# Transformation in Action: Digital partnership to enhance technological leadership

Accelerating digital connectivity through the Asia-Pacific Information Superhighway (AP-IS)

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#### **Outline:**



1. Frontier Technologies, policy experimentations,

and regulatory sandboxes in Asia and the Pacific - Maldives and Bangladesh

- 2. Digital trends in North and Central Asia
- 3. Asia-Pacific Information Superhighway (AP-IS)

### (1). Frontier Technologies, Policy Experimentations, and Regulatory Sandboxes in Asia and the Pacific

- United Nations Department of Economic and Social Affairs Division for Public Institutions and Digital Government
  - United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) Information and Communications Technology and Disaster Risk Reduction Division (IDD)



Department of Economic and Social Affairs



#### **Project Countries**

<b>Project Country</b>	Bangladesh	Kazakhstan	Maldives
Focal Point	A2i, ICT Division + other national stakeholders	Ministry of Digital Development, Innovations and Aerospace Industry +other national stakeholders	Ministry of Environment, Climate Change, and Technology + other national stakeholders
Proposed Focus Areas	<ul><li>(1). Cottage Micro SME</li><li>Hub for Digital</li><li>Acceleration</li><li>(2). Broadband equity</li></ul>	<ul> <li>(1). Autonomous</li> <li>vehicles</li> <li>(2). Decentralization,</li> <li>digitalization &amp;</li> <li>decarbonization in the</li> <li>Energy Sector</li> </ul>	<ul><li>(1). Central Bank</li><li>Digital Currency</li><li>(2). Stable Coins</li></ul>

### **Project Activities: Bangladesh**



**Opportunities**: Digital transformation, family planning, family healthcare, universal educational enrolment, women's empowerment, microfinance, innovation culture in the civil service, - "digital opportunity for all"

 Digital acceleration of cottage and micro-SMEs – leaving no business behind (accessing business support e-services >>>regulatory sandbox)
 Broadband connectivity – connecting all citizens for development

#### Activities in 2022:

- (1). National studies
- (2). Study tour

Source: Anir Chowdhury, a2i Programme, ICT Division/Cabinet Division/UNDP Bangladesh, UN Development Account Project Kick-off Event, November 2021.

#### Linkages to the SDGs

- **SDG 3** COVID-19 has accelerated the use of telehealth services up to 300%
- **SDG 4** 65% of secondary and 80% of primary level students do not have affordable and reliable access to the Internet
- SDG 8 Bangladesh has more than 650,000 IT freelancers, the 2nd largest freelancing community (~16%) in the world, making more than \$200m annually
- **SDG 9** The e-commerce market is currently worth \$2bn with 2,000 e-commerce sites





### **Project Activities: Maldives**



**Opportunities – CBDC/Stable Coins**: Easy transaction; more confidential; low transaction fee, potential to help the 'unbanked'; secured online transaction; facilitate currency exchange; contribute to reducing national debt; & cashless society.

#### Activities in 2022:

#### (a). Studies (April-June 2022):

(1). National study on development and eventual implementation of **central bank digital currency CBDC** and **stable coin** 

(2). Prepare a national stakeholders survey of potential start-ups in the Maldives that could benefit from a regulatory sandbox initiative.

#### (b). National Workshop (June-July 2022):

To present the key findings of the studies to national participants & and validate studies

(c). Study Tour (November 2022) : Republic of Korea

### **Opportunities of digital currency for the Maldives**

#### **IN THE ECONOMY**

Easy Transaction –no middleman
More Confidential –financial history privacy & identity protection
Low Transaction Fee –much lesser compared to traditional financial system
Potential to help the "unbanked"–opportunity for underprivileged people to establish credit

#### **NATIONAL DIGITAL CURRENCY**

Online Transaction —easier to track and set monetary policy; more transparent Currency Exchange —ease of exchange Appreciation of a Debt Solution —contribute to reducing the national debt Cashless Society!

Source: HE Mohamed Shareef, Minister of State, Ministry of Environment, Climate Change, and Technology, Maldives, Sensitization Workshop, 3 June 2021

### **Central Bank Digital Currency Projects in Asia and the Pacific**



Country	Project status
Republic of Korea	Pilot
Singapore	Pilot
Thailand	Pilot
Cambodia	Development
Lao PDR	Research
India	Development
Bhutan	Research
Malaysia	Pilot
Indonesia	Research

Country	Project status
Philippines	Research
Kazakhstan	Research
Hong Kong, China	Pilot
Palau	Development
Australia	Development
New Zealand	Research
Pakistan	Research
Russian Federation	Pilot
China	Pilot

Source: Consolidated by UNESCAP based on data from Atlantic Council (2021). "Central Bank Digital Currency Tracker." Retrieved from: https://www.atlanticcouncil.org/cbdctracker/ and other online sources

#### **Digital currency linkages to the SDGs**

#### **Financial inclusion**

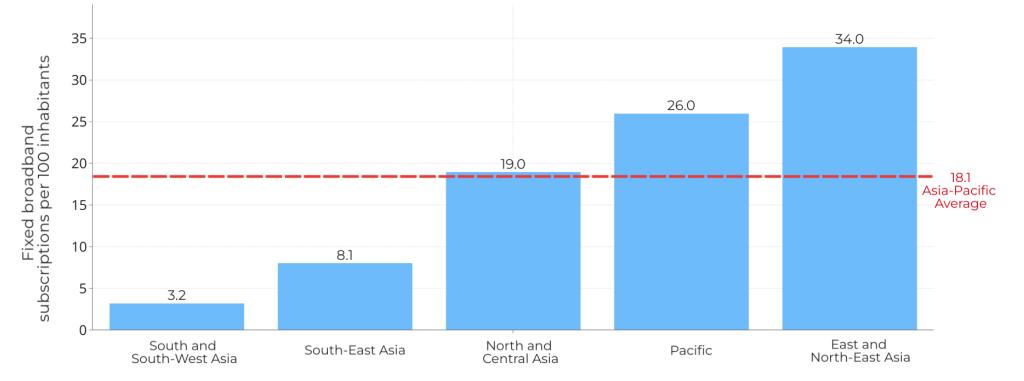
The various financial use cases for digital currencies (cross-border payments, remittances, loans etc.) will boost financial inclusion, which is crucial for development and closely linked to eight of the seventeen SDGs.







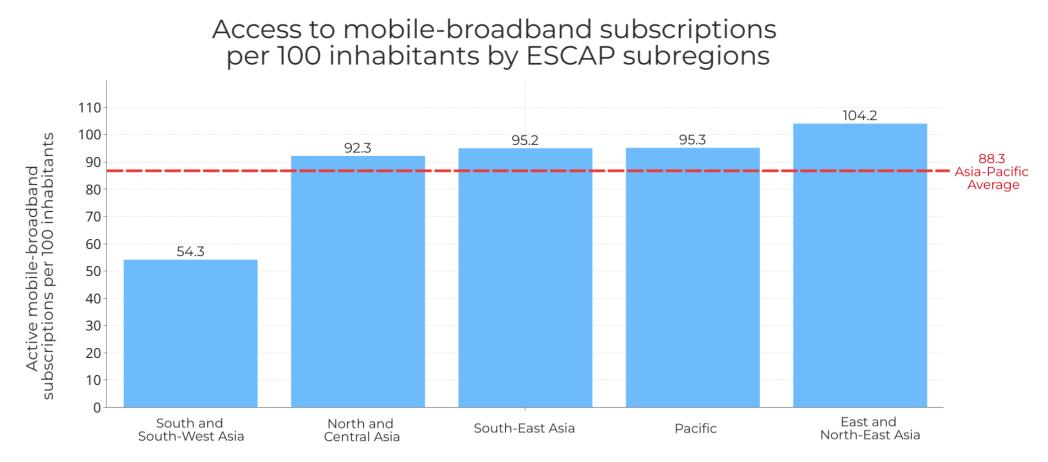
Access to fixed-broadband subscriptions per 100 inhabitants by ESCAP subregions (weighted averages)



Source: ITU, "World Telecommunications and ICT Indicators Database", 25th edition (December 2021), 2022. Available at: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

Note - graph drawn from 2020 data or latest year with available data



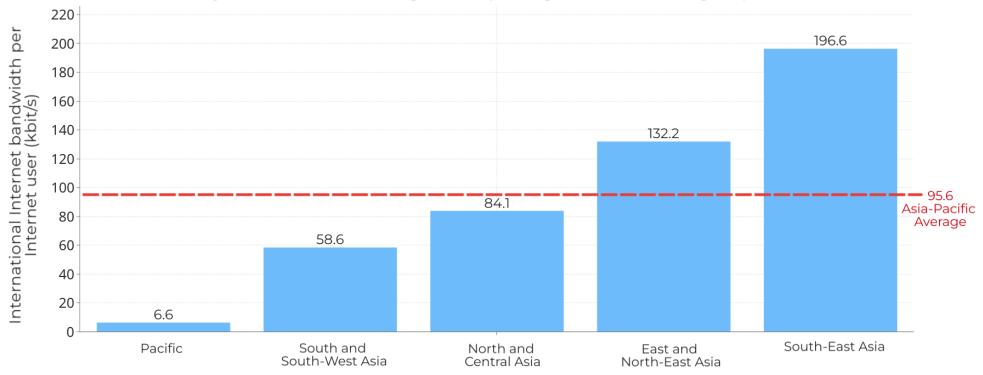


Source: ITU, "World Telecommunications and ICT Indicators Database", 25th edition (December 2021), 2022. Available at: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

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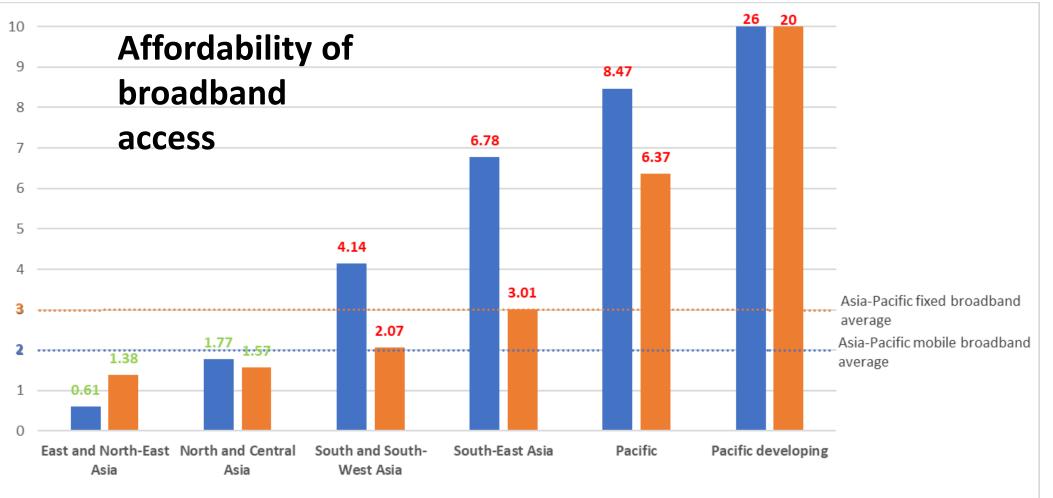


International Internet bandwidth per Internet user by ESCAP subregions (weighted averages)



Source: ITU, "World Telecommunications and ICT Indicators Database", 25th edition (December 2021), 2022. Available at: https://www.itu.int/en/ITU-D/Statistics/Pages/publications/wtid.aspx

Note - graph drawn from 2020 data or latest year with available data



**ESC** 

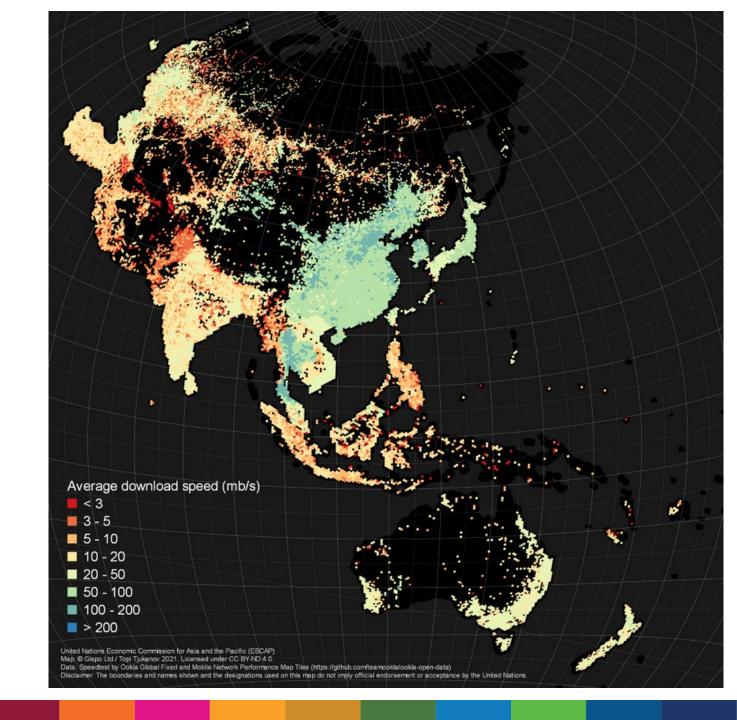
Fixed-broadband Internet 5GB; as a % of GNI/pc (weighted by population) (2018-2020)

Mobile broadband high usage bundle (140 min; 70 SMS; 1.5GB); as a % of GNI/pc (weighted by population) (2018-2020)

### <u>(1). Digital trends –</u> <u>Internet speed</u>

Internet speed connectivity and speeds vary significantly between and within Asia-Pacific countries.

It has amplified social-economic gaps and further exacerbated by COVID-19.



### **AP-IS contribution to global agendas**



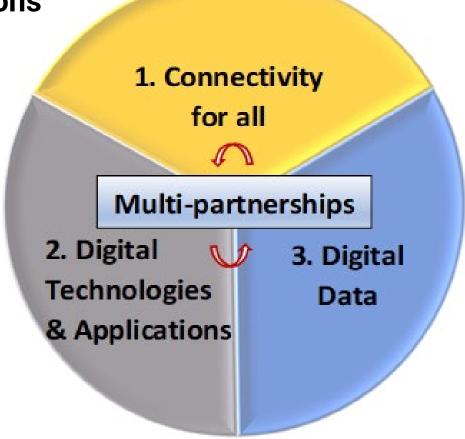
ESCAP secretariat as mandated by Committee on ICT & STI operates at regional level in support of ITU-D global activities:

- a. Mandated by <u>GA Resolution 70/125</u> supports the regional review of the implementation of the World Summit on Information Society (WSIS)
  - In past years, organized it in parallel with the AP-IS Steering Committee sessions
  - A dedicated session on WSIS action lines in partnership with ITU)>>><u>ESCAP resolution 72/10</u> on WSIS regional review.
- b. ESCAP secretariat (and other UNRCs) contribute to the <u>United Nations Group on Information Society</u> (UNGIS), which is chaired by ITU and Vice Chairs (UNESCO, UNCTAD, UNDP and ECA as UNRC rep).
- c. ESCAP secretariat reports regional ICT progress on a yearly basis to the Commission on Science and Development (CSTD) in Geneva on WSIS implementation (UNCTAD as secretariat, and ITU an active member).
- d. ESCAP contributes to the Partnership on Measuring ICT for Development (UNCTAD as secretariat, and ITU an active member)

### (2). AP-IS Action Plan (2022-2026)



- Objective: To bridge the digital divide and accelerate digital transformation by promoting connectivity, digital technology applications and data use.
- 3 Pillars and 25 Actions



### (2). AP-IS Action Plan (2022-2026)



Pillar 1 – Connectivity for all	Pillar 2 – Digital technologies and applications	Pillar 3 – Digital Data
Digital connectivity infrastructure USAF E-resilience Codeployment of ICT infrastructure Smart village (rural and urban connectivity) IXPs Digital economy etc National and regional intelligent data resource management centre Fiber-optic corridors	<ul> <li>Capacity building on infrastructure connectivity policies</li> <li>Promote digital transformation</li> <li>Promote inclusive digital connectivity</li> <li>Strengthen digital connectivity using PPPs</li> <li>Promote digital and frontier technologies</li> <li>Promote digital financial services</li> <li>ICT applications for disaster risk reduction</li> <li>Digitalization in other sectors of the economy</li> <li>Digital platforms for SMEs</li> </ul>	<ul> <li>Promote integration of digital data for e-government services</li> <li>Promote digital data sharing in government sector</li> <li>Local content</li> <li>Digital literacy</li> <li>Data privacy</li> <li>Regional cooperation of different stakeholders (government, private sectors, NGOs, Academia, etc)</li> </ul>

https://www.unescap.org/sites/default/d8files/event-documents/AP-IS%20Action%20Plan%202022-2026\_Final.pdf

#### (2). AP-IS Action Plan (2022-2026)



#### **Bureau of Working Groups (as of Dec 2021)**

	Working Group 1	Working Group 2	Working Group 3
	(Connectivity for All)	(Digital Technologies and	(Digital Data)
		Applications)	
Chair	Armenia	India	Republic of Korea
	United States of		
	America		
Vice	Kazakhstan	Armenia	Armenia
Chair	Maldives	Russian Federation	Sri Lanka
	Sri Lanka		

#### **ESCAP** support to Central Asia



#### Project on "Addressing the Transboundary Dimensions of the 2030 Agenda through Regional Economic Cooperation and Integration in Asia and the Pacific (RECI)", 2018-2021

- Research on co-deployment of ICT-Energy-Transport infrastructures
- Developing the interactive dashboard for e-resilience monitoring

INFORMATION AND COMMUNICATIONS TECHNOLOGY	INFORMATION AND COMMUNICATIONS TECHNOLOGY	INFORMATION AND COMMUNICATIONS TECHNOLOGY
AND DISASTER RISK REDUCTION DIVISION	AND DISASTER RISK REDUCTION DIVISION	AND DISASTER RISK REDUCTION DIVISION
Infrastructure Corridor Development Series	Infrastructure Corridor Development Series:	Infrastructure Corridor Development Series:
Part I: In-Depth Analysis of Three Promising Infrastructure	Part III: Calculation Results for Determining the Most Promising	Part II: Toolkit for Determining the Most Promising Scenario for
Corridors	Scenario for Infrastructure Corridor Development	Infrastructure Corridor Development
Vadim Kaptur	Vadim Kaptur	Vadim Kaptur
Aida Karazhanova	Aida Karazhanova	Alda Karazhanova
ASIA-PACIFIC INFORMATION SUPERHIGHWAY	ASIA-PACIFIC INFORMATION SUPERHIGHWAY	ASIA-PACIFIC INFORMATION SUPERHIGHWAY
WORKING PAPER SERIES JUNE 2021	WORKING PAPER SERIES JUNE 2021	WORKING PAPER SERIES JUNE 2021

#### **Building Forward Together in North and Central Asia**



- To adopt the action plan of the next phase of implementation of the Master Plan for the AP-IS (2022-2026) at the Committee on ICT and STI in August 2022.
- Support and actively engage in the AP-IS Working Groups partnerships including work on digital transformation, e-resilience, digital literacy, etc
- Accelerate research on the issue of co-deployment of fiber-optic cables along passive infrastructure networks
- Continue to study and promote the establishment of carrier-neutral internet exchange points, with a focus on LDCs, LLDCs & SIDs
- Expand regional collaboration including multi-stakeholder alliances to scale up broadband internet capacities for inclusive innovation and SDG implementation

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