



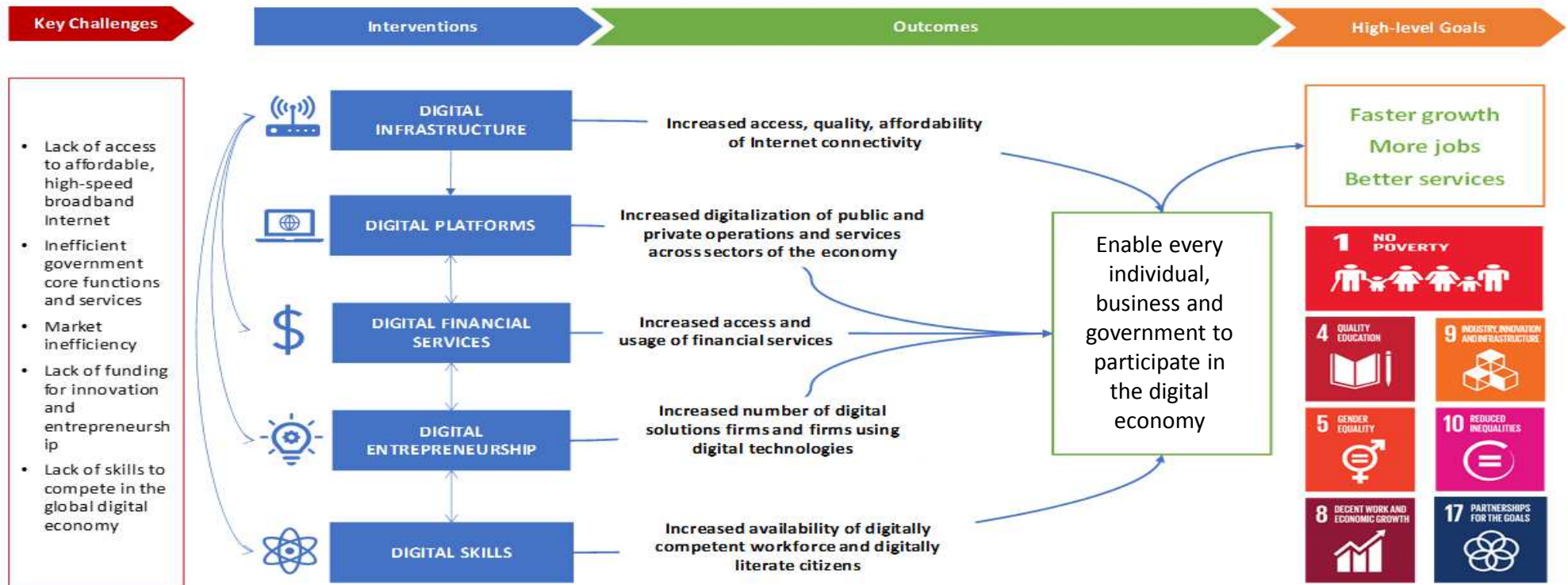
Asia-Pacific Digital Connectivity Engagement Update for AP-IS Steering Committee, August 11, 2020

A large, stylized blue globe graphic with white grid lines, partially visible on the left side of the slide.

Natasha Beschorner
Senior Digital Development Specialist

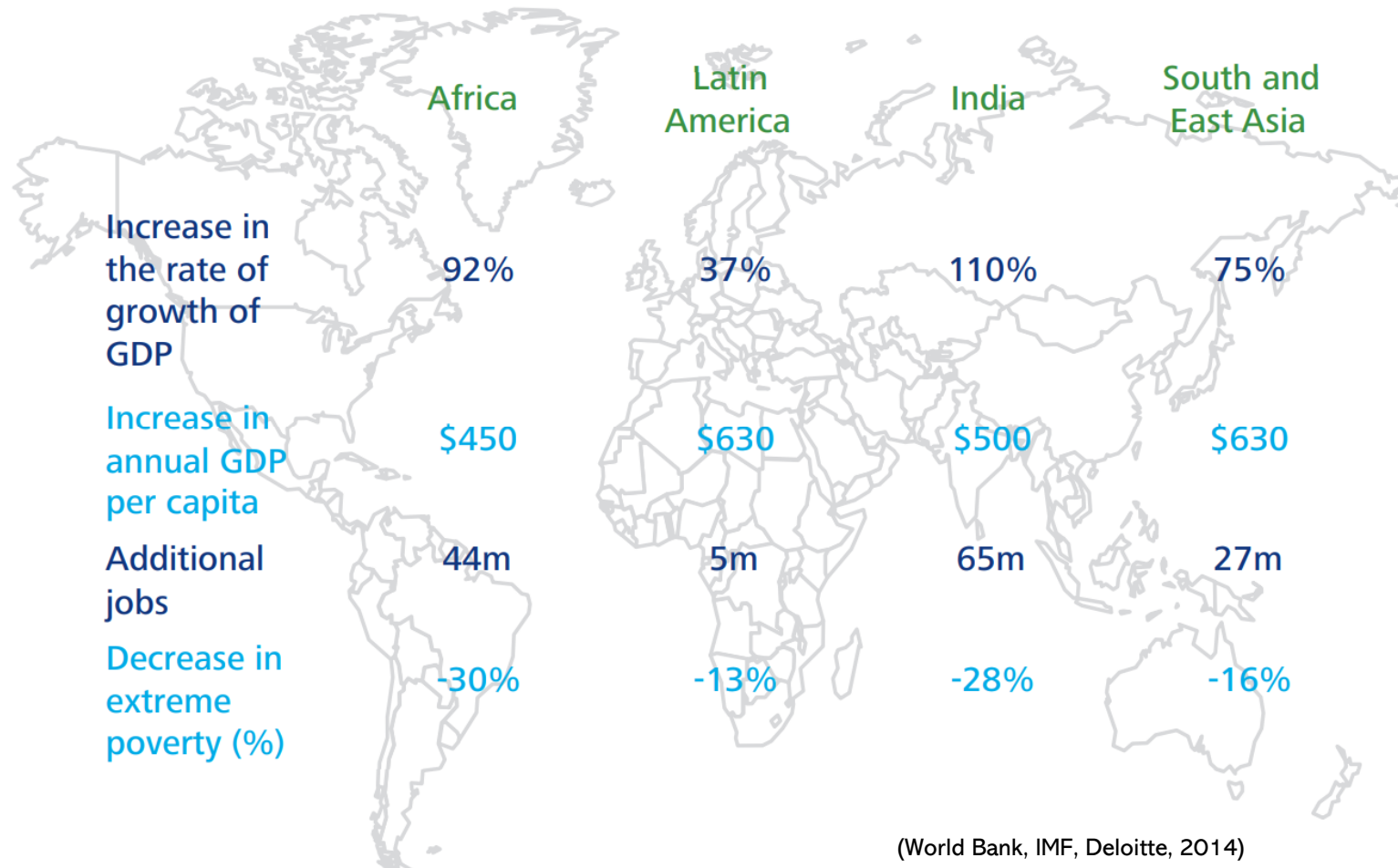
Digital transformation

Moving towards the implementation phase.



Digital Infrastructure is a Good Investment.

Economic impacts of extending internet penetration by region



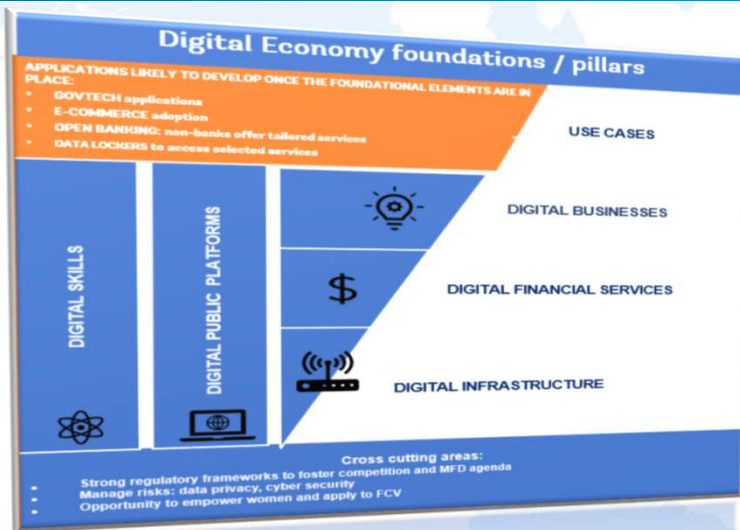
Affordable and reliable connectivity essential for digital platforms, in the public and private sector

Enabling Environment	Government Platforms	Private Sector Platforms
Policies & Regulations	Digital Identity	Digital Payments
Systems & Infrastructure	Digital Financial Management	Digital Commerce
Standards & Protocols	Digital Taxation	Digital Marketplaces
Skills & Capacity Building	Additional Applications	Additional Applications



Platforms: Digital systems that facilitate exchange of information between multiple users, improving service delivery and coverage for both public and private sector services

Operationalization of the Digital Economy agenda across regions in line with regional development strategies.



Europe and Central Asia

Digital Central and South Asia Project Series— expanding connectivity from Kyrgyz Republic to Uzbekistan and Tajikistan;

South Asia

Applying **Digital Economy country diagnostics** across entire region to develop a coherent strategy and investing in digital infrastructure.

Digital Afghanistan Project

Digital Bangladesh Project

Planned Pakistan Digital Economy Project

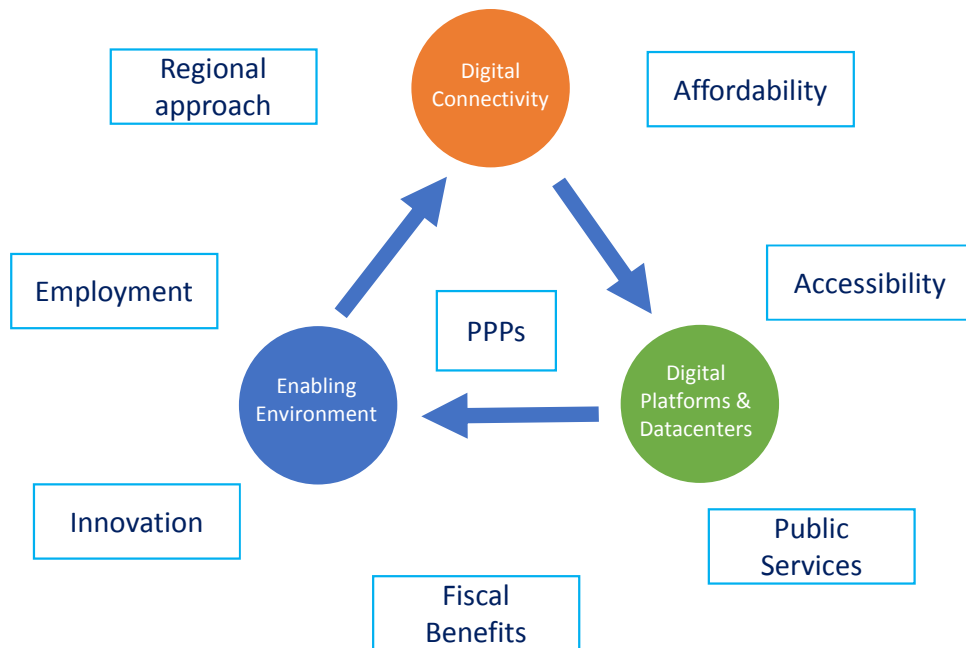
East Asia and Pacific

Investments in **digital infrastructure** (submarine cable, last mile), and **digital government** (Pacific Islands, Philippines, Vietnam, Indonesia).

Europe and Central Asia

Zooming in on Central Asia.

Digital Central and South Asia (CASA) Projects



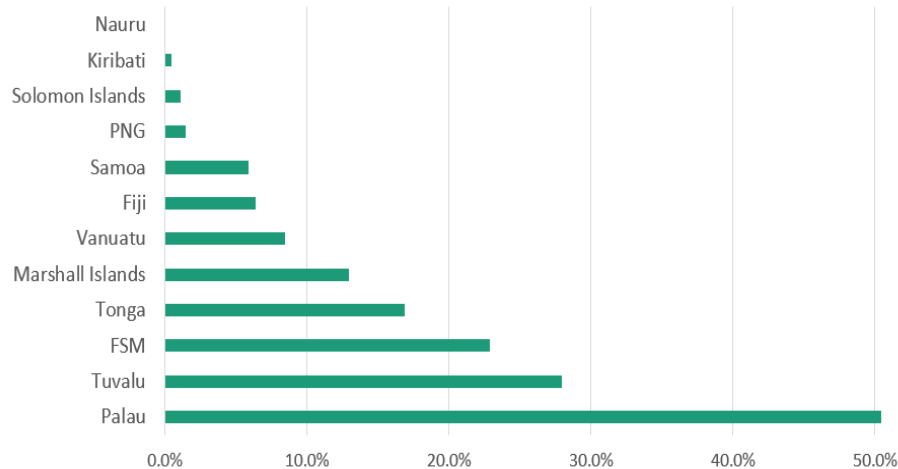
Participating Countries

- Kyrgyz Republic (US\$50 million) – approved by World Bank Board on 20 March 2018
- Afghanistan (US\$51 million) – approved by World Bank Board on 28 March 2018
- Uzbekistan (estimated at \$300 million) – Board approval in May 2020
- Preparation stage in Tajikistan (\$90 million) – expected Board Approval in FY22
- Dialogue ongoing with Turkmenistan

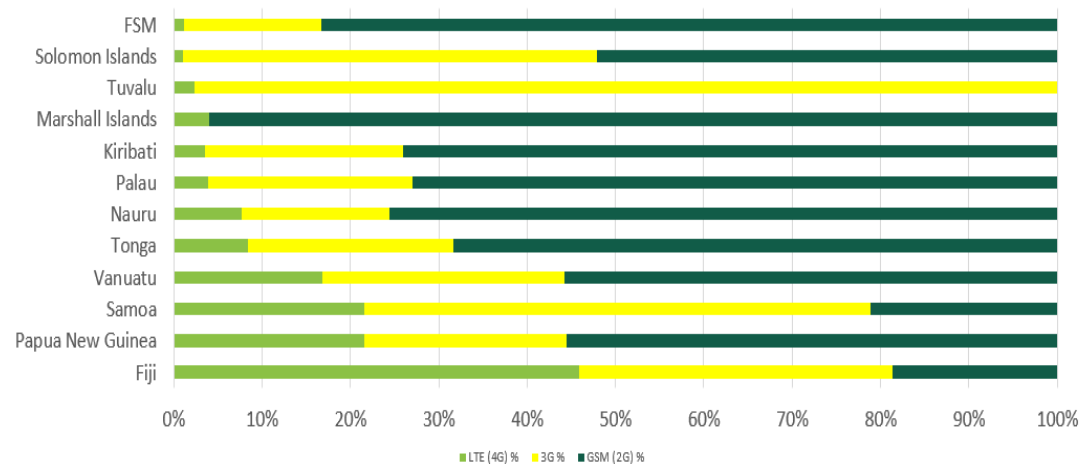
Pacific

Internet use is progressing at different pace between islands due to various internet access challenges...

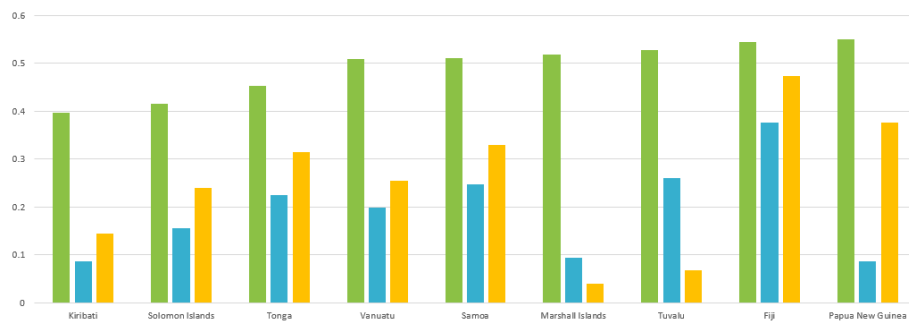
Fixed-Broadband Penetration per household (2018)



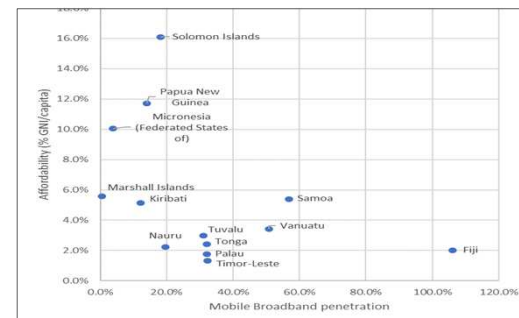
Mobile and Mobile Broadband Penetration in the Pacific (2018, % of population)



Pacific Islands and PNG: Digital Adoption Index 2018



Mobile Broadband affordability versus penetration (2018)



East Asia & Pacific

Pacific Subregional Engagement.

Pacific Regional Connectivity Program

Tonga-Fiji Connectivity Project	<ul style="list-style-type: none">• IDA US\$17.2m (approved 2012), cofinanced with ADB, Australia, TCC -<i>Ready for Service</i>
Palau-FSM Connectivity Project	<ul style="list-style-type: none">• IDA US\$47.5 million (appr. 2014), cofinanced with ADB -<i>Ready for Service</i>
Samoa Connectivity Project	<ul style="list-style-type: none">• IDA US\$16.0m (appr. 2015), cofinanced with ADB, DFAT, private sector--<i>Ready for Service</i>
Fiji Connectivity Project	<ul style="list-style-type: none">• IBRD US\$6.8m (appr. 2016)-<i>Ready for Service</i>
Kiribati Connectivity Project	<ul style="list-style-type: none">• IDA US\$20m (approved May 2017) cofinanced with ADB
Additional financing for Kosrae (FSM)	<ul style="list-style-type: none">• approved in May 2017
Tuvalu Connectivity Project	<ul style="list-style-type: none">• US\$29m (approved December 2018)

Pacific Digital Transformation Program

- **Regionwide analytical and advisory program on Digital Economy and Digital Government (2019-2021)**
- **Regionwide Program on Digital Identification**
- Investments in Digital Government:
 - **Tonga: Digital Government Support Project** (US\$4.5m approved May 2019)
 - **Samoa: additional component for Digital ID and Digital Govt Platform** under Samoa Connectivity Project (US\$0.4m—approved August 2019)
 - **Planned: Digital FSM (FY20), Marshall Islands (FY21)**

WB engagement with Government of Indonesia to improve the availability of affordable, high-speed broadband Internet

Connectivity Priority

Fixed Broadband

Promote more efficiency in fixed broadband roll out through sharing of passive infrastructure (e.g. ducts, poles, rights of way) (which typically constitutes 70-80% of investment cost)

Mobile Broadband

Provide additional spectrum for mobile broadband operators through better governance of spectrum allocation

What are the issues?

- Infrastructure sharing (passive and active) is not common yet in fixed broadband (but widely practiced in mobile broadband)
- It requires inter-agency coordination, especially with local Governments (not an exclusive Kominfo issue)

- Spectrum scarcity is the main reason for the remaining access and quality challenges in mobile broadband
- Past practices of spectrum allocation is no longer suitable to support digital demand

What needs to be done?

- Local governments should provide, facilitate, or incentivize companies to build shared passive infrastructure.
- Build database of available passive infrastructure for sharing

- 700 MHz band: reallocate from broadcasting to 4G-LTE
- 2.6 Ghz band: reallocate from satellite broadcasting to 4G/LTE
- Enable sharing of 3.4-3.8 Ghz bands between satellite and mobile services (including 5G prospectively)
- Prepare the spectrum in the mmWave band, 24-29 GHz, for 5G

What is the Government doing?

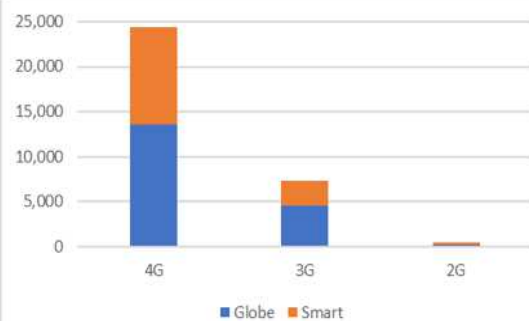
- In the recent Omnibus Bill for Job Creation, the Government introduces the concept of passive infrastructure sharing in the revision to the Telco Law '99

- In the recent Omnibus Bill for Job Creation, the Government impose mandatory migration for broadcasting (applicable for the 700 MHz band)
- Yet no clear roadmap for the migration for all the bands (including the immediate 700 MHz band)

Engaging with the Philippines government to accelerate mobile network rollout

- Common Tower Policy (June 2020)
- Cell tower/site permit streamlining (in progress)
- Broadband roadmap (in progress)

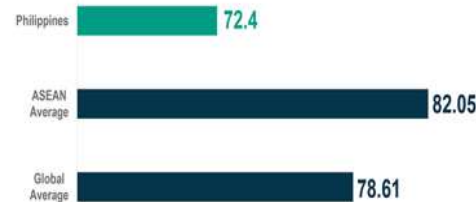
Number of Unique Cell Site IDs Detected (as of February 2020)



Source: ProjectBass Quick Reference Sheet on Tableau.¹⁷

Note: Number of Cell sites reflects those detected within range when subscribers use the BASS app

4G Network Coverage (% of Population)



Source: Open Signal data (2019)

Note: Availability is the percentage of time that 4G mobile device users were able to access a 4G signal.

World Bank Engagement: the “CHIP” Framework for East Asia & Pacific

Leveraging technology for inclusive development:
faster growth, more jobs and better service delivery

Connect

Build digital foundations and enablers (digital ID, digital payments, data analytics, etc.) and ensure system compatibility.

Harness

Invest in analog complements: regulations, skills/literacy, and leadership and institutions

Innovate

Create and expand new economy services, business models, digital entrepreneurs and e-government

Protect

Mitigate risks: cybersecurity and privacy, mis-information, inequality of opportunities, automation and digital monopoly

Digital Development

The World Bank provides knowledge and financing to help close the global digital divide, and make sure countries can take full advantage of the ongoing Digital Development revolution.

Thank you

nbeschorner@worldbank.org

<https://www.worldbank.org/en/topic/digitaldevelopment>

<http://documents1.worldbank.org/curated/en/674601544534500678/pdf/Main-Report.pdf>

