

# AsiaPac – Europe System @ 100G

# GLIF Tech Friday, 21 September 2018 Erik-Jan Bos – NORDUnet



#### NORDUnet Nordic Gateway for Research & Education

### **Current Europe – AsiaPac R&E links**

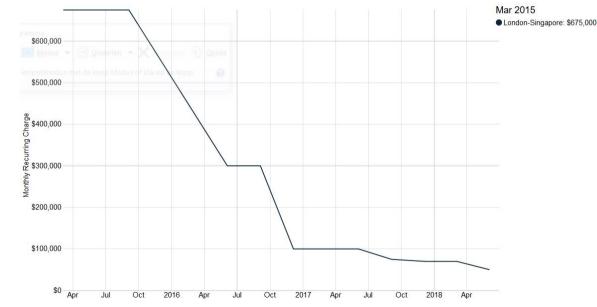
- NORDUnet's 1G between NORDUnet PoPs in Frankfurt and Hong Kong.
- A 10G between London and Beijing, dedicated to Europe-China traffic.
- A 10G between London and Singapore, dedicated to Europe-SingAREN and TEIN traffic.
- 2x 10G between London and Tokyo, dedicated to Europe-Japan traffic.





#### **A Word in Cost**

- Current market indications for a 100G LON-SIN:
  - Average MRC Q4 2015: 675 kUSD
  - Average MRC Q4 2016: 160 kUSD
  - Average MRC Q4 2017: 74 kUSD
  - Average MRC Q2 2018: 66 kUSD



Source: TeleGeography



## **Joining Forces on Europe – AsiaPac**

- Or... How could we create a ANA & APR like collaboration on this path
- Demands from several organizations
- First meeting at APAN45 in Singapore in March 2018
- Current efforts to start a collaboration on two levels:
  - 1. Jointly procuring a 100G
  - 2. Forming a system (ring) with SINET's 100G



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# Jointly procuring a 100G

- From AsiaPac:
  - SingAREN,
  - AARNet, and
  - TEIN\*CC.
- From Europe:
  - GÉANT,
  - SURFnet, and
  - NORDUnet.
- Looking at a long-term 100G, jointly





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#### SINET's 100G Europe-Japan







### **Possible AsiaPac-Europe System**







