OVERVIEW: ICT CONNECTIVITY AND ASIA PACIFIC INFORMATION SUPERHIGHWAY (AP-IS)
Growing Digital Divide in Asia-Pacific

- Asia and the Pacific has 52.3% of fixed broadband users in the world, yet...
  - Average per capita fixed broadband subscriptions is below world average and behind Latin America, North America and Europe;
  - Within Asia and the Pacific, the low income economies are being left further behind
Fixed Broadband Penetration Rates (per 100)

Without effective supply and competitive transit, prices remain high and take up remains low.

**International bandwidth vs. IP transit costs**

**Internet penetration vs. IP transit costs**

**Note:** Tajikistan, Turkmenistan and Uzbekistan: outlier status (largely due to dominance of incumbent)
Challenges: Regulations and Broadband Access

• There is a strong correlation between the perceptions on quality of regulations (World Bank – World Governance Indicators) and fixed-broadband subscriptions.

Better quality of regulation instills certainty in investment environment, which encourages private operators to invest more.
Challenges: E-commerce and ICT Access

- Strong positive correlation between E-commerce and broadband access
- Hence, if broadband infrastructure is not in place, it limits access and therefore e-commerce.

**Figure 15: E-commerce versus fixed broadband access, 2015**

Sources: ESCAP estimates; UNCTAD B2C E-Commerce Index 2016; and fixed broadband per 100 sourced from ITU.
### Projected bandwidth demand

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<td>72.3%</td>
<td>+779.5%</td>
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<td>14.4%</td>
<td>14.8%</td>
<td>85.3%</td>
<td>85.1%</td>
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Building a Resilient Digital Economy: Fostering SMEs in Central Asia

- Economic Structure and the State of ICT in the SPECA Subregion
- The Challenges posed by Disasters in Building a Resilient Digital Economy in the SPECA Subregion

Share of disasters in the SPECA subregion by number of occurrences, 2000-2015

- Earthquake: 18%
- Flood: 45%
- Drought: 9%
- Extreme Weather: 4%
- Landslide: 4%
- Storm: 14%
- Others: 6%

IMPROVING REGIONAL BROADBAND CONNECTIVITY THROUGH THE ASIA-PACIFIC INFORMATION SUPERHIGHWAY
Disaster damage in the SPECA subregion, 2000-2015
The Asia-Pacific Information Superhighway initiative aims to increase the availability and affordability of broadband Internet across Asia and the Pacific, by strengthening the underlying Internet infrastructure in the region.

- Promote terrestrial and submarine fibre-optic connectivity
- Provide a regional intergovernmental platform focusing on the missing fibre-optic links between ESCAP countries
Four Pillars of AP-IS

CONNECTION

• Physical network design, development, management at regional level
• Intergovernmental negotiation
• Improving regulations based on open access

TRAFFIC / NETWORK MANAGEMENT

• Ensuring efficient and effective Internet traffic and network management at regional, sub-regional and national levels

E-RESILIENCE

• Resilient ICT networks
• Support to disaster management systems
• Ensuring last-mile disaster communication

BROADBAND FOR ALL

• Bridging digital divides
• Promoting affordable access to underserved areas
• Policy and technical support to Governments
AP-IS Initiatives

Strategic Initiatives 2016-2018

1. Identification, coordination, deployment, expansion and integration of the regional backbone network

2. Establish a sufficient number of IXPs at the national and sub-regional levels and set out common principles on Internet traffic exchange

3. Regional social and economic studies

4. Enhancing ICT infrastructure resilience

5. Policy and regulations for leveraging existing infrastructure, technology and inclusive broadband initiatives

6. Capacity-building

7. AP-IS funding mechanism based on public-private partnerships
AP-IS Master Plan and the Regional Cooperation Framework Document for the AP-IS

- Both documents are available (including Russian Version):
  - Report of the Committee on Information and Communications Technology, Science, Technology and Innovation, first session, 5-7 October, 2016, Bangkok, Thailand
  - AP-IS Flyer
Asia-Pacific ICT & DRR Gateway

Providing policymakers and relevant stakeholders with an accessible gateway containing a spectrum of resources with regard to Information and Communications Technology and Disaster Risk Reduction
Online Communities

Communities on Unite platform facilitating dialogue on 4 pillars:

1. Infrastructure and connectivity
2. Internet traffic and network management
3. E-resilience
4. Broadband for all
THANK YOU