Providing e-health, e-education and e-applications to meet the   needs of SIDS in the South Pacific Region

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Update of SIDS in the South Pacific Region

Table 1: List of SIDs in the South Pacific Region (Members of Pacific Island Forum) as of 2024 (MOFA Japan)		
Name of the country	Area(km2)	Population
1. Papua New Guinea	462.000	6,187,000
2. Solomon Islands	534,000	29,785
3. The Republic of Vanuatu	12,189	221,417
4. Republic of Fiji	18,333	827,900
5. Tuvalu	25.9	9,652
6. Samoa	2,935	185,000
7. Kingdom of Tonga	687	99,298
8. Niue	259	1,591
9. The Cook Islands	237	13,572
10. Palau	488	19,907
11. Fedrated States of Micronesia	701	108,000
12. Republic of the Marshall Islands	181	52,700
13. The Republic of Nauru	21.1	10,131
14. The Republic of Kiribati	720	92,428
15. French Polynesia	4,167	278,786
16. New Caledonia	18,575	275,355
Total	1,055,519	8,412,522

High level Meetings of the South Pacific SIDS in Tokyo and Tonga last July and August

1) The 10th **Pacific Islands Leaders Meeting** (PALM10), 16~18 July 2024, Tokyo (ref. 9 in my paper)

Declaration says to reinforce their efforts for a well-connected region that ensures inclusive, affordable and accessible air, sea and land transport and **Information and Communication Technology (ICT) infrastructure.** Action plan says importance of telemedicine and education system.

https://forumsec.org/publications/declaration-10th-pacific-islands-leaders-meeting-palm10-japan-pacific-islands-forum

https://forumsec.org/sites/default/files/2024-07/Annex_PALM%2010%20Joint%20Action%20Plan_Final.pdf

2) 53th **Pacific Islands Forum** (PIFS), Vava'u, Tonga 26 - 30 August 2024 (ref.11 in my paper)

The COMMUNIQUÉ stressed the importance of **resilient health system** against sea level rise and extreme weather and improving resilient healthcare infrastructure such as telemedicine designed for remote islands. Expressed their concern of ongoing Non-Communicable Disease (NCD) such as **childhood obesity**. It also stressed the **resilient education system**, climate resilient and digital infrastructure to develop localized and culturally curriculum for **disaster preparedness** and delivering quality learning, training and capacity for students and teachers. **Climate change and resilience** are also in their important agenda.

https://forumsec.org/sites/default/files/2024-08/53rd%20Pacific%20Islands%20Forum%20Communique_FINAL.pdf

Challenges of Remote and Isolated Islands

- About **twenty thousand inhabited islands** in the South Pacific Region,

- Most of the **islands are offline** but HF for emergency,

- Transportation is depending on monthly or bi-monthly boat coming to islands to carry islanders, visitors, and daily necessary commodity goods, etc.,

- Some islands are connected with major islands by commercial small plane,

- Modern communication means such as fixed and mobile services and various e-applications for those remote and isolated islands are demanded,

- However, provision of services to remote and isolated islands will be **commercially unviable**, and will depend on the subsidy to compensate the unprofitability

HF center of the University of Guam to watch rescue signals of remote islands in the South Pacific Region

The study of e-health, e-education and other e-applications by ITU's development sector

- The studies continued since 1998,
- The present TOR of study group's rapporteur group for 2022-25 under ITU-D Question 2/2 (enabling technologies for e-services and applications including e-health and e-education; collecting inputs from members about **country's case studies and issue analysis reports to provide guidelines and recommendations**,
- The study includes, ways to promote e-services, m-services to developing countries, new e-health technologies to **combat pandemics**, sharing e-health standardization, etc.

The study of telecommunications/ICT for rural and remote areas under ITU-D's Question Q5/1

- **Up-to-date technologies to lower infrastructure capital and operating costs,**
- **Building broadband digital infrastructure in rural and remote areas,**
- **Business models for sustainable deployment of networks and services in rural and remote areas,**
- **Financing mechanisms including Universal Service Funds,**
- **Promotion of internet applications such as online education and telemedicine,**
- **others**

Needs of infrastructure development and deployment for South Pacific island countries

- **submarine cables and communications satellite** supported by the international aid, however the many remote and isolated islands are left behind because of geographical, financial and other difficulties,

- New technologies such as **low earth orbit satellite** will make it possible to provide accessibility for population of the remote and isolated islands, however still remain the problem of funding projects and affordability of services for islanders,

- Investment for development and deployment of national infrastructure of each SIDS are also much needed for **domestic fiber networks and the penetration of FTTH, broadband mobile services and public WiFi hot spots**, etc.,

- **Power supply by the renewable energy** is the key issue of the islands to be taken into consideration.

Donation of fusion fiber splicer and training at the MINTA of RMI by KDDI team, APT project

Satellite Connectivity to remote island of Mejit (RMI), (GSM mobile phone service made available for islanders by prepaid card, APT project)

Health Dispensary of Mejit Island (RMI) now connected by satellite GSM service. Before it was connected by HF, and presentation to islanders

Accessibility to e-application services and m-services

- **Services will be made available over the broadband satellite/submarine cable or domestic fixed/mobile networks extended to islands,**

- **Information to be provided by internet website will be useful for the life of islanders and other e-services, if provided by affordable cost will make the life of islanders more healthy, wealthy and happy,**

- **Satellite technologies (GEO, MEO, LEO, etc.) will have the potential to provide connectivity to remote and isolated islands, and the accessibility to ICT services for islanders with affordable cost,**

- **Efforts are made by the INTELSAT and KDDI teams to connect the remote islands of RMI via satellite**

High School Students at Kosrae and Health Dispensary at Pohnpei of FSM, APT project

Financial resources for the development

- In most of countries **Universal Service Fund** (USF) funding mechanism is introduced,

- USFs are typically funded via some form of contribution mechanism from telecommunication service providers/operators,

- Other sources of funds include, but not limited to, **licensing fees**, full or partial proceeds from **spectrum auctions**, direct contributions from government budgets,

- Contributions from international agencies such as the **World Bank, regional development banks**, etc. ,

- international aid institutes and international organizations (for example: **ITU and Asia-Pacific Telecommunity**) are providing fund for projects for ICTs development on application basis.

- **Public Private Partnership** (PPP) is the other option for funding the project.

Conclusion

- the ICT development index by the ITU, says one-third of the global population (**2.3 billion**), remain **offline** in 2024,

- Population of number of remote and isolated islands of South Pacific is almost **offline and left behind the benefit of information age**,

- Development and deployment of communication infrastructure, fixed/mobile networks, internet connectivity and e-application services will ease the life of all of islanders,

- **PTC community may extend any form of assistance** to South Pacific island countries for improvement of the life of isolated islanders.

Thank you!