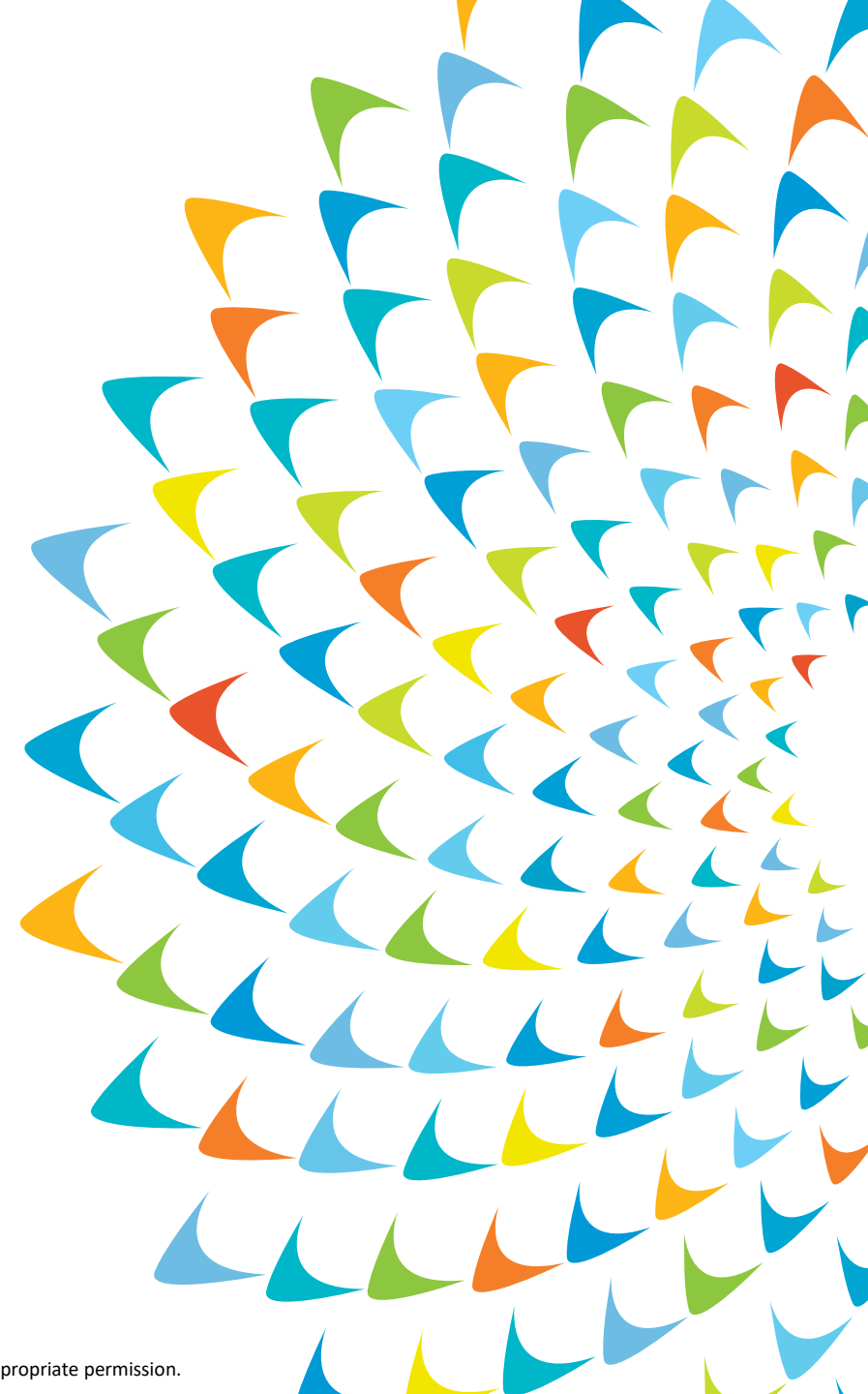




Telecom Infrastructure in the Pacific

23 October 2024, Session 2 (ii), Data x Blue Pacific

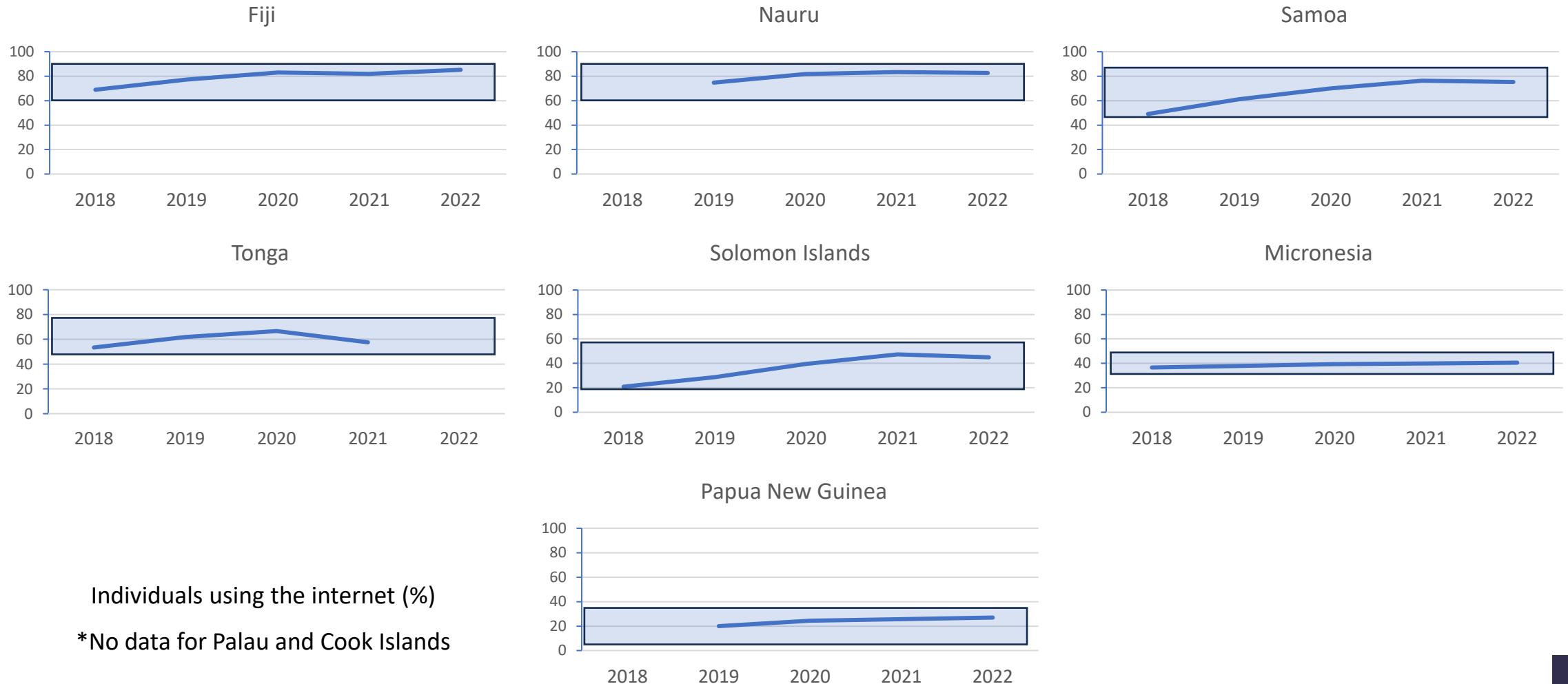
Tahani Iqbal, Digital Development Specialist
Digital Technology for Development Division, ADB





Enhancing connectivity and economic growth in the Pacific

The need to close the digital divide more urgent than ever



Individuals using the internet (%)

*No data for Palau and Cook Islands

Source: ITU World Telecommunication/ICT Indicators Database

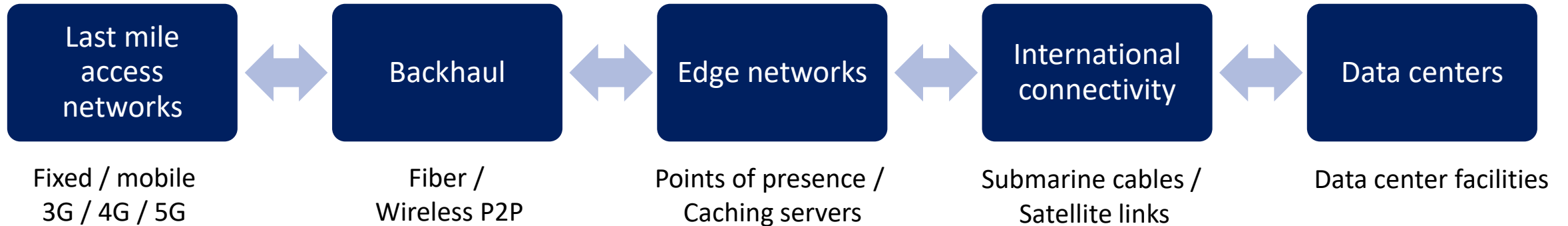
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Network connectivity value chain

The extended connectivity value chain is as important as the last mile





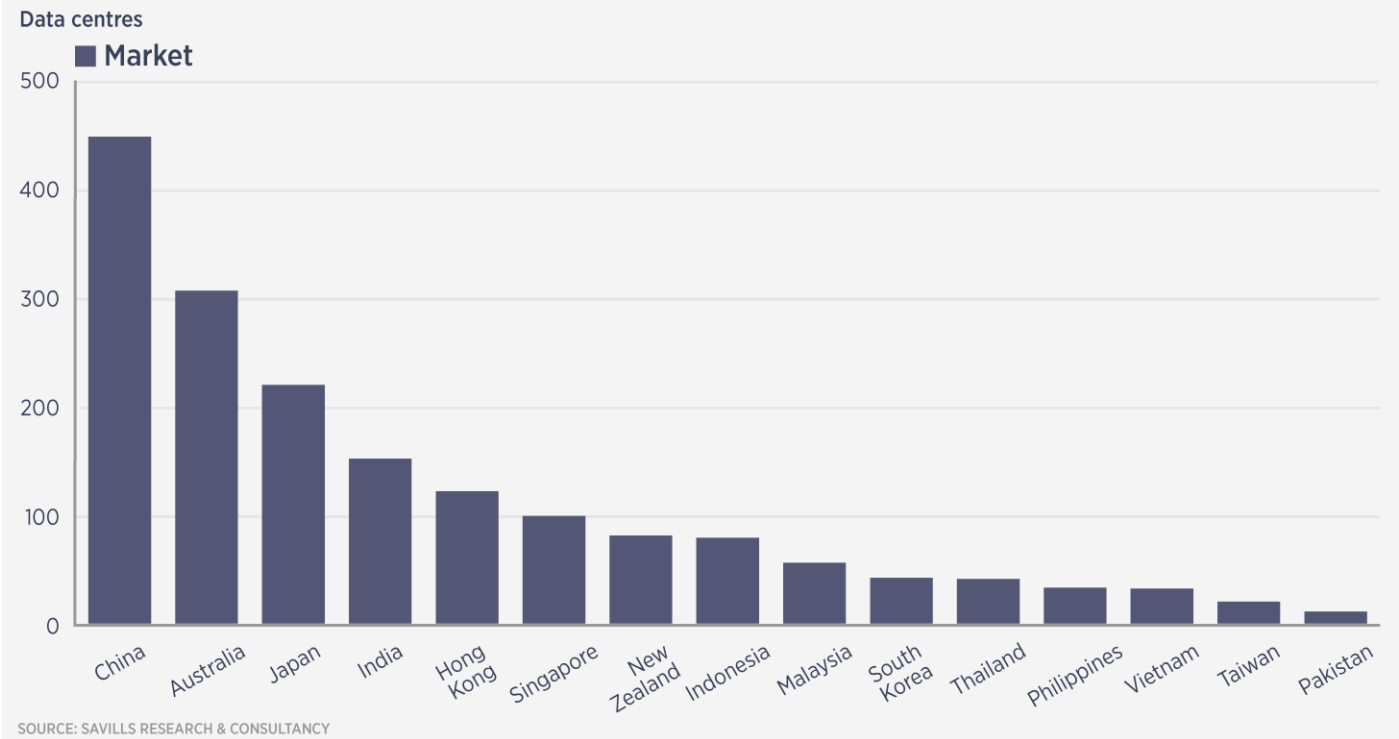
Data centers in APAC

DC infrastructure is important for digitalization

- Technological developments such as generative AI and the Internet of Things drive demand
- Data sovereignty/data security regulatory requirements

Number of data centres in Asia Pacific by market, Q1/2024

Developed markets have the highest concentration of data centres





Data centers for the Pacific Islands

Very few DCs in the Pacific Ocean

- DCs in:
 - Papua New Guinea
 - French Polynesia
 - New Caledonia
 - New Zealand
- In 2024, Google has announced plans to build in \$200 million data center in Fiji



Source: <https://www.datacentermap.com/datacenters/>



Challenges in building out telecom infrastructure

Topography, population size and digital readiness are added challenges in the Pacific

- Stable electricity – blended energy sources
- Stable internet connectivity – digital transformation
- Availability of relevant skills – cybersecurity, network/data engineers, etc
- Proximity to the markets served
- Economies of scale



Government's role in incentivizing telecom infrastructure investments

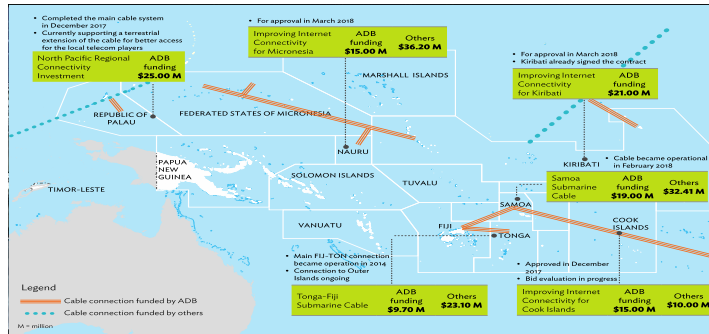
Long-term and holistic approach needed to achieve digital transformation

- Conducive policy and regulatory frameworks – data protection, data governance, cloud policies
- Accelerate green electricity development
- Enhance digital talent development
- Ease procurement challenges
- Improve management of land resources, spatial plans, permits
- Provide guarantees for funding
- Provide tax holidays/incentives



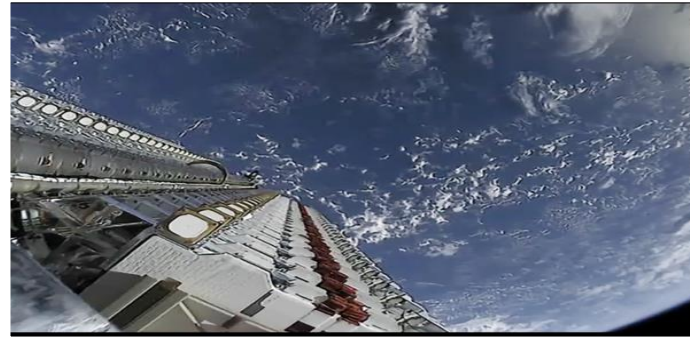
ADB's role in supporting digital transformation and infrastructure development

Investing and supporting connectivity projects



Investing and supporting PPP conceptualization of digital infrastructure projects, including submarine cables, national broadband network (e.g., ICT corridor, Towers) and telco expansions

Knowledge capture and policy advisory



Raising awareness of emerging technologies and innovative business models and solutions to close the digital divide

Future-proofing ADB investment



Promoting multi-sector infrastructure sharing and co-deployment of fiber with transport, energy and water infrastructure as a means to boost fiber roll-out and future-proof infrastructure projects

PARTNERSHIP BUILDING





Investing in digital infra in underserved areas

Connecting the Pacific Islands



Pacific Region: Submarine Cable Systems in the Pacific

- Tonga (2011) – Grant \$9.7M
- Solomon Islands (2012) – Loan \$10.5M, Grant \$7.5M
- Samoa (2015) – Grant \$25M
- Palau (2015) – Loan \$25M
- Cook Islands (2017) – Loan \$15M
- Micronesia (2018) – Loan \$21.6M and \$15M

Expanding Mobile Coverage



Papua New Guinea: Pacific Telecommunications Modernization Project (2021, Non-sovereign) - \$25M equity investment to ATH for 4G expansion

Philippines: Rural Connectivity in Southern Philippines (2022, Nonsovereign) – \$40M loan to Tiger Infrastructure for mobile tower expansion



Supporting innovative approaches

Satellite for Remote Connectivity



Image Source: Kacific

Asia-Pacific Remote Broadband Internet Satellite Project

- \$50M nonsovereign loan to **Kacific**
- Financing for construction, launch, and operation of a shared, GEO, high-throughput satellite (Kacific-1)
- Provision of low cost, high-speed, easily accessible broadband internet in Asia and the Pacific

Fiber Co-deployment and Sharing



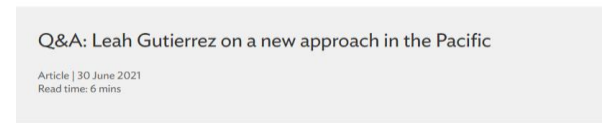
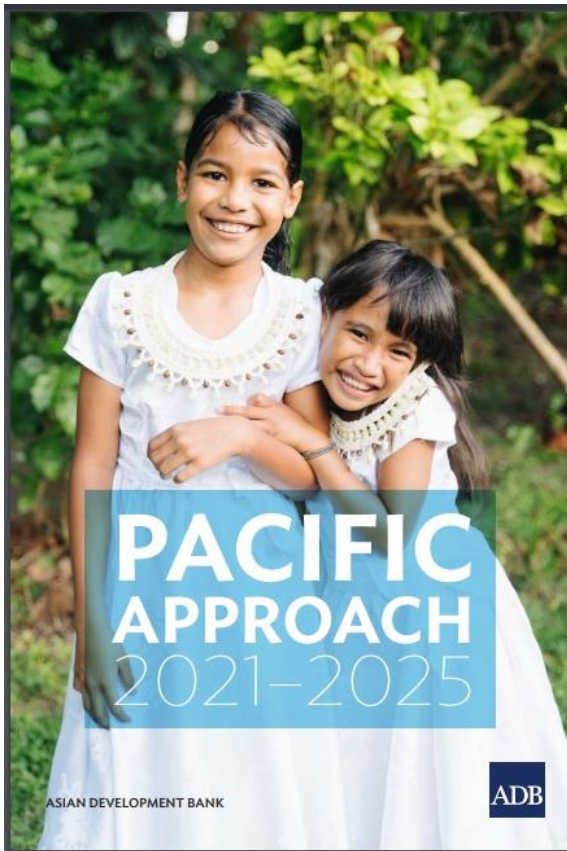
Image Source: ADB

India: Bengaluru Smart Energy Efficient Power Distribution

- \$100M sovereign and \$90M nonsovereign loans
- BESCO, state-owned distribution utility, to convert overhead distribution to underground cables and install 2,800km of fiber optic cables
- Excess fiber capacity to be leased as a source of revenue



Guided by the Pacific Partnership Strategies (2021-2025) ++



On 30 June, the Asian Development Bank Board (ADB) generally endorsed its Pacific Approach 2021-2025, the blueprint for future activities in 12 of ADB's 14 developing member countries in the Pacific. In this Q&A, Leah Gutierrez, Director General of ADB's Pacific Regional Department, outlines the key priorities in the Pacific Approach for 2021-2025, the impact of COVID-19 on the region over the past two years and into the future, and what she's most looking forward to about visiting the Pacific when travel restrictions are lifted.

Q. What is the Pacific Approach 2021-2025 and why is it so important?

Ms. Gutierrez: The Pacific Approach serves as the country partnership strategy for the next five years for ADB's 12 Pacific small island developing states (SIDS): Cook Islands, Kiribati, the Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Tokelau, Tonga, Tuvalu, and Vanuatu.

Leah Gutierrez, Director General of ADB's Pacific Department





Key takeaways

- Connectivity is lagging and the digital divide needs to be addressed in the Pacific
- Last mile access receives most attention, but international links and storage are as important to support end-to-end connectivity
- The Pacific faces significant challenges in building out telecom infrastructure, particular to its topography, population size, and lack of digital readiness
- Governments can do a lot more to create an enabling environment for connecting its citizens
- ADB can assist in a number of ways to promote digital development and transformation in this region, but needs the support and alignment of Government and Private sector



Thank you.

