Increasing Connectivity in Asia and the Pacific

Smart Islands and the Giga Initiative
Smart Islands
Whole-of-government approach for rural digital transformation
Limited digital services available to a small group of islands / villages

- Inadequate digital infrastructure (connectivity, platforms etc.) accessible to a wide group of citizens
- Inadequate resilience
- Some communities not connected
- Sustainability of digital infrastructure not established

- Insufficient affordability
- Affordable devices
- Affordable internet
- Wi-Fi in schools, hospitals, public offices, libraries etc.

- Insufficient digital skills
- Training programs
- Education opportunities
- Digital literacy and skills
- Awareness
- Community engagement
- Youth and women participation

- Limited digital services (scale and scope)
- E-commerce
- Range of digital applications and services (education, health, finance, agriculture, tourism etc.)

Evidence based, future proof (integrated emerging technology), partnership driven, whole-of-government approach

- Established digital infrastructure required to provide digital services a wide group of citizens
- Improved resilience of networks and infrastructure
- Support from government
- Connected schools, hospitals, public offices, libraries etc.
- Devices and internet services made affordable
- Wider portfolio of services enhance value for money
- Trainings and digital literacy programs scaled out and expanded
- Awareness enhanced for majority citizens in project area
- Partners engaged in wide range of digital skills
- Community ownership
- Vulnerable groups and stakeholders empowered (youth, women, PwDs)
- Improved capacity of government to manage digital services and adopt whole of government approach
- Governance mechanism established
- Access to a range of digital services
- Availability of data-driven analysis and application of emerging technologies for digital services
ITU Proposed Approach

- Evidence based policy making
- Future proof - Integrate emerging technologies
- Partnership driven
- Whole of government approach

Source: ITU
An innovative solution

an integrated platform to deliver SDG-related services to

Women and Children
Farmers
Government Offices
Students & Teachers
Health Workers
THE CONCEPT OF SMART ISLANDS

- whole-of-government approach
- common ICT building-blocks

an integrated platform to deliver SDG-related services

- low cost
- better scalability
- multi-sector collaboration
- partnerships

Smart village piloted in Niger

- e-healthcare
- e-education
- e-agriculture
- e-governance
- disaster management
- digital finance
EXPECTED IMPACT OF SMART ISLANDS

WHAT DOES IT DELIVER TO THE COUNTRY?

Reduced inequality, improved well being and access to better jobs through digital services

Education, health, government, e-commerce services through common digital platform

Enhanced sustainability and cross-sectoral partnerships by adopting SDG linked whole of government approach

Co-creation and scaling up of SMEs and businesses by providing a platform to innovate
Giga - Connecting Schools: Asia and the Pacific
Giga is a convener

Giga acts as convener between funding opportunities and connectivity projects for schools in disconnected areas and, ultimately, their communities.

**Funders and Supporters**

Giga helps funders hold governments and providers to account through clear target-setting and timeline management.

**Giga**

Giga provides grants and technical advisory services to help governments in project preparation.

**Partner Countries**

Giga enables relevant regulation, and establishes & shares best practices in mapping connectivity demand, identification of funding, project preparation, project delivery and post-delivery device adoption and empowerment.

**Providers**

www.gigaconnect.org | info@giga.partners
With the launch of Giga in late 2019, UNICEF and ITU set a goal of providing connectivity to every school in the world.

We’re on our way.

- **$22M+** raised from global partners including Ericsson and Dubai Cares, and the Musk Foundation
- **19 countries joined** to connect over 86,000 schools and more than 25.8 million students and teachers
- **2,800+ pilot schools connected** by Giga partners: Kenya, Sierra Leone, Kazakhstan, Brazil, OECS ... and more soon
- **800,000+ schools mapped** across 30 countries and all viewable on the Project Connect platform
- **10 partners joined** World Bank, EIB, IsDB, ADB, AIIB, GSMA, Liquid Telecom, NIC.br, Ericsson, Musk Foundation
- **$400M+ funding mobilized** to countries and UNICEF Country Offices to accelerate connectivity

These dots are every school in Brazil colored by the quality of internet access. Yellow dots have <3Mbps connectivity, green dots have >3Mbps connectivity, and red dots have 0 connectivity.
Giga builds on four Pillars

**Map**
Resolving information gaps with real-time connectivity maps of schools

**Finance**
Stacking layers of public and private financing to de-risk investment and move capital “out” to the “edges”

**Connect**
Building new regulatory frameworks & structuring “common bids” with government partners

**Empower**
Partner to ensure every young person has access to information, opportunity, and choice (DPGA, Reimagine Education, GenU, End Violence Partnership, etc.)
Leveraging of several financing instruments to finance 3 billion of new consumers who can be digital natives

1. Country & Public Sector Sponsors
   - Offer legally binding long-term financial pledges

2. Connectivity Bonds
   - Pledges can be leveraged to issue connectivity bonds. Converting long-term pledges into immediately available cash.

3. Capital Market Investors
   - Invest in bonds. The proceeds will finance Capex and other eligible costs

4. Private Equity investors
   - Traditional PE/VC investors invest in equity: in telcos, in digital tech.

Connects
- Onboarding billions of new digital creators, consumers, and customers
- And uses schools as the major ‘pin’ to do that
Giga is building a $420B+ railroad
We need a visionary, clear product to finance this work – the Giga Bond

1. BUILD THE TRACKS
   **Giga: UNICEF & ITU**
   Financing and technology to extend telecommunications infrastructure, evaluate connectivity solutions, and monitor and implement connectivity at scale

2. BUILD AND MOVE THE SUPPLIES
   **Education, Innovation, Digital Public Goods Alliance**
   Financing for software and digital solutions that will be delivered to communities soon after they are connected

3. CONNECT YOUTHFUL ECONOMIES TO GLOBAL MARKETS
   **Generation Unlimited**
   Financing for future of jobs, future types of digital work, and new realities in an interconnected world
The small island states and land locked countries in Asia Pacific present a variety of challenges to financing connectivity. The magnitude of the challenge will determine the financing solution.
Tapping into Established Financing Sources

Universal Service Funds

• Largely funded by levy on revenue or license auctions
• Established in all Giga target countries
• should be one of the first considerations for funding Giga school connectivity initiatives

Issue to be addressed:

• low disbursement rates
• misalignment of fund objectives and actual projects funded.
• lack of monitoring tools and transparency

Examples

Pakistan USF:
• Widely regarded a best case example in the region

Papua New Guinea USF:
• Specifically mentions education institutions in its definition of universal coverage

NetPracharat Thailand:
• While CapEx of the program was funded from general government budget initial OpEx is funded by Thailand’s UFO
Innovative financing solutions have potential in the region but require examination in the local context.

**Blended Finance**
- Blended finance leverages philanthropic capital to attract commercial capital
- Sub-Saharan Africa receives the largest share of blended finance investment at 33% over the period of 2017-19
- Asia Pacific is emerging as the new gravity center of blended finance
- Attracting 21% of overall blended finance investments over the period 2017-19 compared to only 14% in all time
- Indonesia roughly 40% of the regions blended finance transactions by volume and approximately 59% by value
- Indonesia's prominence is likely due to strong government support of blended finance

**Bonds**
- Infrastructure bonds in Asia Pacific have generally better credit ratings and lower default rates
- This makes them a suitable option to attract private sector investment into ICT infrastructure
- Gavi-style Social Bonds, Bhutan Covid recovery bond
Franchise Model

- Bluetown, India
- Facebook Express

Wholesale Model

- Kacific, Pacific Islands
Achieving Sustainability

Open Access Network
- NetPracharat
- Facebook's Open Transport Network

Community Network Model
- Internet Society Community Networks (India, Pakistan, Nepal, Papua New Guinea)
- TakNet Thailand
Thank you!

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