

Towards Equitable Connectivity

ITU-ADB Joint Webinar

Advances in Closing the Connectivity Gap in Asia-Pacific: *Better Analysis, Understanding and Solutions*

*Wednesday, 23 September 2020,
Online*

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Scope

01

Defining the
situation in
ASP

02

Areas of
Intervention

03

Tools &
Initiatives

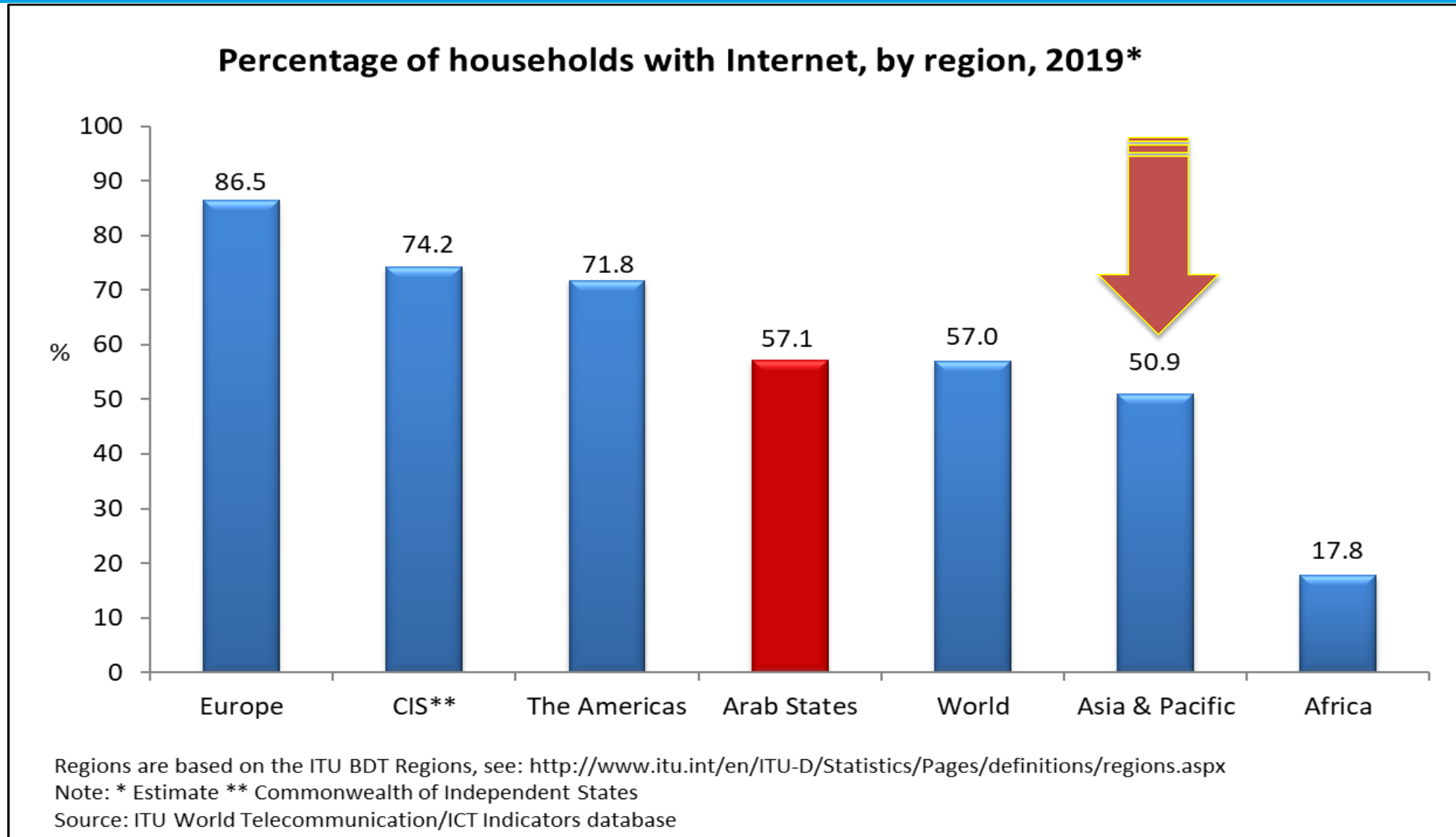
04

Impactful
Partnerships:
Example

05

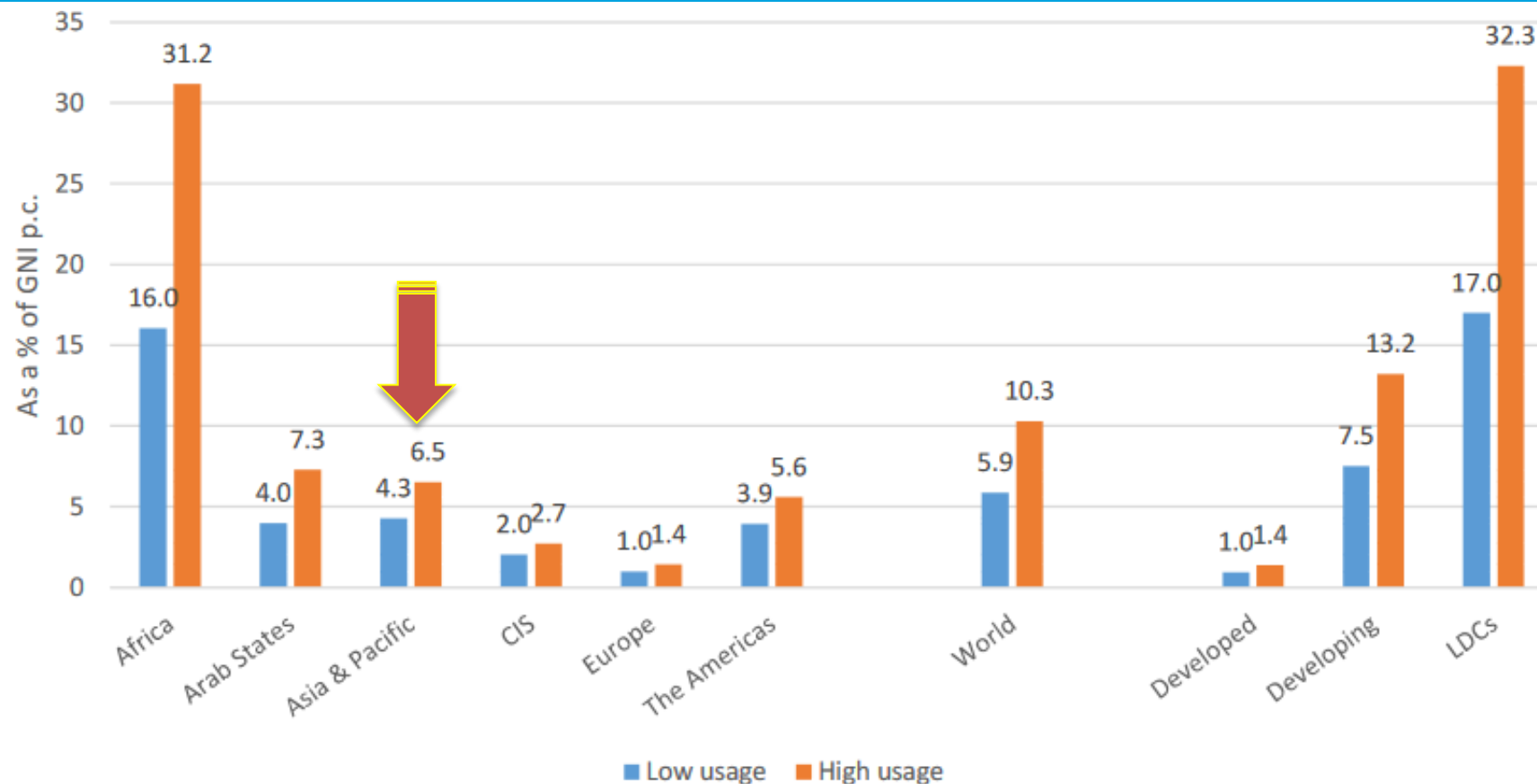
Conclusion

Our Problem Graphically: Connectivity



Our Problem Graphically: Affordability

Mobile-data-and-voice baskets as a % of GNI, 2019



Note: Simple averages. Based on 182 economies for high-usage data and voice baskets and 179 economies for low-usage data-and-voice baskets for which data on prices of mobile-data-and-voice baskets in PPP\$ are available for the year 2019.

Source: ITU. GNI p.c. data are from the World Bank.

Possible interventions for Solutions

Resilient Infrastructure

- Where to achieve most Impact?
- How Capex and which technology?
- Roll out issues
- Spectrum availability?

- **Tools**
- **Partnerships**
- **Spectrum harmonization**
- **Regulatory regime**
- **Policy Interventions**

Affordability

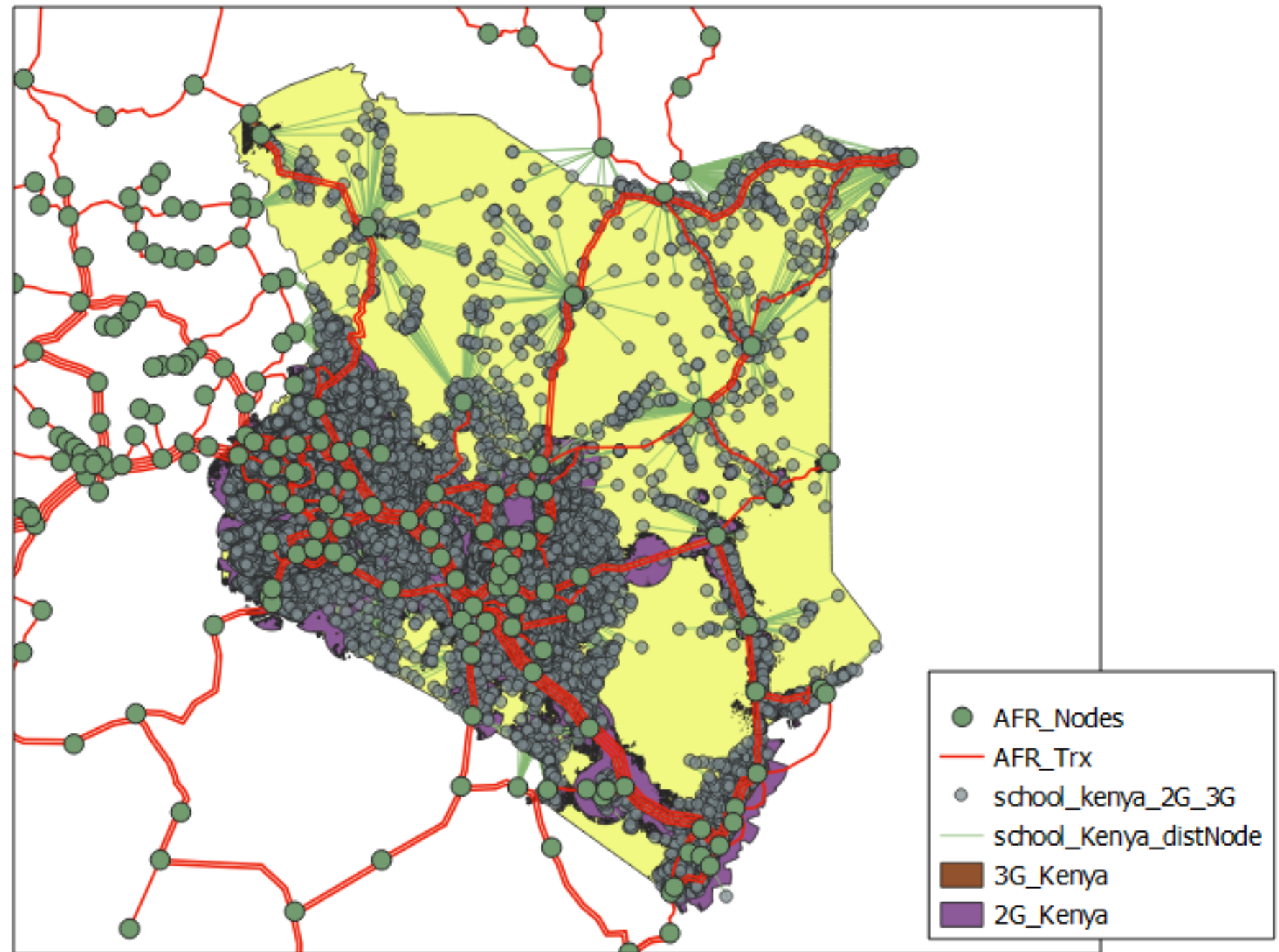
- Competition and market of scales
- Taxation, affordable devices
- Rural connectivity
- Best practices

- **Policy Interventions**
- **Regulatory regime**
- **USOF**
- **Guidelines**
- **Capacity building**

ONE SIZE FITS ALL SOLUTION?

**Targeted interventions needed
using
Best Practices / Guidelines / Toolkits**

Kenya - Schools/Mobile Coverage/Distance to Backbone Nodes



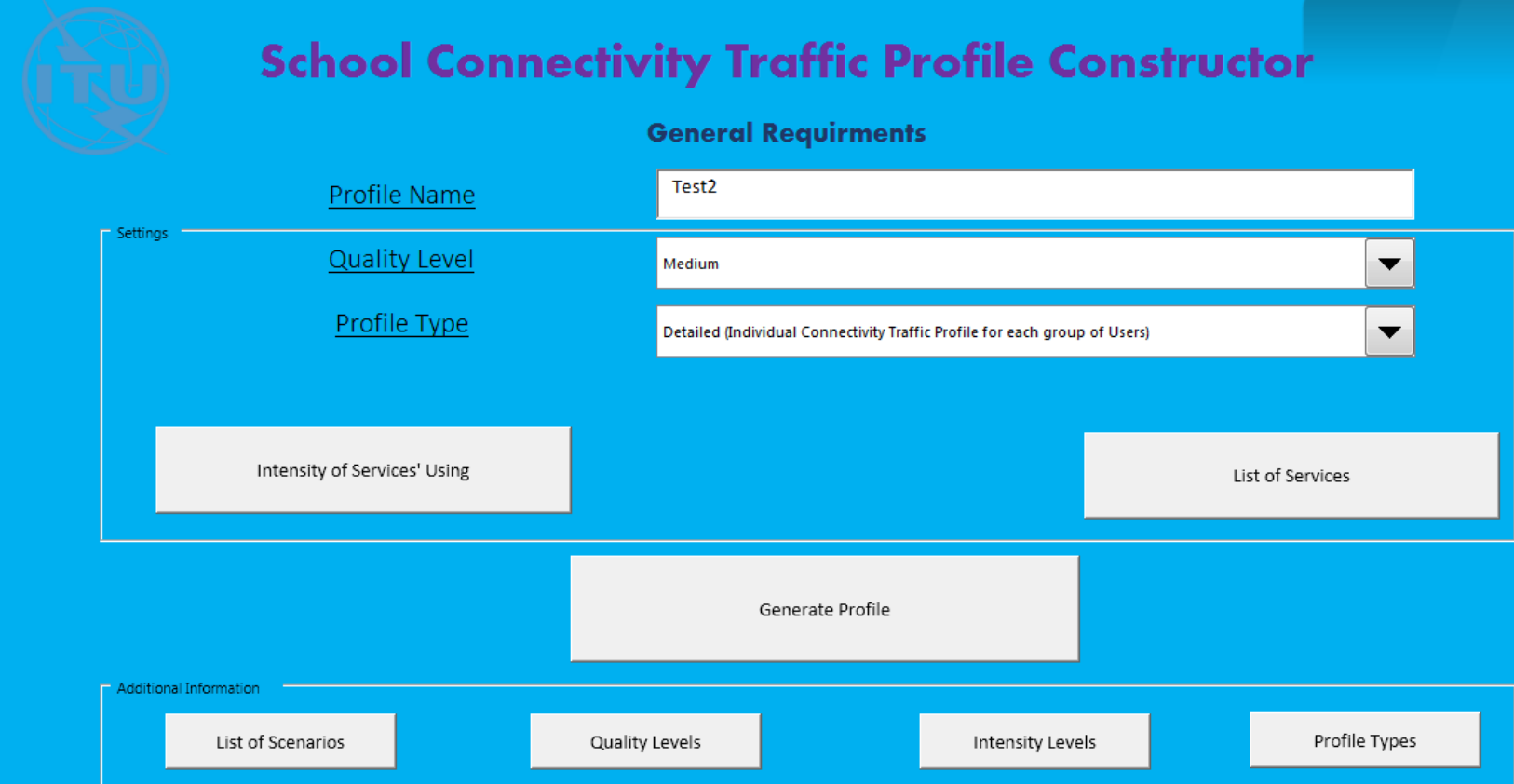
Last Mile connectivity Toolkit

ITU Last
Mile
connectivity
Toolkit

An umbrella for various Last Mile Connectivity resources including:

- ITU Last Mile Internet Solutions Guide (October 2020)
- ITU Broadband Diagnostic Tools (October-December 2020)
- ITU courses on building, maintaining and monitoring a Last Mile network (Q2 2021)
- Additional resources on last mile connectivity from ITU and from various partners (December 2020)

Coordination and collaboration on Last Mile Connectivity resources, projects and initiatives (Q1 2021)



The screenshot displays the 'School Connectivity Traffic Profile Constructor' web application. The interface is set against a blue background. At the top left is the ITU logo. The main title 'School Connectivity Traffic Profile Constructor' is in a large, bold, purple font. Below the title, the 'General Requirements' section contains three input fields: 'Profile Name' with the value 'Test2', 'Quality Level' with a dropdown menu showing 'Medium', and 'Profile Type' with a dropdown menu showing 'Detailed (Individual Connectivity Traffic Profile for each group of Users)'. Below these fields are two buttons: 'Intensity of Services' Using' and 'List of Services'. A large 'Generate Profile' button is centered below these. At the bottom, an 'Additional Information' section contains four buttons: 'List of Scenarios', 'Quality Levels', 'Intensity Levels', and 'Profile Types'.

School Connectivity Traffic Profile Constructor

General Requirements

Profile Name

Quality Level

Profile Type

Additional Information

6 targeted countries In ASP

Pakistan, Bhutan, Bangladesh, Mongolia, Vanuatu, PNG.



Map schools to
identify
connectivity gaps



Build affordable
and sustainable
Finance models



Identify fit for purpose
infrastructure to
Connect schools



Empower digital
education via
appropriate Digital
Public Goods

Global initiative that aims to **reinforce national digital infrastructures and ecosystems** to support the COVID-19 response, recovery and preparedness for the **‘new normal’**

Methodology

Country
Assessments

Country
Strategies

Pilot Projects

Topic-based
Deep Dives

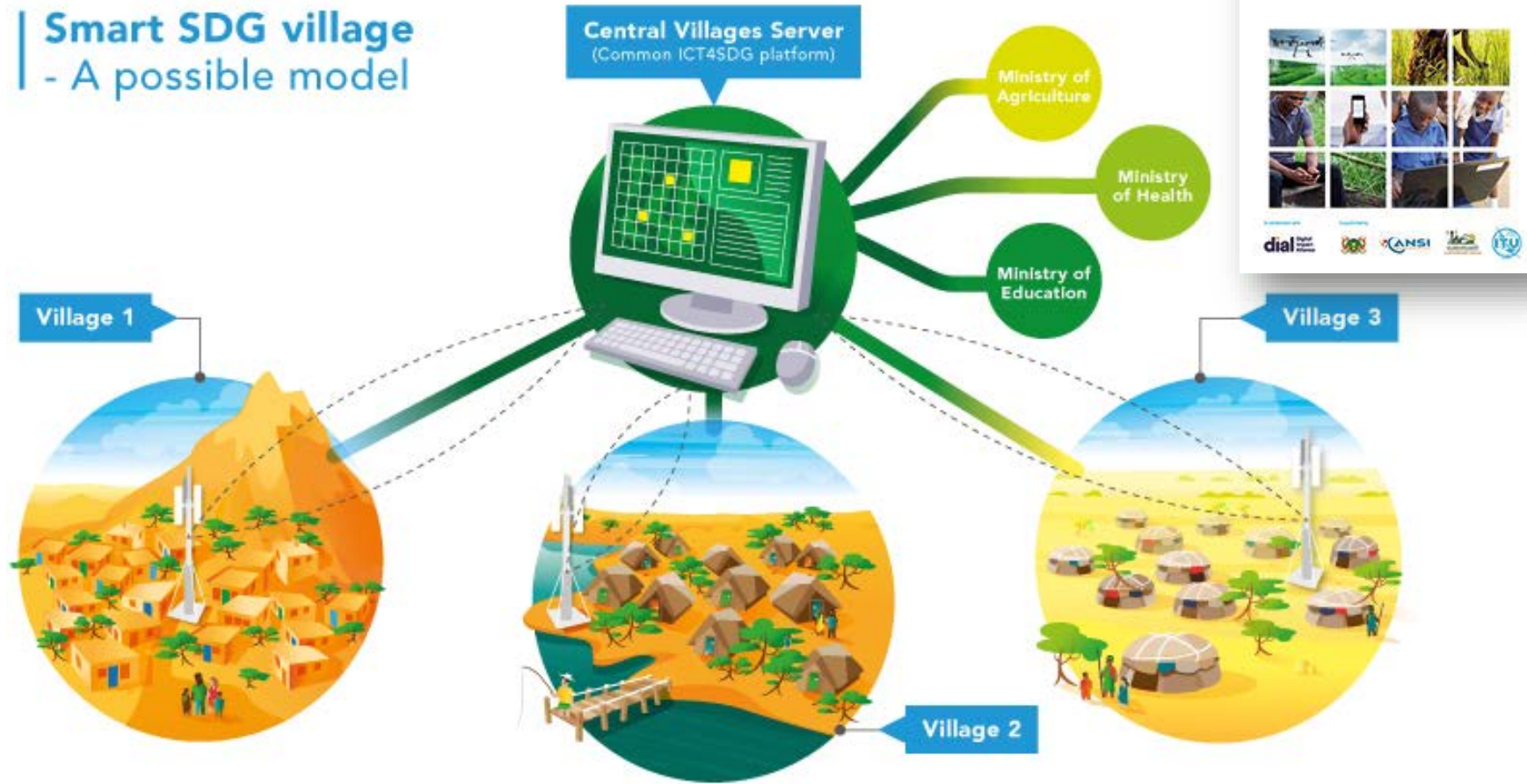


Reach out to us to:

- ❖ Support
- ❖ Partner
- ❖ Find out how you could benefit

Smart Village/island

Smart SDG village - A possible model



- **Multi-stakeholder**, cross sectoral initiative
- **Cost-effective** solution accelerate the implementation of the SDG in remote areas through an integrated development and technology platform model.
- Aim to **increase the efficiency**, security and effectiveness of public services while reducing their cost, promoting transparency and good governance, enhancing traceability of transactions, and data exchanges, among others.

Impactful Partnerships: Example

Pacific Satellite connectivity and Development of Emergency Telecomm facility



<https://www.scoop.co.nz/stories/WO1906/S00104/opening-of-the-pacific-satellite-connectivity-project.htm>

<https://www.telecompaper.com/news/kacific-powers-samoas-pacific-satellite-connectivity-project--1297007>

<https://news.itu.int/itu-and-kacific-join-forces-to-boost-emergency-telecoms-and-ict-development-in-vanuatu/>

<https://www.satelliteevolutiongroup.com/magazines/Americas-August2020/content/Digital%20Issue%20download.pdf>



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May 19, 2020

ITU and Kacific join forces to boost emergency telecoms and ICT development in Vanuatu

telecompaper

HOME WIRELESS BROADBAND VIDEO GENERAL IT INDUSTRY RESOURCES

WIRELESS

Kacific powers Samoa's Pacific Satellite Connectivity Project

Monday 17 June 2019 | 10:20 CET | News
Kacific Broadband Satellites Group (Kacific) is working with the Office of the Regulator (OOR) of Samoa and the International Telecommunication Union (ITU) on the Pacific Satellite Connectivity Project.

SCOOP World
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Opening of the Pacific Satellite Connectivity Project

Monday, 17 June 2019, 3:30 pm



Digital Divide

Connecting the unconnected

Bridging the digital divide, connecting the unconnected or underconnected – these are the hot topics of the moment. With connectivity providing essential services for health, education, finance, government and so much more, the development of satellite communications capacity for the small island developing states during natural emergencies is of the utmost importance.

Doreen Bogdan-Martin, Director, ITU Telecommunication Development Bureau

On 6th April, while most of the world was connected through advanced ICT applications and services during COVID-19, life in the South-East Pacific, on the small island state of Vanuatu, people in Malekula were relying on emergency telecommunications to access vital services. The South Malekula Junior Secondary School was one of the very few links that survived the devastation of Typhoon Harold, the fourth-strongest storm on record. This remote connectivity solution took years of collaborative partnership.

The 20,000-30,000 islands in the Pacific Ocean pose a challenge. The vastly distributed remote islands, with tiny low populations, coupled with the region's constant vulnerability to natural disasters, as well as the lack of access to electricity supply, means that providing reliable



wellbeing as well as to access government services during emergencies. Strategies were needed to address these challenges and implement low-cost and reliable network configurations to minimise disruptions that can be caused by both terrestrial and satellite failures, particularly when disasters strike. To realize this, ITU with its partners, Inmarsat, Intelsat, Kacific and International Telecommunications Satellite Organization (ITSO) worked with the beneficiary administrations in the Pacific islands to develop remote satellite connectivity capacity. Previously, the satellite-based ICT infrastructure in place





Samoa School Lab inauguration



Vanuatu: Inauguration in South Malekula Secondary School by Prime Minister and launching of connectivity to health facility which received connectivity from the VSAT in the school



In **Papua New Guinea**, the ICT regulator, National Information and Communications Technology Authority (NICTA), installed the Ku-Band terminals in rural Secondary High Schools **using solar-powered solutions**, given the lack of access to a stable electricity supply. The systems are now being used by the respective schools and surrounding communities, creating a rural e-community centre.



Implementation – Ka-Band in Vanuatu

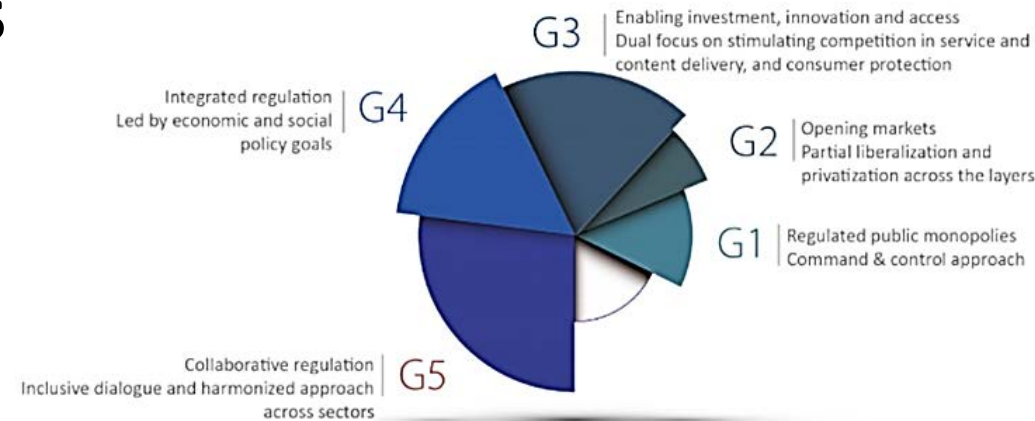


Typhoon Harold April 2020

- Setting up VSAT at one of the Emergency Operations Center (EOC) in Luganville, Santo on 8th April 2020 by National ETC.
- Tower of MNO destroyed in Pentecost

Conclusions

- ✓ Improving connectivity in Asia-Pacific is a challenge but real **solution is Affordable connectivity**
- ✓ **Tools**, best practices and guidelines help in **planning and strategizing investments** to create the biggest impact
- ✓ **Smart Partnerships** are needed to deliver



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THANK YOU



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