

Connectivity in the context of implementation of Sustainable Development Goals



Contribution of connectivity to achieving SDGs



“Improvements in regional connectivity related to transport, information and communications technology and trade are of critical significance in achieving sustainable development”

Connectivity issues as identified by the Regional Roadmap for Implementing the 2030 Agenda for Sustainable Development In Asia and the Pacific

- **Enhance sustainable transport connectivity**

- Expand and integrate the Asian Highway network, the Trans-Asian Railway network and the network of dry ports to allow maximum modal integration and expansion of connectivity to rural areas; develop and integrate maritime connectivity and implement regional transport facilitation frameworks and other technical standards for operationalizing transport connectivity; develop regional standards including harmonization of technical standards of transport infrastructure, sustainable urban transport index, regional road safety goals, targets and indicators and handbooks on road safety;

- **Implement the Asia-Pacific Information Superhighway**

- **Develop sustainable trade**

-Enable paperless trade and e-commerce and review the current approaches towards regional integration to improve their efficacy, in particular to simplify and harmonize trade and supporting regulations and procedures to make the benefits of trade accessible for all

Examples of connectivity initiatives/programmes in SDG implementation context

Digital trade facilitation – a tool to reduce trade costs in the region

The ESCAP Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific provides a unique platform for member States to implement seamless electronic exchange of trade data and documents.

The implementation of this agreement is expected to reduce trade costs by 25 per cent. ESCAP has supported the development of electronic trade data exchange between China, Mongolia, the Russian Federation and the Republic of Korea. An ESCAP-led community of practice, United Nations Network for Paperless Trade in Asia and the Pacific has created a dedicated Task Force on Cross-border Electronic Data Exchange for Northeast Asia, with experts from Customs and other border agencies

Bridging the digital divide in Asia and the Pacific

Interactive Asia-Pacific Information Superhighway Transmission Map

Years: 2012 – present

Countries: **China, Kazakhstan, Kyrgyzstan, Mongolia, and the Russian Federation**

Partner: **International Telecommunication Union (ITU)**

Key results achieved:

- Interactive Asia-Pacific Information Superhighway Transmission Maps reveal missing links in terrestrial transmission
- ESCAP assisted in its efforts to bring affordable access to ICT and broadband connectivity in the region
- Mapping of regional terrestrial routes reveals missing links and investment opportunities for the development of a coherent Asia-Pacific Information Superhighway
- Main transport construction projects identified, enabling fibre-optic cables to be laid in coordination with railway and road construction to ensure appropriate cost savings

Table 1.2.1: Number of international submarine cables connected to each Pacific island

Pacific Islands	Currently active	Proposed additional ^a	Pacific Islands	Currently active	Proposed additional ^a
American Samoa	2	1	Palau	1	0
Northern Mariana Islands	2	0	Papua New Guinea	2	2*
Cook Islands	0	1	Marshall Islands	1	0
Federated States of Micronesia	2	1	Samoa	2	2
Fiji	4	2	Solomon Islands	0	2
French Polynesia	1	1	Tokelau	0	2
Guam	12	2	Tonga	1	1
Kiribati	0	2	Tuvalu	0	1
Nauru	0	1	Vanuatu	1	0
New Caledonia	1	1	Wallis and Futuna	1	0
Niue	0	1			

Source: ITU

* As a replacement for an existing cable.

^a Includes cables currently under construction and proposed/planned cables, including dormant branching units.

Figure 1.4.1: Map of existing and selected proposed international and national submarine cables



Source: ITU (<https://www.itu.int/en/ITU-D/Technology/Pages/InteractiveTransmissionMaps.aspx>)

Table 2.5.1: Common challenges for submarine cable projects in the Pacific islands

<p>Financing:</p> <ul style="list-style-type: none"> • How best to use grant funding? • How to cover annual operational expenses? 	<p>Limited resources and technical capabilities:</p> <ul style="list-style-type: none"> • human resources; • power.
<p>Policy and regulation:</p> <ul style="list-style-type: none"> • political risk/interventions; • permits and licences; • underdeveloped regulatory frameworks. 	<p>Wholesale pricing:</p> <ul style="list-style-type: none"> • small market size; • low utilisation; • retail affordability.
<p>National optical fibre distribution:</p> <ul style="list-style-type: none"> • aging infrastructure; • inter-island connectivity; • financing. 	<p>Location of the cable landing station:</p> <ul style="list-style-type: none"> • land ownership/custom title; • distance from beach manhole.
<p>Maintenance and repairs</p>	<p>Technology upgrades</p>
<p>Environmental factors</p>	

Source: Enhancing access to submarine cables for Pacific island countries workshop delegates.

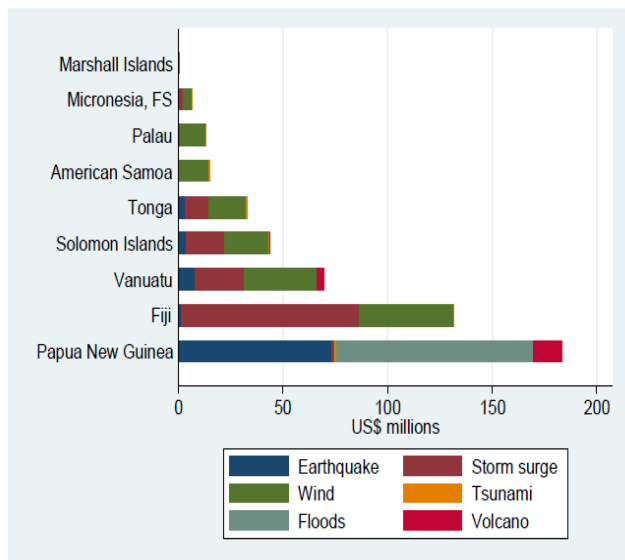
Broadband in the Pacific (ESCAP study)

- Broadband access in the Pacific Island countries has been unequal: there were 19 ESCAP members with 2 per cent or lower fixed-broadband penetration in 2016—of which eight were Pacific Island countries. At the same time, New Caledonia and French Polynesia had more than 19 per cent fixed-broadband penetration,⁴ while Fiji, Nauru and Tonga had mobile-broadband penetration of more than 30 per cent;
- **the broadband divide continues to widen within the Pacific subregion and between the Pacific and other ESCAP subregions** despite best-intentioned policy interventions;
- Recommendations:
 1. Establish a subregional governance structure for effective coordination and cooperation in the development of ICT connectivity in the Pacific;
 2. Improve the resilience of the ICT infrastructure in the face of frequent and major natural disasters; and
 3. Conduct technical studies on specific issues identified in this working paper, including broadband affordability, skills and development of online content, and productive use of broadband connectivity.

The Asia-Pacific Information Superhighway (AP-IS) initiative helps countries in their efforts to develop resilient, affordable and inclusive broadband connectivity in line with the tenets of the 2030 Agenda for Sustainable Development.

Connectivity: Strengthening multi-hazard risk assessment and early warning systems in Pacific Island countries

Figure 16: Average annual loss in Pacific Island countries by hazard type⁶⁷



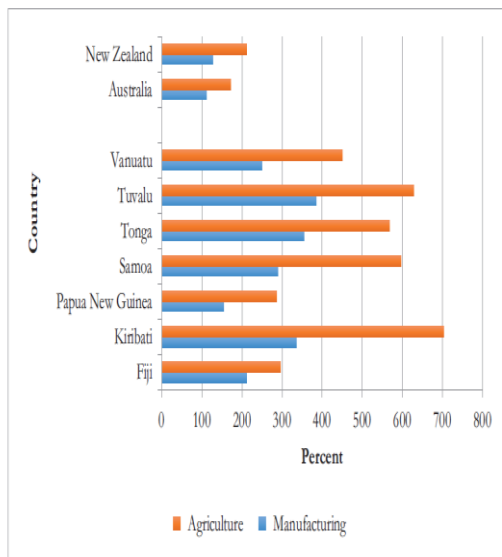
Source: Produced by ESCAP, based on data from EMDAT. Available from <http://emdat.be/> (accessed March 2017).

Project objective:

- Strengthen the capacity of Pacific Island countries in multi-hazard assessment and early warning systems, including the use of space technology and geospatial information systems;
- Assist Pacific regional cooperative platforms on data sharing for multi-hazard early warning systems; and
- Contribute to global development agendas such as the Sustainable Development Goals (SDGs), Sendai Framework for Disaster

SIDS: Connectivity and G/RVC

Figure 1. Trade costs in agriculture and manufacturing, percent ad valorem equivalent, selected countries, latest available year.








Note: Data are not available for the remaining Pacific Islands.

- High trade costs; there is a scope for improvement;
- CSNDR 2019: fishery, tourism, agriculture key for structural transformation;
- Air transport priority + logistics: niche goods, perishable goods;
- Necessary policies:
 - economic/trade liberalisation,
 - enabling business environment,
 - transparent regulations and regulatory reform,
 - private sector development;
- Stronger linkages not only with Australia and NZ, but also developing Asia.

THANK YOU

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