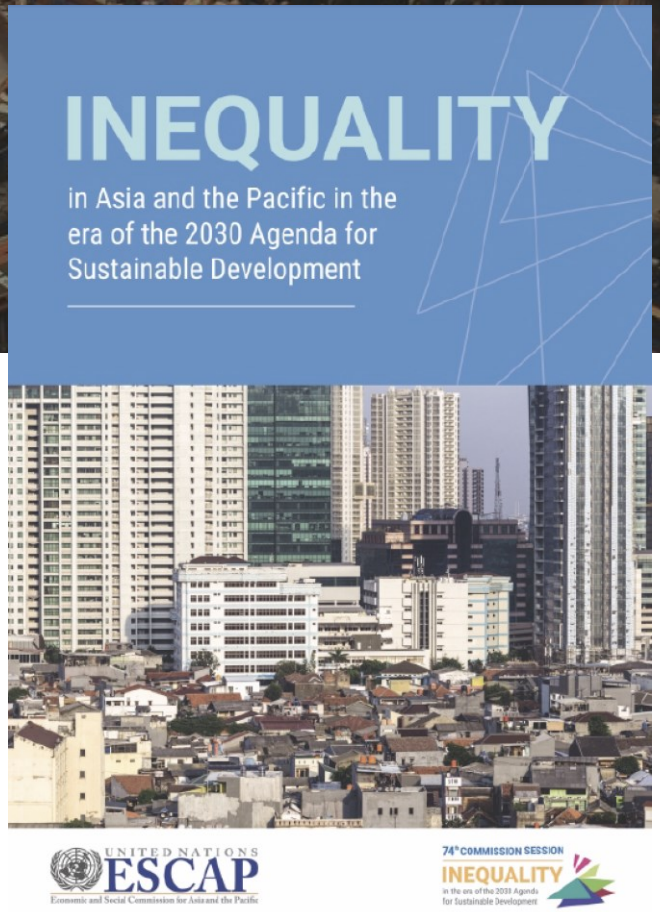
ACHIEVING SDG AND INCLUSIVE DEVELOPMENT IN ASIA AND THE PACIFIC

ICT and Development Section
ICT and Disaster Risk Reduction Division
ESCAP

Outline:

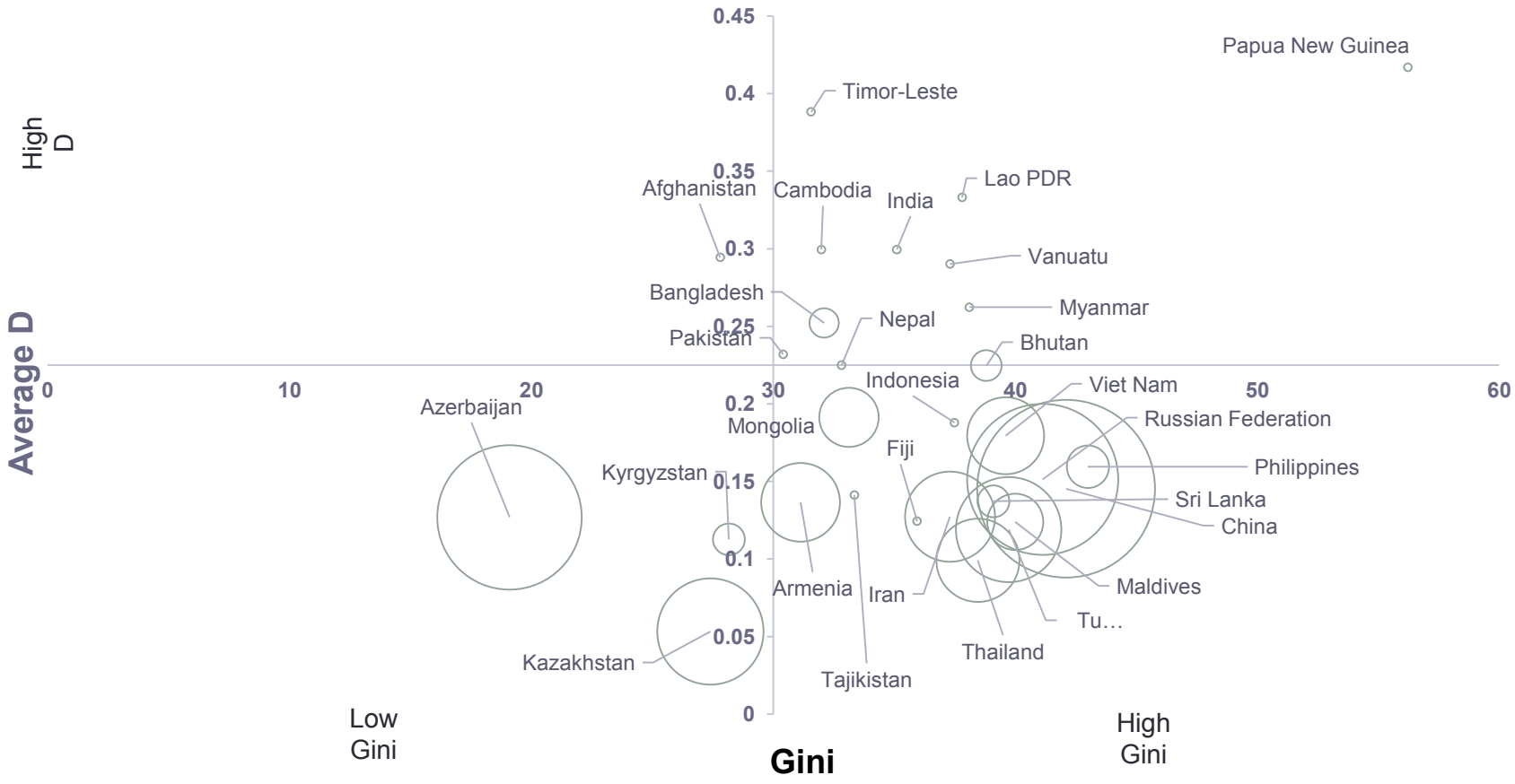
1. Inequality convergence in Asia-Pacific
2. Opportunities for digital transformation
3. … and Challenges
4. Asia-Pacific Information Superhighway
5. Way forward



The 74th Commission session discussed economic, social and technological inequalities emerging in Asia and the Pacific, including the digital divide.

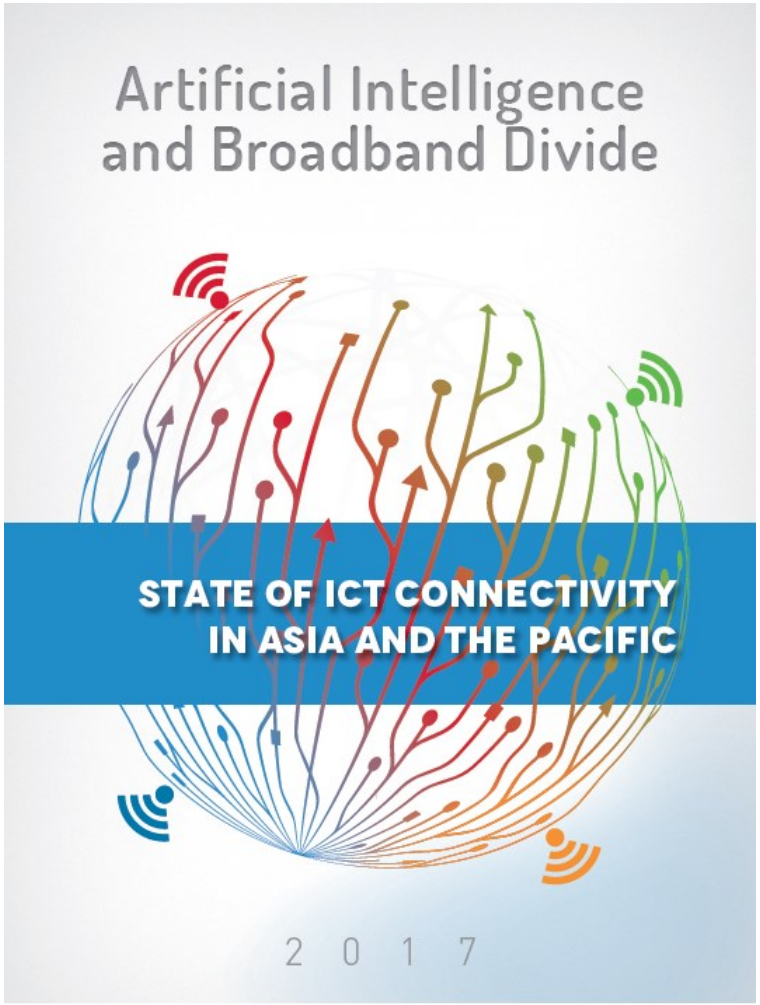
Inequality convergence in Asia-Pacific

Gini, Average D, Fixed-broadband connectivity in selected Asia-Pacific countries

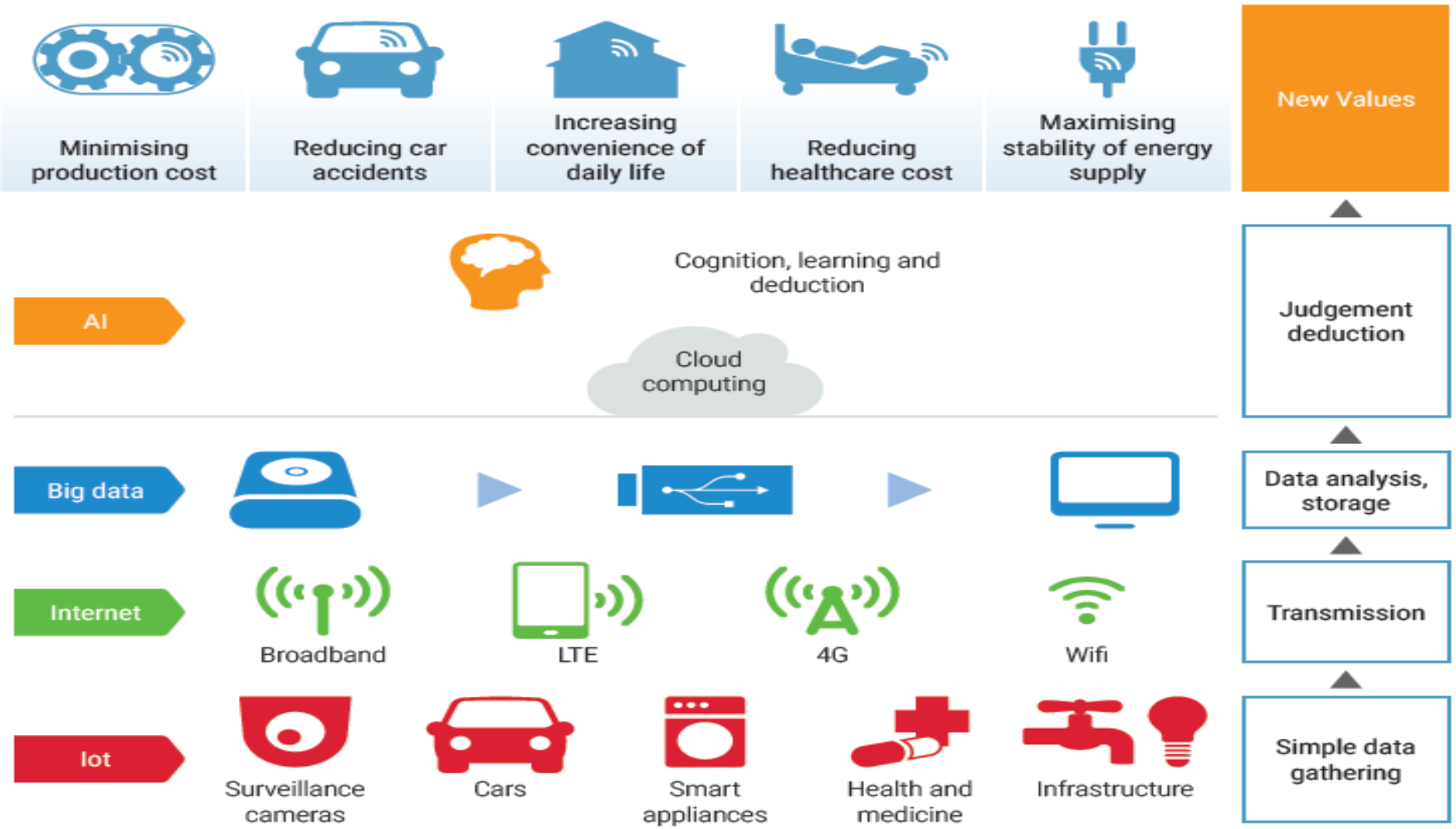


Adapted from the ESCAP theme study "Inequality in Asia and the Pacific in the era of the 2030 Agenda for Sustainable Development"(2018)

ESCAP's analytical work on ICT: frontier technologies, financing mechanism, broadband infrastructure, co-deployment, international gateways, university education among others



Opportunities for digital transformation : Artificial Intelligence (AI) Landscape



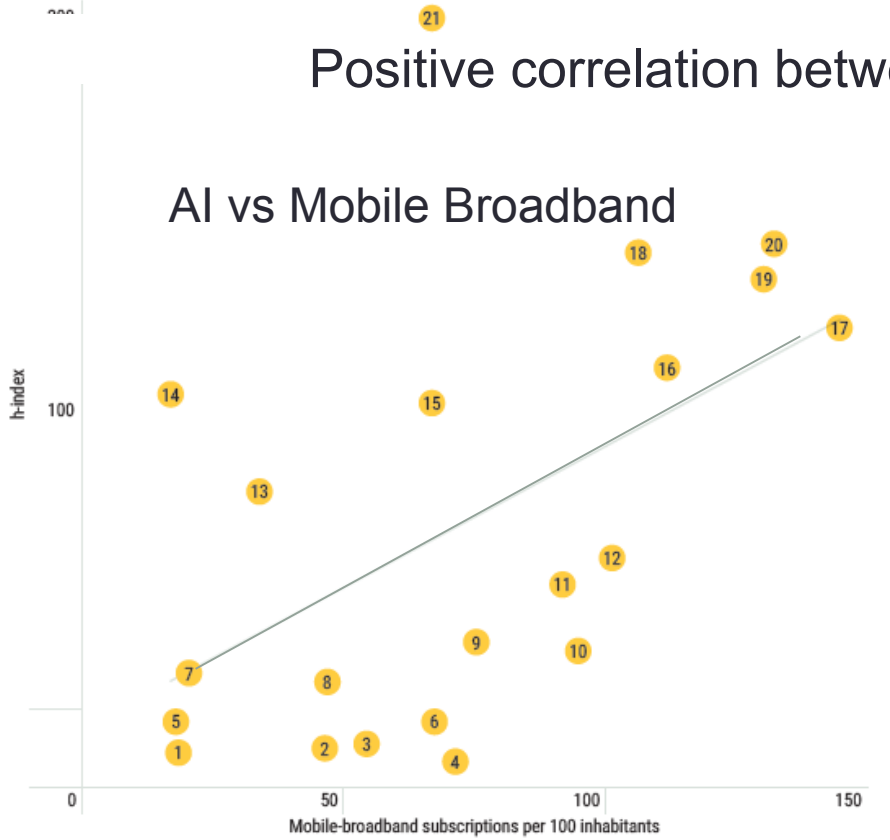
Source: Korean Ministry of Science, ICT and Future Planning, "Mid- to Long-Term Master Plan in Preparation for the Intelligent Information Society: Managing the Fourth Industrial Revolution", undated. Available from http://www.msip.go.kr/dynamic/file/afieldfile/msse56/1352869/2017/07/20/Master%20Plan%20for%20the%20intelligent%20information%20society.pdf

Opportunities for digital transformation : **Connectivity**

Positive correlation between AI and broadband connectivity

AI vs Mobile Broadband

The relationship between h-index in AI research and mobile-broadband subscriptions per 100 inhabitants in the Asia-Pacific region, 2016



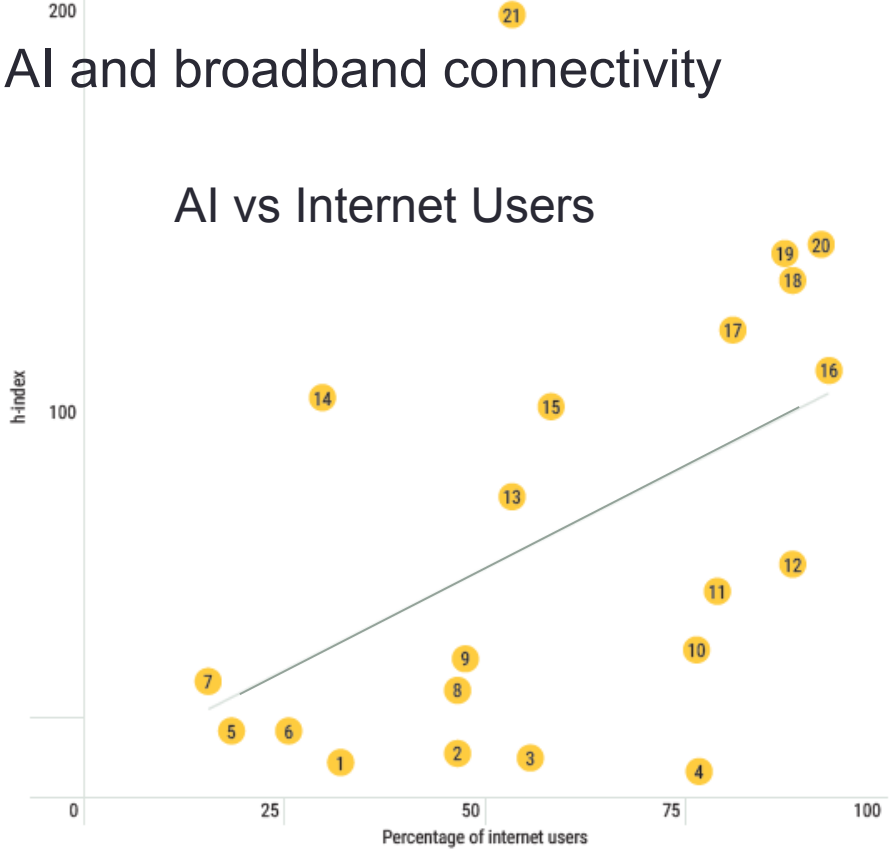
1 Sri Lanka; 2 Philippines; 3 Fiji; 4 Kazakhstan; 5 Bangladesh; 6 Indonesia; 7 Pakistan; 8 Viet Nam; 9 Russian Federation; 10 Thailand; 11 Malaysia; 12 New Zealand; 13 Iran, Islamic Republic; 14 India; 15 Turkey; 16 Japan; 17 Singapore; 18 Hong Kong, China; 19 Australia; 20 Japan; 21 China

Source: Produced by ESCAP, based on mobile-broadband data from ITU World Telecommunication/ICT Indicators Database (accessed July 2017); and h-index in AI research from Scimago Journal & Country Rank. Available from http://www.scimagojr.com/countryrank.php?category=1702 (accessed July 2017).

Note: Macao, China, has been dropped as an outlier.

AI vs Internet Users

The relationship between the h-index in AI research and the percentage of Internet users in the Asia-Pacific region, 2016



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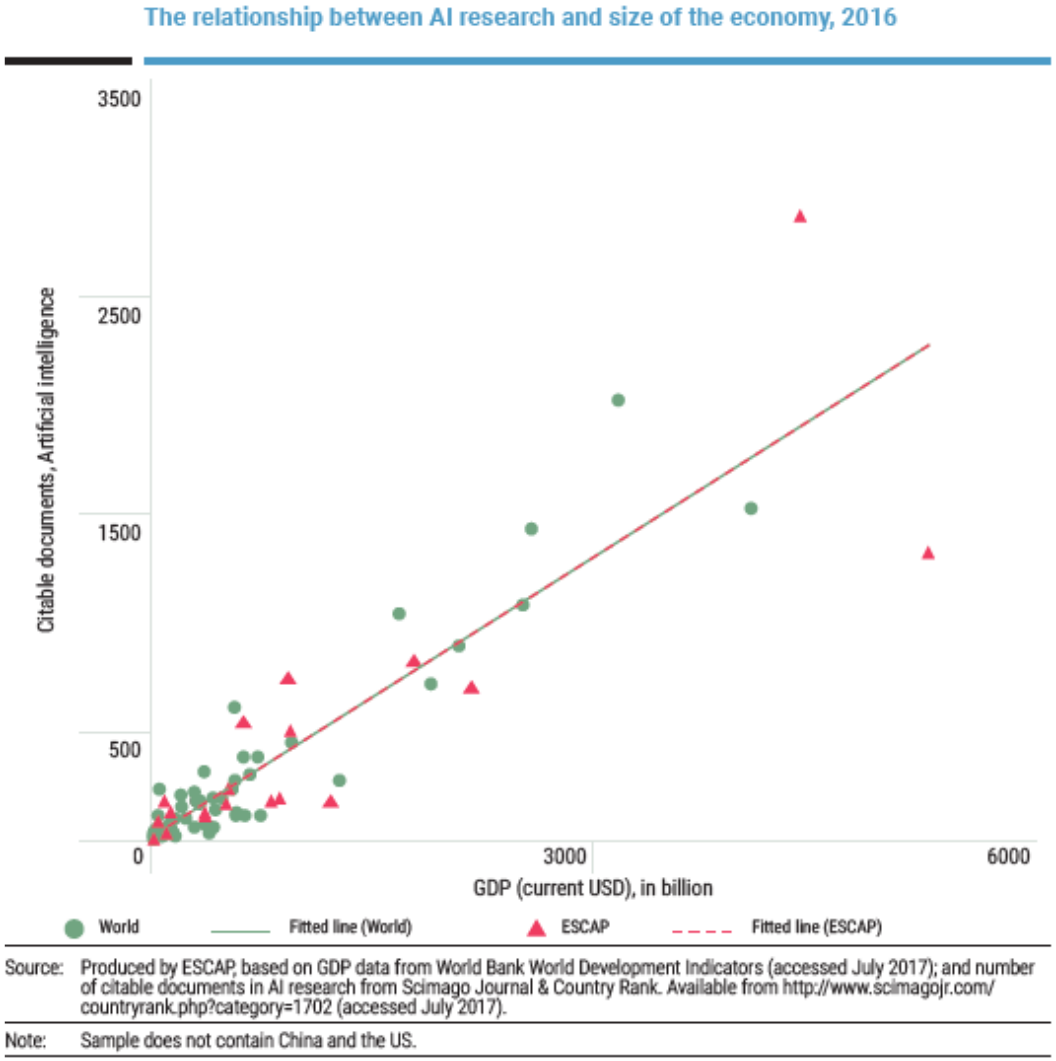
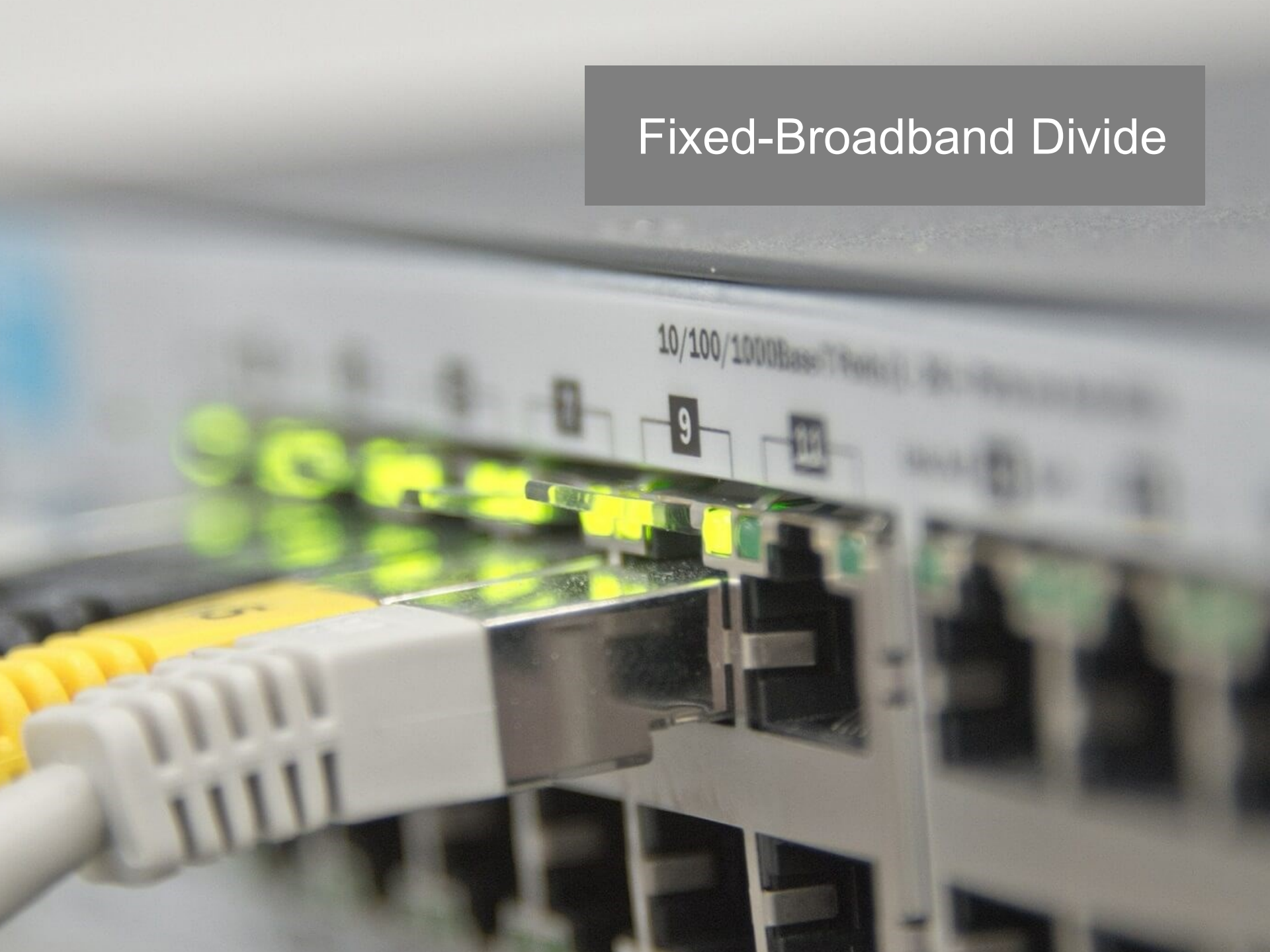
Source: Produced by ESCAP, based on Internet users data from ITU World Telecommunication/ICT Indicators Database (accessed July 2017); and h-index in AI research from Scimago Journal & Country Rank. Available from http://www.scimagojr.com/countryrank.php?category=1702 (accessed July 2017).

Opportunities for digital transformation : **Artificial Intelligence (AI)**

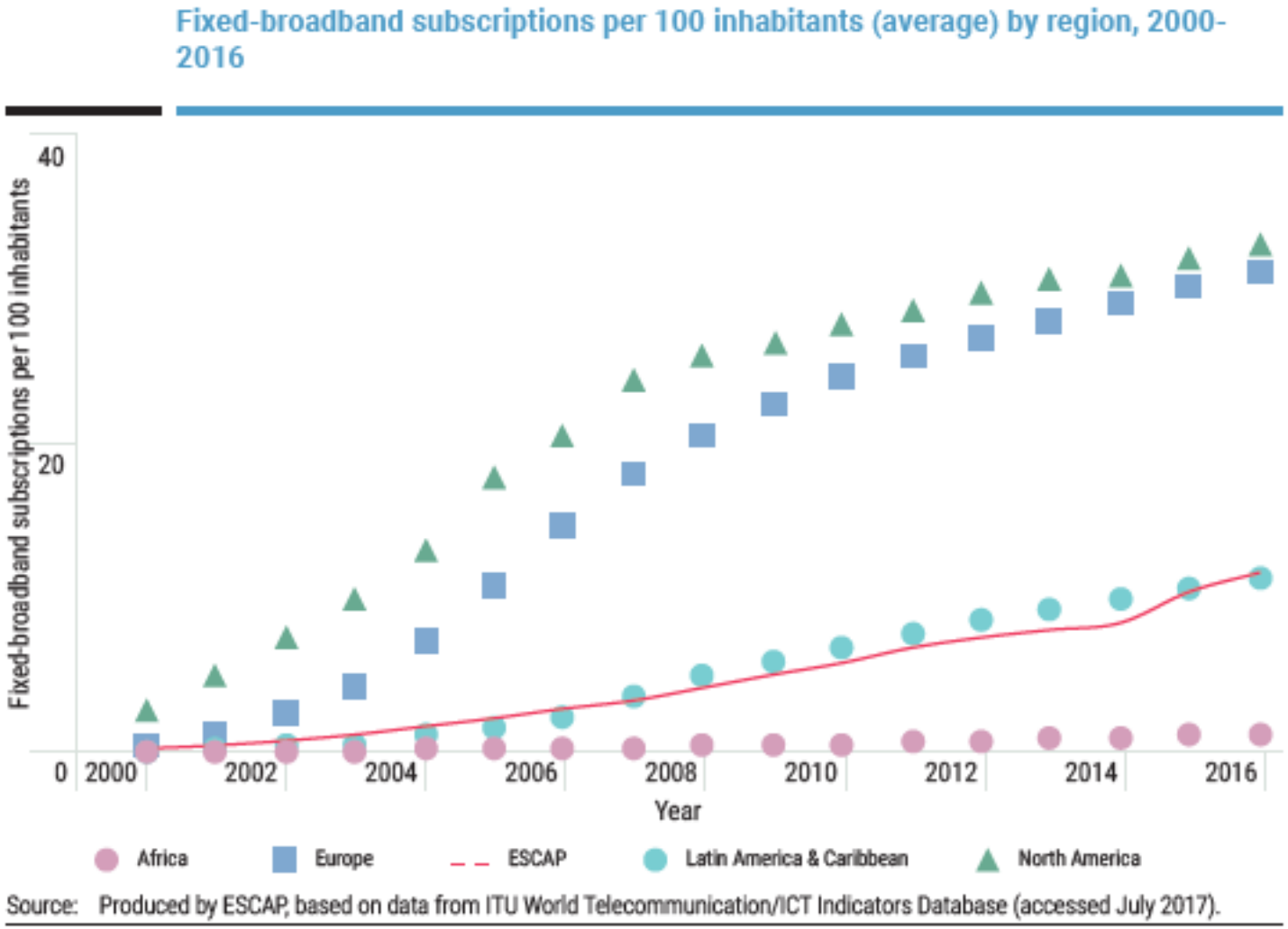


- Positive relationship between AI and economic development (GDP) in Asia and the Pacific region.

Fixed-Broadband Divide



Challenges: Broadband connectivity



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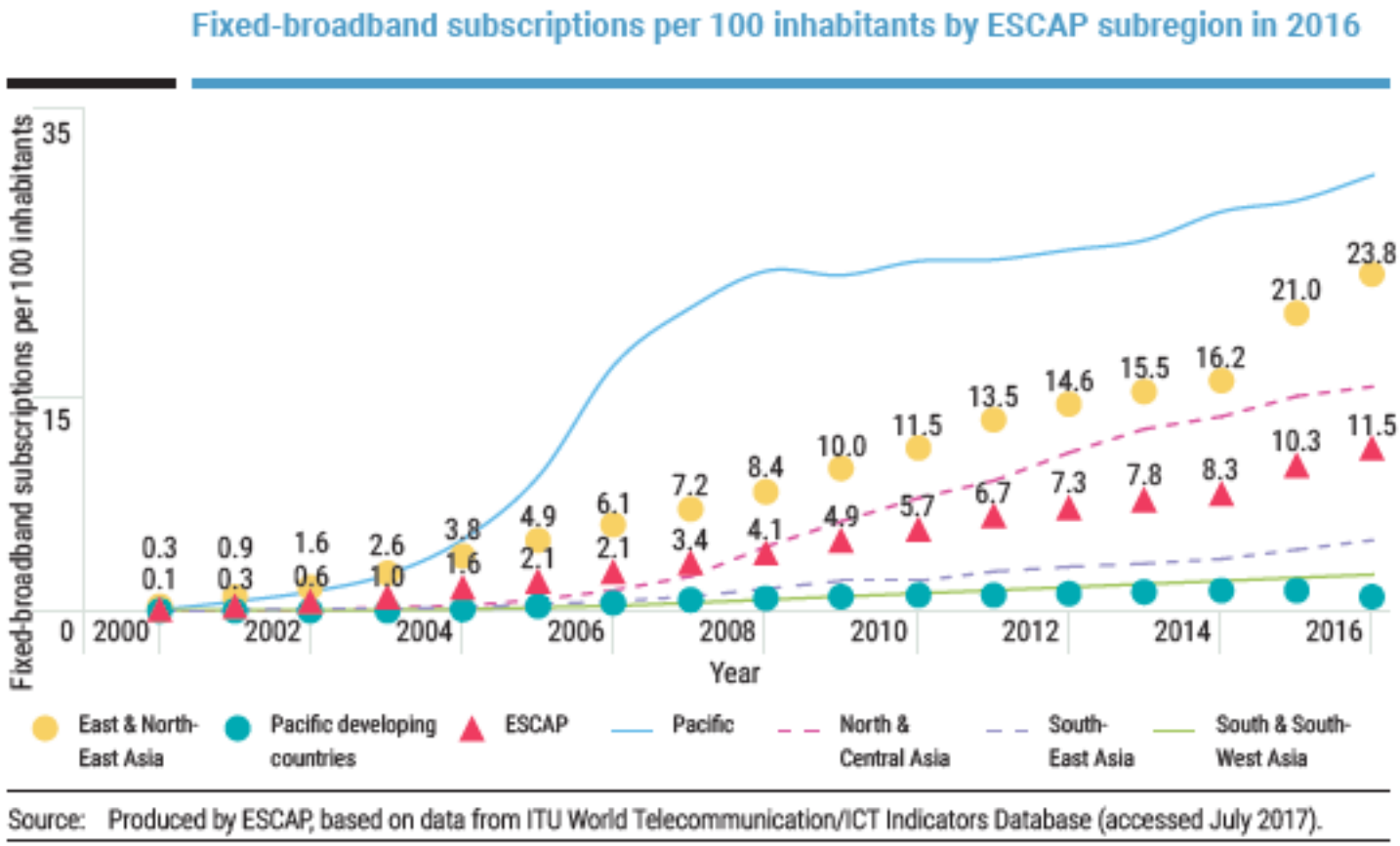
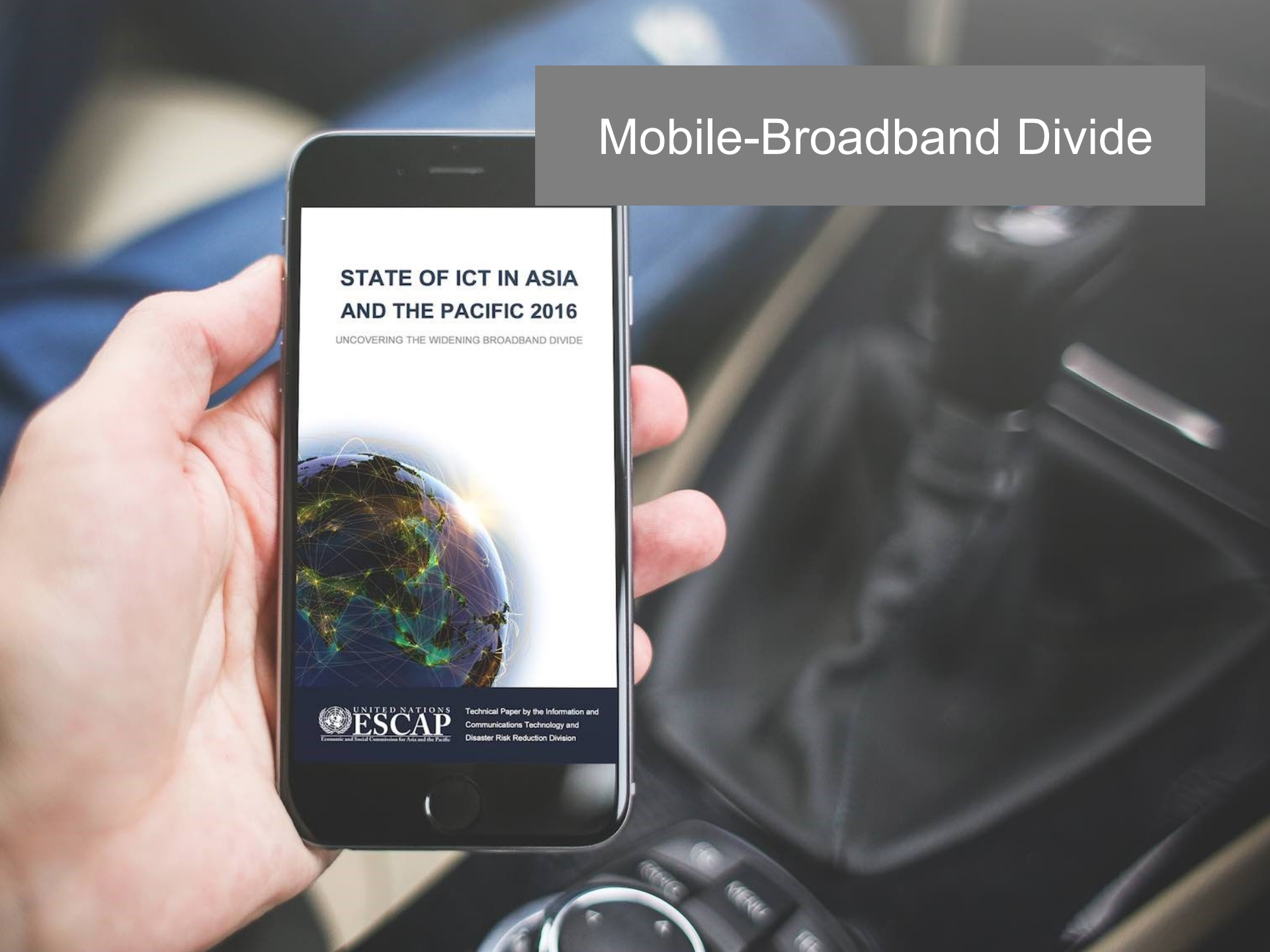


Source: Produced by ESCAP, based on data from ITU World Telecommunication/ICT Indicators Database (accessed July 2017).

Mobile-Broadband Divide



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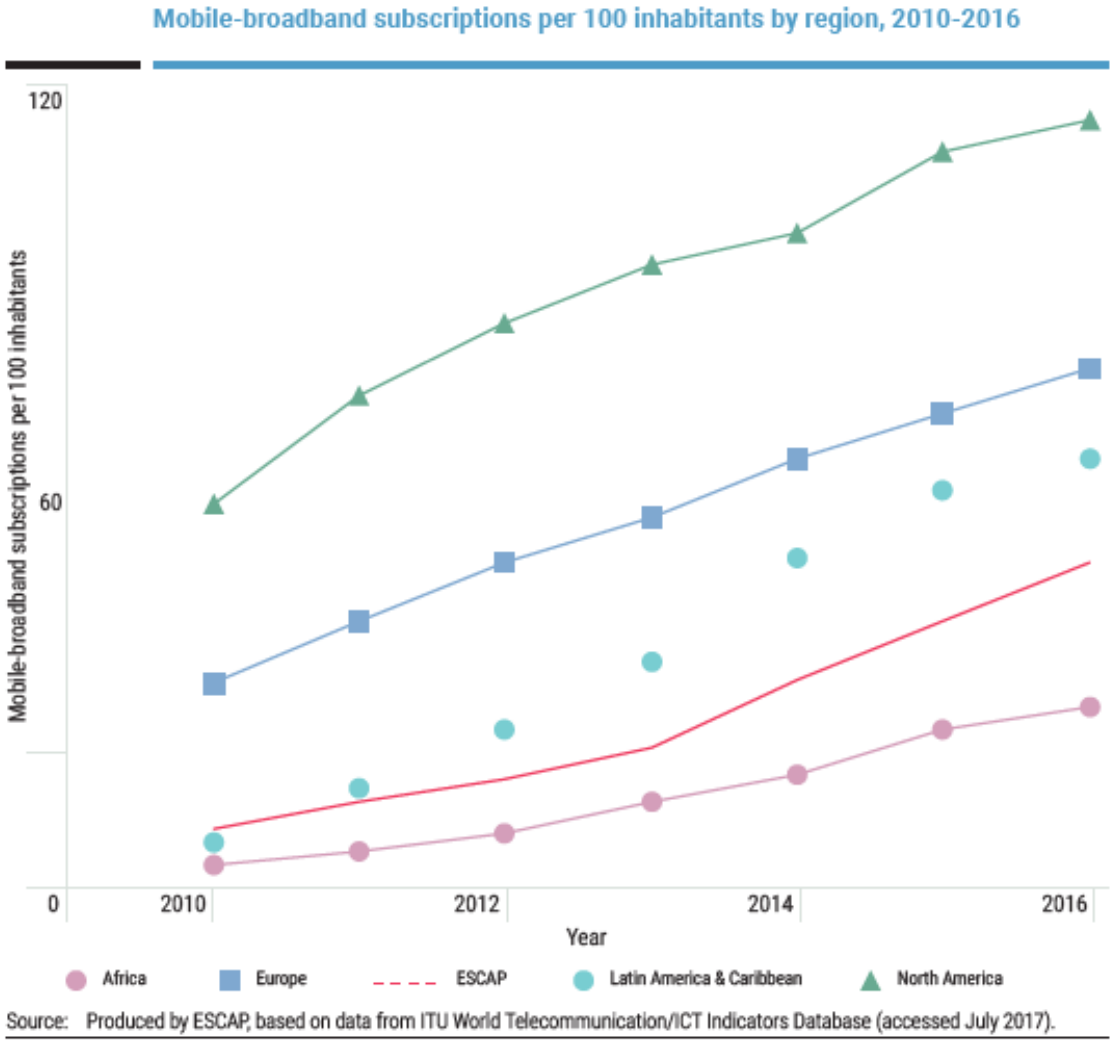

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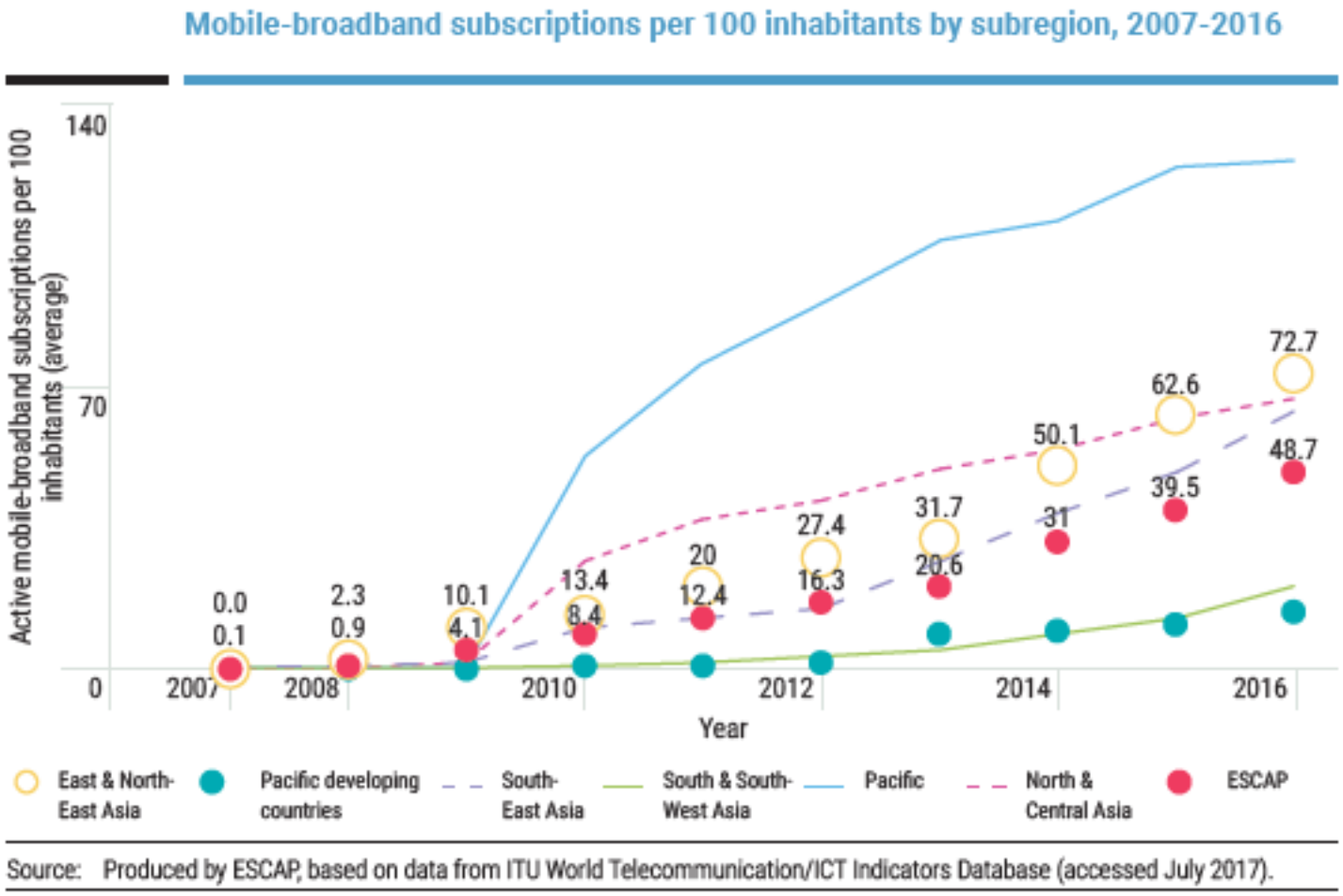
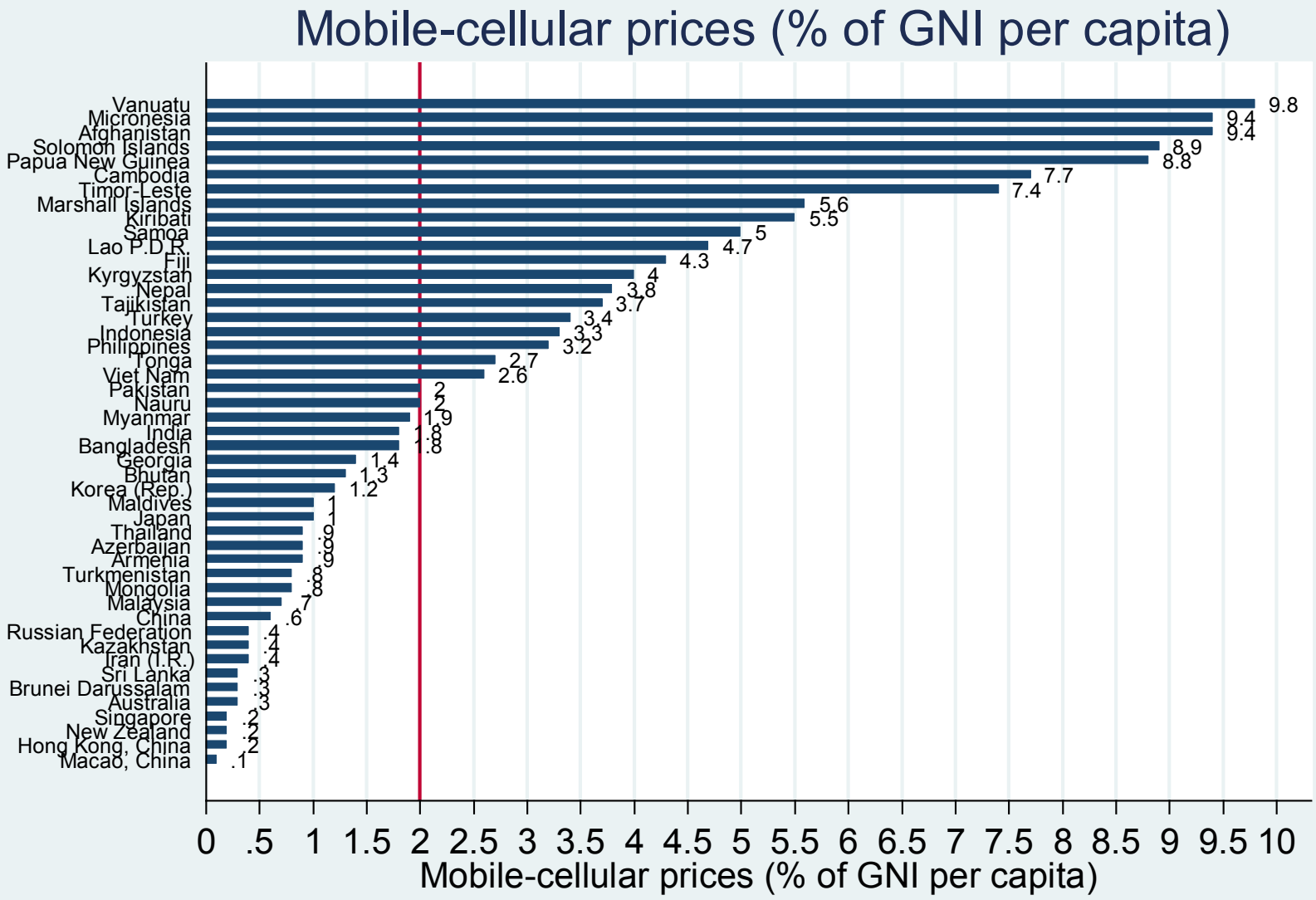


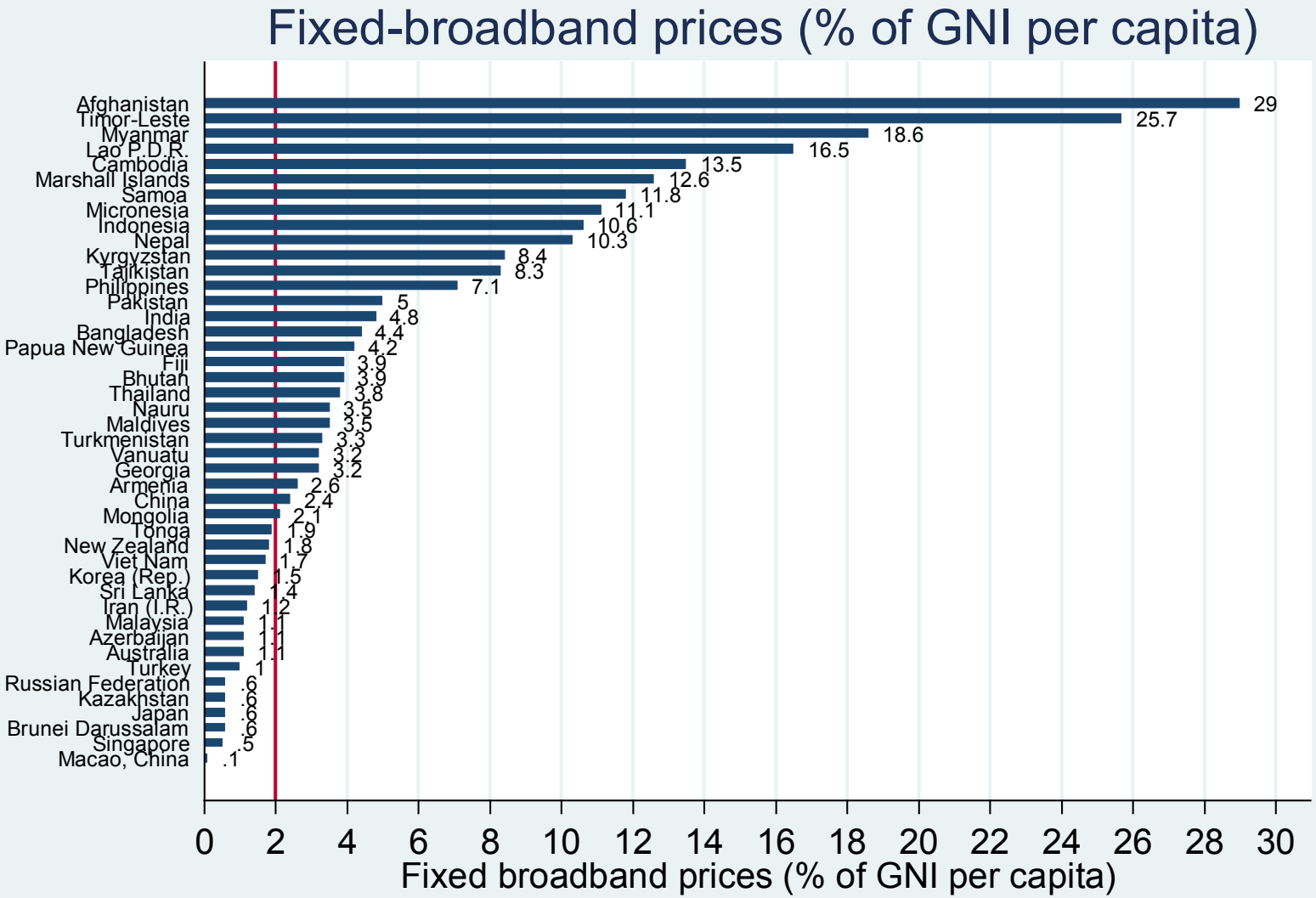
Source: Produced by ESCAP, based on data from ITU World Telecommunication/ICT Indicators Database (accessed July 2017).

Challenges: Affordability



Source: ITU World Telecommunications/ICT Indicators Database (21th Edition/Dec 2017)

Challenges: Affordability



Source: ITU World Telecommunications/ICT Indicators Database (21th Edition/Dec 2017)

Challenges: Drivers of digital divide

- Insufficient international bandwidth – missing or lack of access to international fibre-optic **cables,** (infrastructure sharing and codeployment and **financing of ICT infrastructure development**).
- Lack of online services and content;
- Lack of conducive regulations for development of ICT infrastructure;
- Poor Internet traffic management;
- Lack of resilient ICT infrastructure (E-resilience);
- Lack of access to affordable and reliable energy sources;
- Income (economic development levels) of countries, among other factors…

Asia-Pacific Information Superhighway

UNITED NATIONS ESCAP
Economic and Social Commission for Asia and the Pacific

ASIA-PACIFIC INFORMATION SUPERHIGHWAY

亚太信息高速公路

АЗИАТСКО-ТИХООКЕАНСКАЯ ИНФОРМАЦИОННАЯ СУПЕРМАГИСТРАЛЬ

L'AUTOROUTE ASIE-PACIFIQUE DE L'INFORMATION

INFO & PUBLICATIONS ON
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Regional cooperation

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
- ESCAP resolution 73/6 = mandate

Four Pillars of AP-IS

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

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

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

- Bridging digital divides
- Promoting affordable access to underserved areas
- Policy and technical support to Governments

AP-IS Initiatives

Strategic Initiatives 2016-2018

		P1: Infrastructure & Connectivity	P2: Internet Traffic & Network Mgmt.	P3: E-Resilience	P4: Broadband for All
1	Identification, coordination, deployment, expansion and integration of the regional backbone network	✓			
2	Establish a sufficient number of IXPs at the national and subregional 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 1st Steering Committee Meeting, 1-2 November 2017, Dhaka, Bangladesh

- Co-hosted with Bangladesh Steering Committee (SC) meeting on 1-2 November 2017.
- The SC meeting was chaired by Mr. Zunaid Ahmed Palak MP, State Minister.
- Around 300+ international and local participants attended the opening ceremony
- ESCAP member countries, regional and international partners, including private sectors attended the meeting.

AP-IS 1st Steering Committee Meeting, 1-2 November 2017, Dhaka, Bangladesh

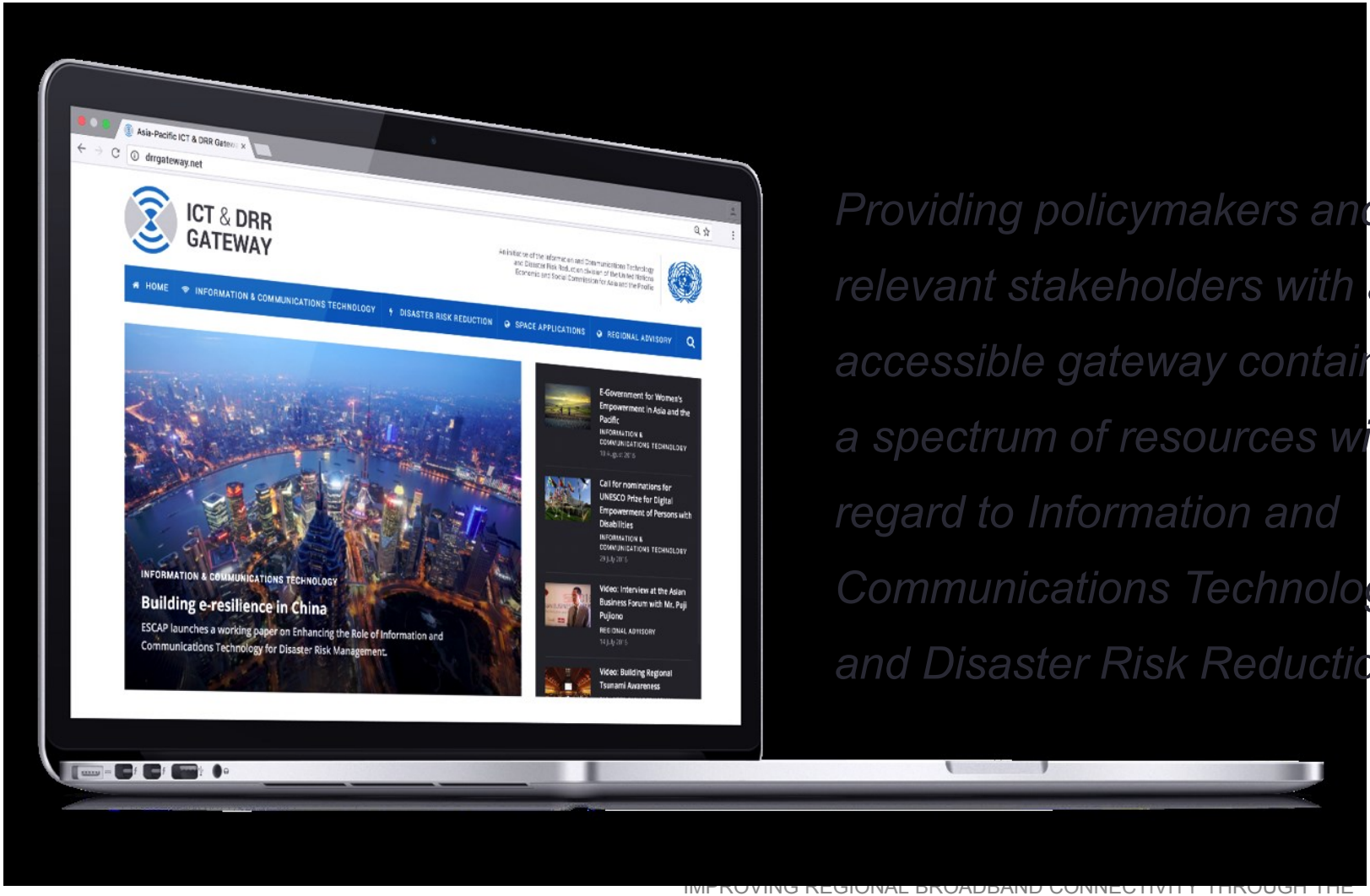
Key Outcomes:

- New bureau – Representative of Bangladesh was elected as Chair; China and Lao PDR as Vice-chairs; and Kazakhstan and Tonga as Rapporteurs;
- ESCAP member countries' needs and requirements for regional and subregional implementation plans consolidated
- UNV submitted a proposal for engaging national UNVs
- The Indian Institute of Management submitted a proposal for the establishment of an AP-IS Academic Network
- LIRNEasia submitted a proposal for collaboration
- GEIDCO proposed power grid co-deployment studies etc

Way forward

- 2nd AP-IS Steering Committee Meeting, 27-28 August 2018, Bangkok, Thailand;
- 2nd Committee of Information and Communication Technology, Science, Technology and Innovation, 29-31 August 2018, Bangkok, Thailand;
- AP-IS Subregional Meetings for Central Asia and the Pacific, 3 July 2018, Baku, and 4th Quarter 2018, Suva, Fiji

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

Navigate to the ICT & DRR Gateway

Access the Gateway on

www.drrgateway.net

Thank you!

For additional information on ESCAP studies, refer to http://www.unescap.org/our-work/ict-disaster-risk-reduction/asia-pacific-information-superhighway/resources