

# Impact of subsea cables on Peering and Transit in Indonesia

# A little background

- MCS is co-own by [Matrix Networks](#) (Singapore) and [NAP Info Lintas Nusa](#) (Indonesia)
- Launched in **08-08-08** and never had any down time
- NAP Info is one of the top 3 internet gateway for Indonesia
- Matrix Networks own FBO license in Singapore
- MCS is 100% fully owned and operates without any government or incumbent shares, thus we are **NEUTRAL**
- MCS was built by Tyco Telecommunication.





# Technical Specs

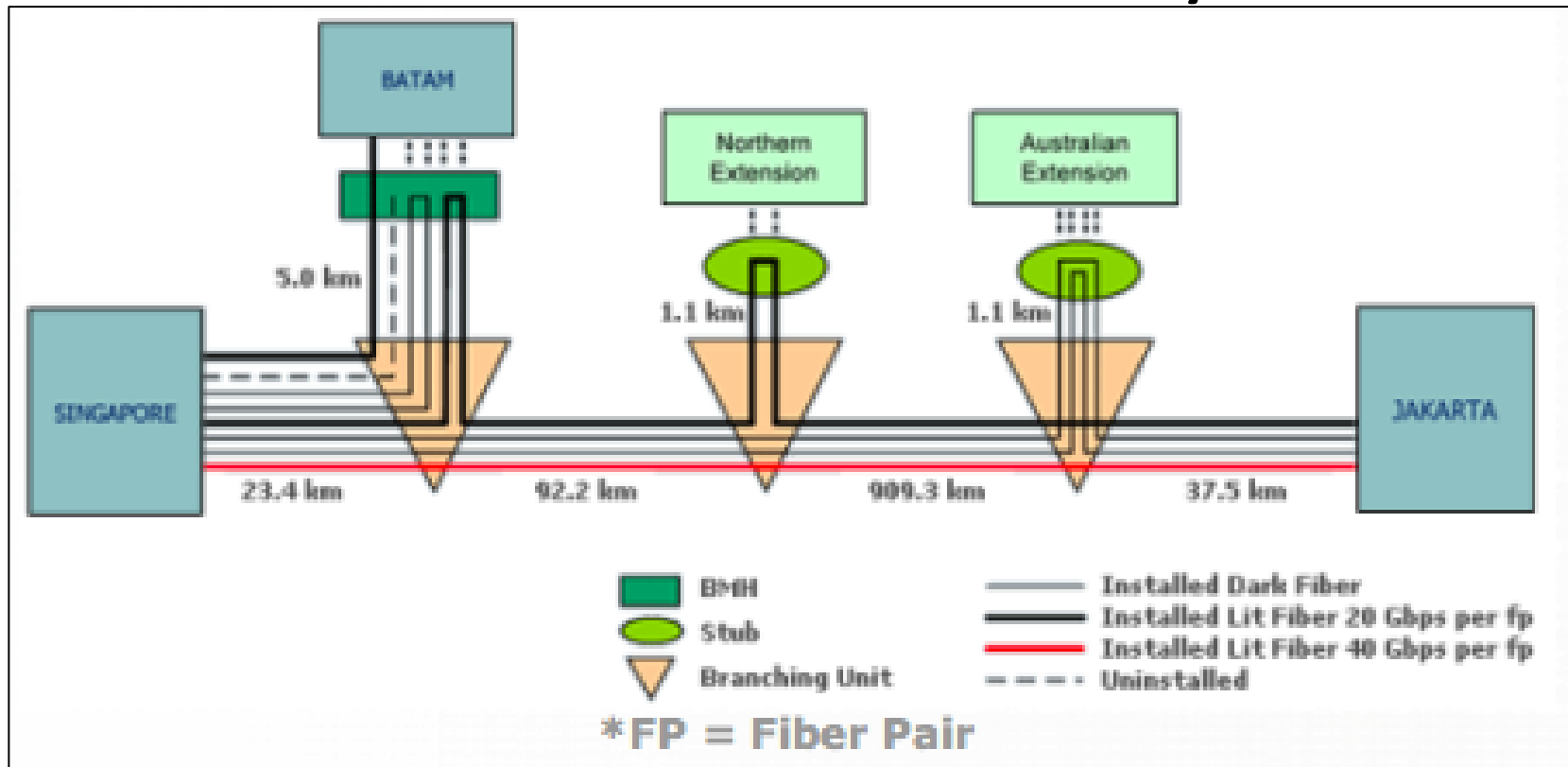
- Designed Capacity 2.5Tb
- Gen 3 Tyco Submarine System
- Distance 1055 km
- 3 BU from Singapore to Jakarta:
  - Batam, Indonesia
  - Kalimantan (Borneo), Indonesia
  - Perth, Australia
- It is a repeater system
- Buried 1-10 meter (SA, DA, LWA)
- Life span 25 years.



# Difficulties during building stage

- License to operate
- Permits from various government:
  1. Ministry of Telecommunications
  2. Indonesian NAVY
  3. Provincial government
- 120 crossings from Jakarta to Singapore
- Adequate power supply in CLS
- Backhaul to POP

# Fiber Pair Connectivity



The segment between Singapore and the Batam BU uses cable with eight fiber pairs, whereas the rest of the trunk segments to Jakarta use cable with four fiber pairs.

# 2.5Tb System

- 8 FP landed in Singapore, 4 FP goes to Jakarta

FP	x	$\lambda$	x	BW	=	Total
4	x	64	x	10G	=	<b>2.56</b> Tbps

- 10 Gb = STM64 = 10GE
- Mux into: STM16, STM4, STM1, DS3, 1Gb, 100Mb
- Upgrade option:
  1. More BW (40G) per  $\lambda$  **OR**
  2. More  $\lambda$  (96) per FP

# MCS Best Solution

- Highest Quality Network
- Carrier Neutral
- Service typed: SDH, PDH and Ethernet
- Commercially flexible
- Easy to Work With
- No Legacy Issues

# MCS IP Traffic Facts

- MCS live since Aug 2008, we are now among the top **3** internet gateway for Indonesia
- Currently we have **50+** Indonesia ISP as our customer
- Traffic grow **100%** every 6 months
- Google/Youtube consumes **25%** of the traffic
- Facebook consumes **10%** of the traffic, no data for friendster
- Traffic from a few major CDN reaches **10%** of the traffic



# Other Cable System

Live in 2009:

- **JaKaBaRe** – operates by Indosat
- **BSCS** – operates by Telkom Indonesia

On Progress:

- **SCAN** – **Indonesia** to Hong Kong
- **SJC** – Japan, Hong Kong, **Indonesia**, and Singapore

# Peering Info

ASN : 45147

Peering point:

1. Equinix Singapore (Open) – v6 READY
2. SOX Singapore (Open)
3. HKIX (Selective) – v6 READY

PeeringDB : <http://as45147.peeringdb.com>

Question...

# Terima Kasih (Thank You)

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