



**ESCAP Committee on ICT  
Fourth Session**

**Item 2: Asian Information Superhighway:  
seamless connectivity for sustainable  
development in Asia and the Pacific**

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## The digital divide in Asia and the Pacific

- Great intra-regional inequalities exist in broadband **access, speed and costs**.
  - In Japan; the Republic of Korea; Macao, China; Singapore; and Hong Kong, China, **monthly subscription for an entry-level broadband plan** is less than 2% of monthly gross national income (GNI) per capita.
  - Costs are much higher in developing economies of the region (**8.8%**), least developed countries (**41.7%**), landlocked developing countries (**63.5%**), and Pacific island developing countries (**126.0%**)
- **International bandwidth** per Internet user remains very low in Asia and the Pacific.
- Heavy reliance on IXPs in technologically advanced countries has led to **high Internet transit prices**.
- International **backhaul costs** reach up to **five times** those in more developed regions of the global economy.
- It is estimated that the Asia-Pacific region needs to spend about \$8 trillion on infrastructure, with the **ICT sector comprising 10 per cent of that amount**.



## Regional Internet infrastructure challenges

- **Reliance on submarine cables:** Limits route diversity and network redundancy. Places the region at risk in the event of disruptions caused by natural disasters, marine vessel accidents.
- **Infrastructure choke points:** Regional bottlenecks negatively affect network traffic and reduce the availability of international bandwidth.
- **Limited cross-border terrestrial connectivity:** Developing and least developed economies are heavily reliant on connectivity from global and regional hubs.
- **Incumbent operators:** Regional network traffic passes through multiple IXPs, impacting performance, reliability and prices.
- **Lack of sufficient regional IXPs:** “Tromboning” of Internet traffic reduces network quality.
- **No uniformity across borders:** Neighbouring countries offer variable quality, cost and service conditions, leading to market inefficiencies and operational complications.

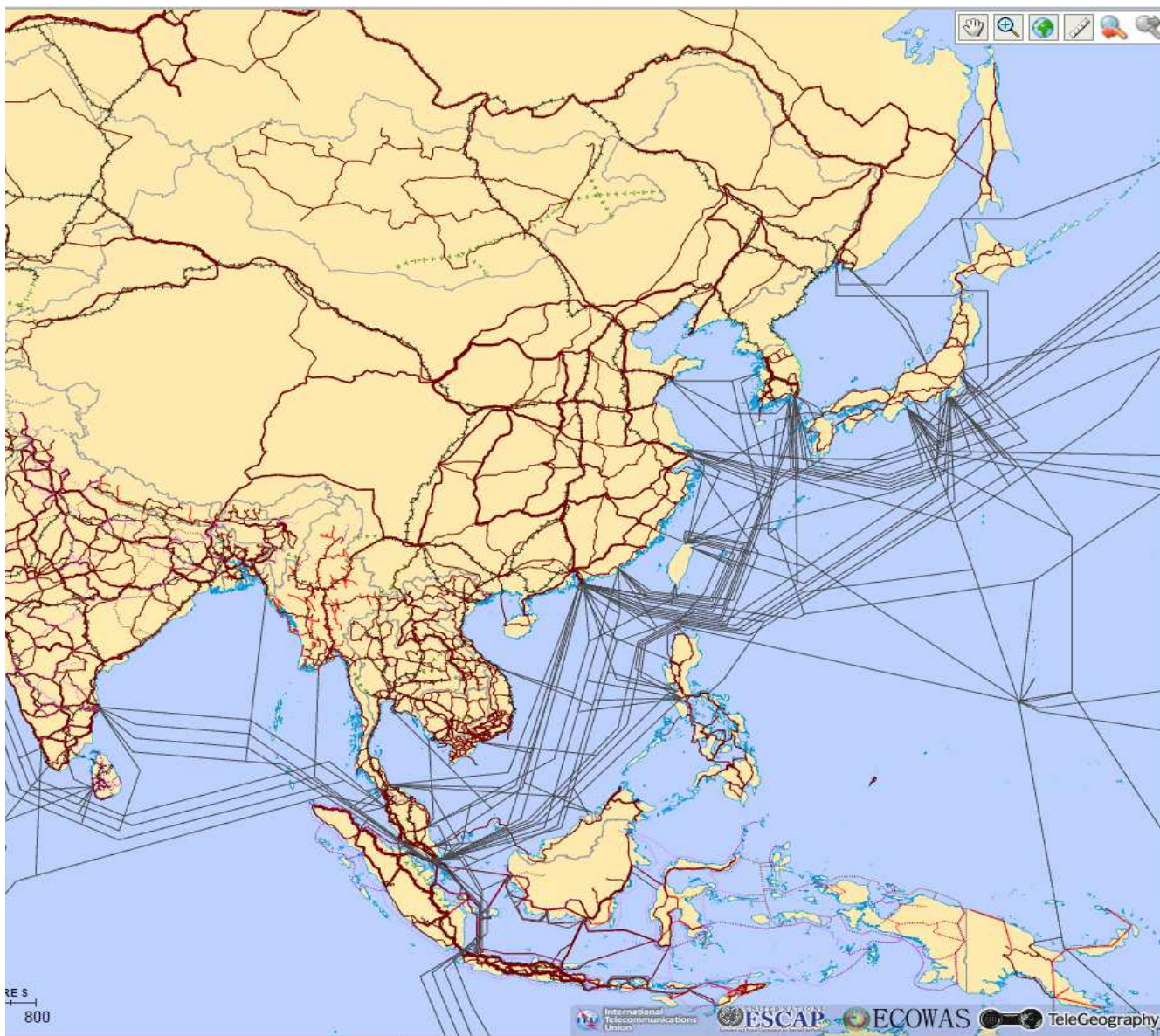


## The Asia-Pacific Information Superhighway

- Comprehensive sub-regional studies of broadband infrastructure and markets in South-East Asia, North and Central Asia, and South and South-West Asia;
- Four sub-regional consultations:
  - Manila, Philippines (23-24 September 2013)
  - Baku, Azerbaijan (3-4 December 2013)
  - Almaty, Kazakhstan (3 June 2014)
  - Paro, Bhutan (1-2 October 2014)
- Outcome documents from the sub-regional consultations feed into the Issues for Consideration by the Committee.
- In partnership with the International Telecommunications Union (ITU), developed the first online map of fibre-optic infrastructure in Asia-Pacific.
  - Shows terrestrial backbone and submarine cable networks, as well as Asian-Highway and Trans-Asian Railway networks.
  - Cross-country connection and missing links.
  - Areas that need further investments to support seamless connectivity



# Connecting economies and empowering people



ESCAP, Information and Communications Technology and Disaster Risk Reduction Division

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