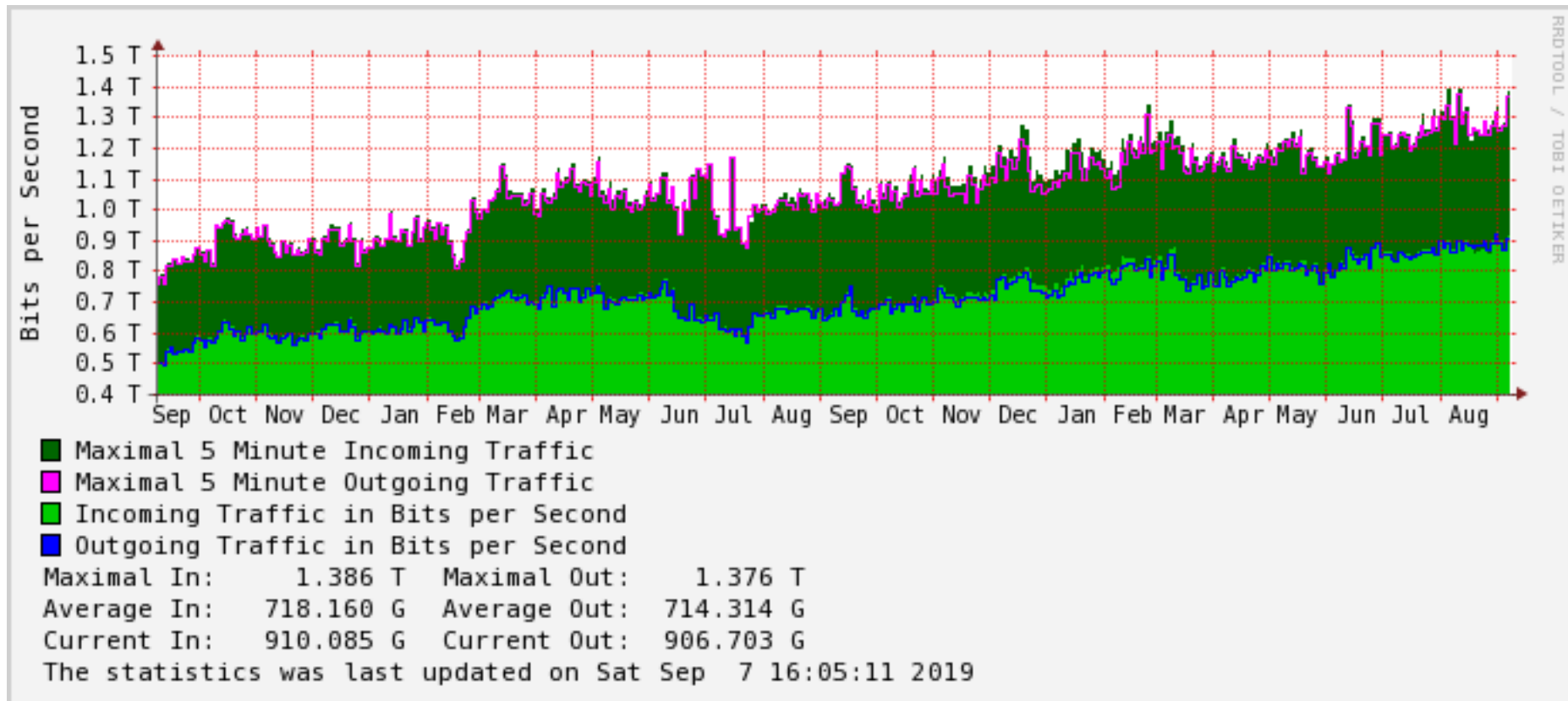
Current HKIX Traffic

Daily Graph (5-min average)

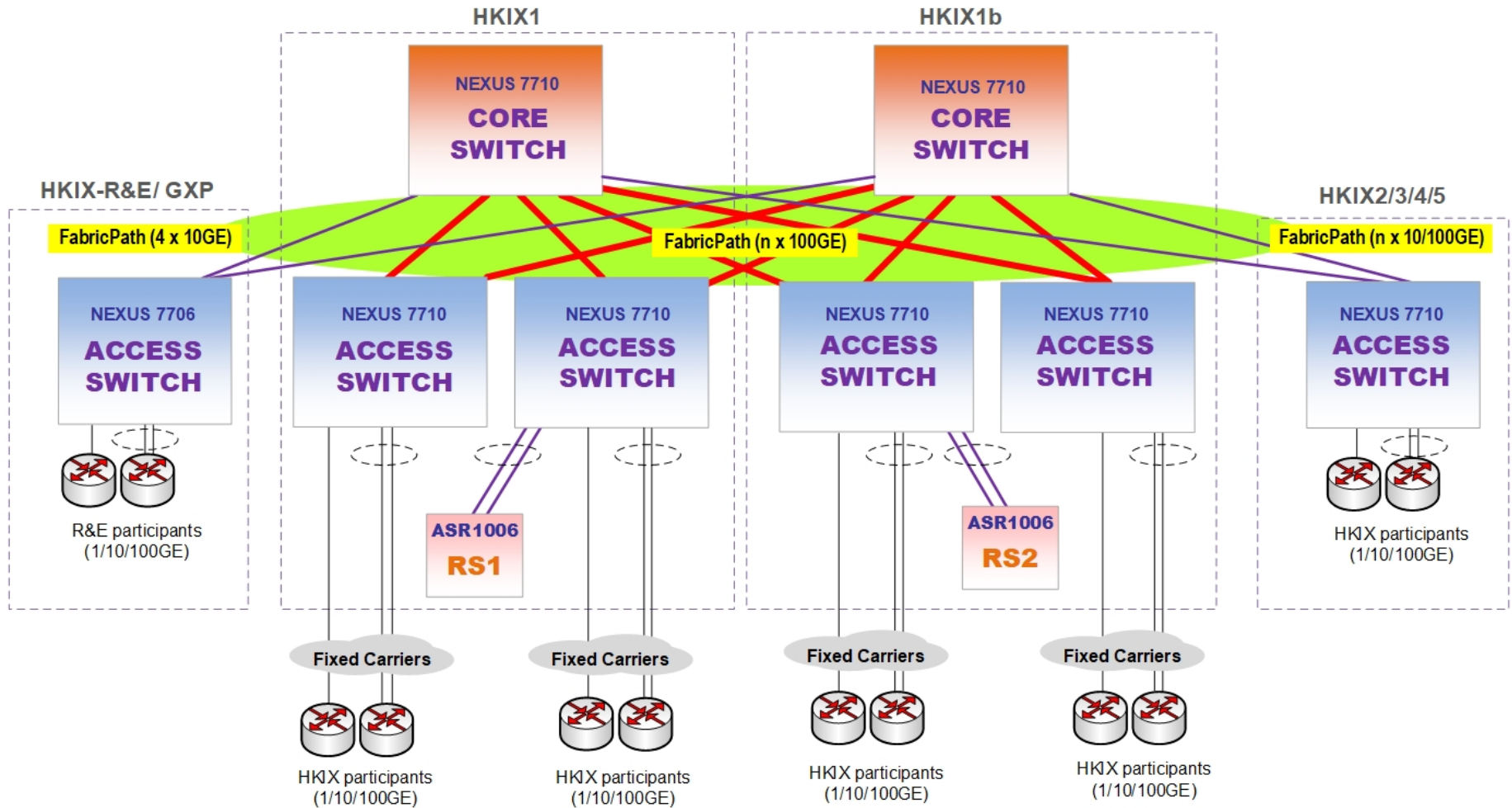


Current HKIX Traffic

Yearly Graph (1-day average)

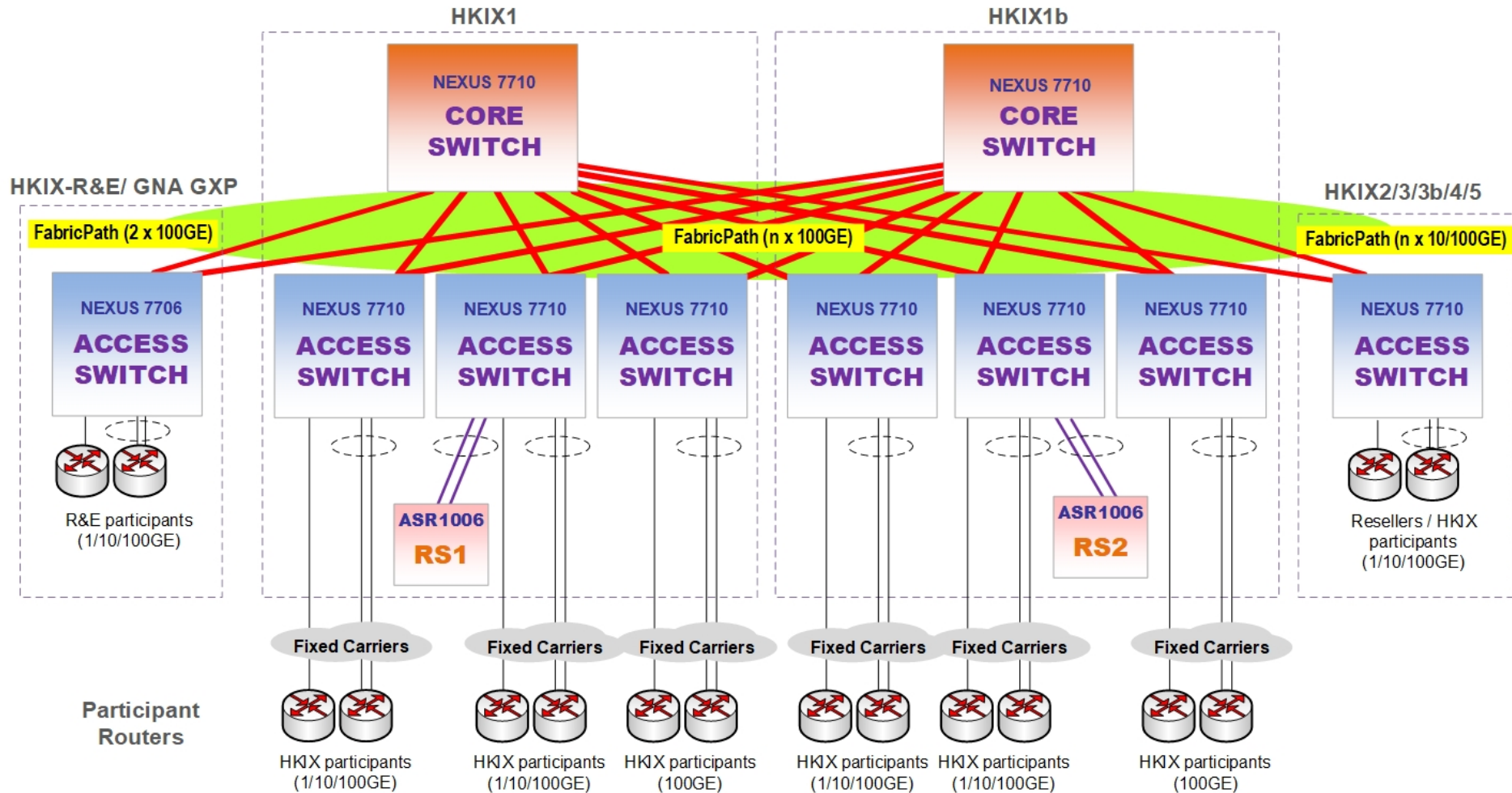


HKIX Network Diagram (Apr 2018)



1. **HKIX1** and **HKIX1b** are the two core sites of HKIX at CUHK while **HKIX2/3/4/5** are HKIX satellite sites outside of CUHK.
2. HKIX participants are encouraged to connect to multiple sites for site resilience.

HKIX Network Diagram (Aug 2019)

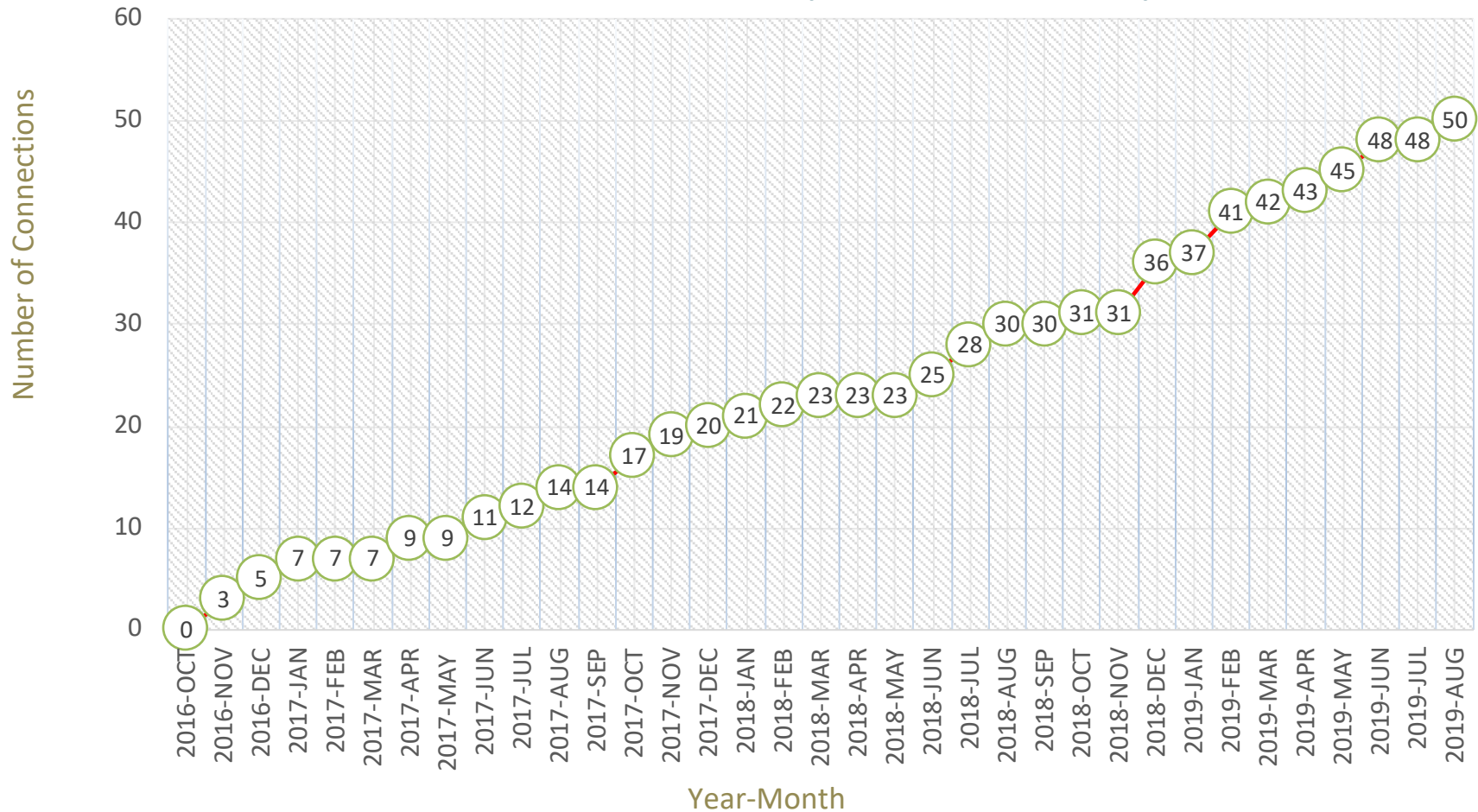


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100GE Connections at HKIX

Total 100G Ports Connected (2016 OCT - 2019 AUG)



HKIX 100GE Participants (1/2)

- Akamai
- Amazon
- ANSONNET
- AOFEI
- BGP Consultancy
- China Mobile HK
- China Mobile International
- CloudFlare
- Facebook
- Google
- HKBN
- Hurricane Electric
- Level 3

HKIX 100GE Participants (2/2)

- Limelight
- Microsoft
- Mytek
- Taobao
- Telin
- Telstra
- Tencent
- TVB
- Udomain
- Value
- XLC Global
- Yahoo

HKIX's 100GE participants at a glance



Content Provider



ISP Regional



ISP Local



Retail & Gaming



DDoS Provider



Data Centre



Others



HKIX Satellite Sites and Reseller Program

5 new satellite sites were established in collaboration with 4 commercial data centres which provide colocation services as well as easy connections to HKIX.

Satellite Site	Satellite Site Collaborator	District	Ports Supported	Status
HKIX2	CITIC Telecom International	Kwai Chung	GE/10GE	
HKIX3/ HKIX3b	SUNeVision / iAdvantage	Fo Tan Chai Wan	GE/10GE/100GE	100G Ready
HKIX4	NTT Com Asia	Tseung Kwan O	GE/10GE/100GE	100G Ready
HKIX5	KDDI / Telehouse / HKCOLO.net	Tseung Kwan O	GE/10GE/100GE	100G Ready

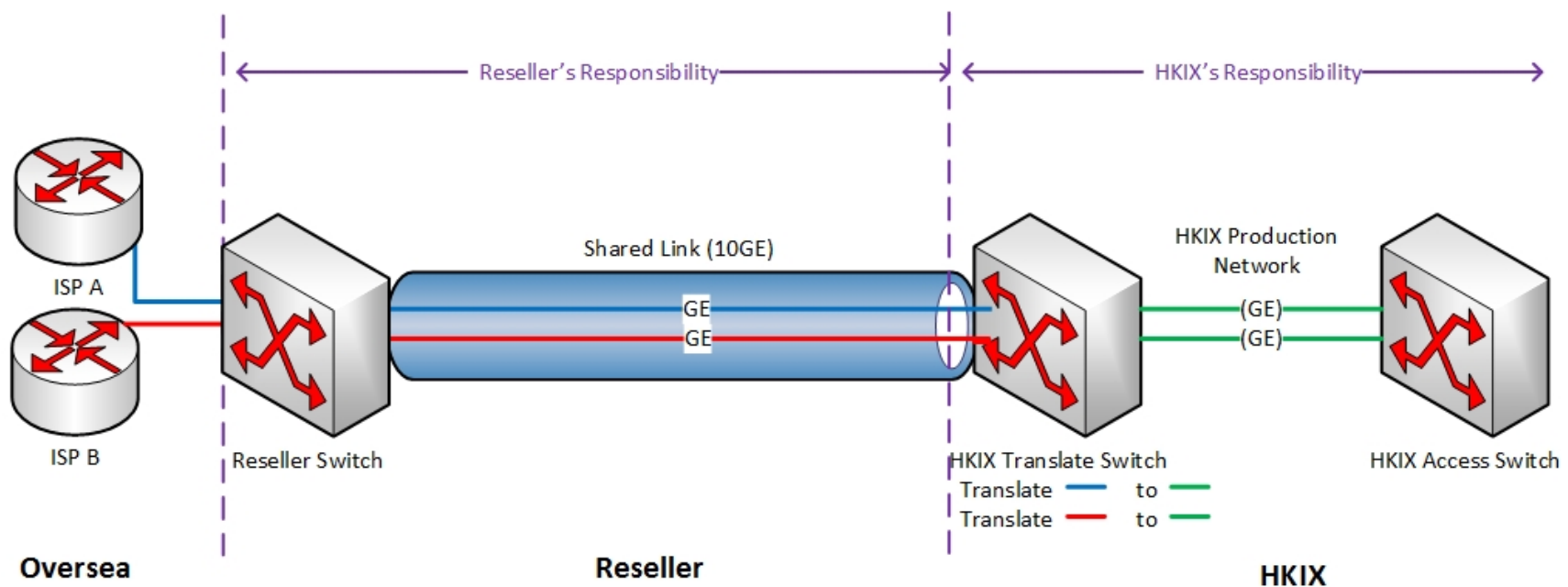
- For connections to HKIX at Satellite Sites, **special connection charges** will be charged by relevant operators, in addition to the **port charges** charged by HKIX.
- For HKIX participants not co-located at HKIX satellite sites, they can still connect to any of the two HKIX core sites, i.e. HKIX1 and HKIX1b sites by local loops via local loop providers.
- Reseller Program: <http://www.hkix.net/hkix/ResellerPPT.PDF>

HKIX Reseller Program

- Target oversea participants for peering
- Non exclusive arrangement / resellers can be IXPs, Data Centres, local and regional ISPs
- First batch will be available in satellite sites only
- Second batch will be extended to HKIX core sites

If you are interest be one of our resellers, please contact [info\[@\]hkix.net](mailto:info@hkix.net).

Reseller Network Topology Diagram



HKIX Planned Works for 2019

- Improved Stability
 - Better Control of Proxy ARP
- Improved Services
 - Rollout portal for HKIX participants / R&E participants
 - True 24x7 NOC (both email & hotline support)
 - Improve after-hour support
 - Introduce advanced Route Server functions
 - Automatic network filter update (support updates from IRR)
 - perfSONAR server
 - **New HKIX Route Server**
- Improved Security
 - ISO27001
 - Better support for DDoS mitigation
 - **Implement MANRS IXP Programme for routing security**
 - **Implement RPKI on HKIX Route Servers to enhance routing security**

IX name	Hong Kong Internet eXchange (HKIX)
City, Country	Hong Kong
Point of Presence	Core Sites: HKIX1 & HKIX1b @CUHK HKIX-R&E: HKIX-R&E@MEGA-i Satellite Sites: HKIX2 @CITIC, HKIX3/HKIX3b @iAdvantage, HKIX4 @NTT, HKIX5 @KDDI
# of connected ASN	314
Peak traffic	1.39 Tbps
Route Servers	Yes (Cisco ASR1006)
Remarks	Website: https://www.hkix.net PeeringDB: https://www.peeringdb.com/ix/42

For enquiries, please email us at info@hkix.net

Thank You!

For enquiries, please contact us at
info [at] hkix.net