



How Universal Service Mechanism is applied in the Pacific Islands?

Round Table@PTC2009

**Universal Service In The Pacific
Islands**

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KEIO 150
Design the Future

What is Universal Service?



- Universal Service Principles was originally introduced by the President Vail at AT&T in 1907 in the United States.
- Mr. Vail said that ‘ we provide one system, one policy, **universal service**’.

What is the Universal Service Mechanism?



- It is an cross-subsidization mechanism.
- AT&T then tried to keep the level of telephone rate all over the country.
- Actual operation costs of telephone services are different between urban and rural area.
- In order to keep 'flat' rate, cross-subsidization is essential.

Universal Service in the competition market



- In the 1970's competition policy was introduced in the long-distance market.
- The universal service mechanism was not possible to sustain because of the introduction of competition policy.
- Universal Service Fund was created by the FCC which is not the internal mechanism but the external mechanism.

Access Charge and Universal Service Fees

- The Federal Communications Commission (FCC) set up the Universal Service Fund Mechanism.
- Access charge is incurred the telecommunication carriers which connect their lines to the AT&T exchange system to provide their service to their customers.
- Telephone subscribers are also incurred the fees to their telephone bill.
- The nature of 'universal service' has changed.

From Economic Policy to Public Policy



- The 'universal service' concept was expanded when former VP Gore introduced the National Information Infrastructure (NII) plan in 1992.
- Life-line, Link-Up America and E-rates were introduced under this plan.

Universal Service to Universal Access



- In the Internet age or the Web 2.0 age, concept of universal service again has been expanded.
- Access to Internet is more important issue not only high-cost area but also schools and hospitals.
- To provide wide-band Internet access is not an economic policy in the telephone market
- It becomes an important public policy not only within a country but all over the world.

Pacific Islands



- The Pacific Islands is consist of 22 countries and regions.
- Some of the islands are independent.
- Some of the islands are territory of the United States, New Zealand, Australia, France and the United Kingdom.
- Culture, languages and currencies are various.

country (* means data is estimate)	population	size (k m ²)	GNI pp (US\$)	currency
Papua New Guinea	6,187,000 (2006)	462,000	991*(2007)	kina
Tonga	110,237 (2004)	748	2,170 (2006)	pa'anga
Fiji	890,354 (2005)	18,217	3,300 (2006)	fiji dollar
Vanuatu	202,609 (2004)	12,200	1,710 (2006)	vatu
Solomon Islands	534,000 (2006)	28,900	590 (2005)	Solomon\$
Samoa	179,186 (2006)	2,831	2,015 (2006)	tara
Tuvalu	9,652 (2006)	26	1,600*(2002)	Australia \$
Nauru	13,770*(2008)	21	2,478 AU\$(2002)	Australia \$
Kribati	92,428 (2005)	730	685*(2007)	Australia \$
Republic of the Marshall Islands (U.S. compact)	62,000 (2003)	181	2,515 (2005)	U.S. \$
Federated States of Micronesia (U.S. compact)	108,000 (2006)	700	2,300 (2007)	U.S. \$
Republic of Palau (U.S. compact)	19,907(2005)	488	7,990 (2006)	U.S. \$
Cook Islands (NZ compact)	13,572 (2006)	237	9,100 (2005)	New Zealand \$
Niue (NZ compact)	1,591 (2006)	259	N.A.	New Zealand \$
Tokelau (NZ compact)	1,405 (2004)	12	1,035*(1993)	New Zealand \$
CNMI	86,616 (2008)	477	N.A.	U.S.\$
Guam (U.S. Territory)	173,456*(2007)	541	21,000 (2000)	U.S.\$
American Samoa	57,902*(2007)	2,944	N.A.	U.S.\$
French Polynesia (French Territory)	259,596 (2007)	4,000	21,565 (2005)	French Pacific F
New Caledonia (French Territory)	219,246 (2006)	19,000	26,275*(2007)	French Pacific F
Wallis & Futuna (French Territory)	15,734 (2003)	274	12,640*(2005)	French Pacific F
Ptcairn Island (U.K. Territory)	48*(2007)	47	N.A.	

Five options on the Universal Service Mechanism in the Pacific Islands



- 1. Universal mechanism of the sovereign state provides support to the territory's telecommunication networks and services.
- 2. To establish universal service mechanism within a country
- 3. Financial supports from other countries
- 4. International support mechanism
- 5. Technical or educational supports by NGO

1. Universal Service Fund in the United States

- In Guam, American Samoa, and CNMI, E-rate and other supports from the U.S. USF can be applied.

2. Establishing self-support USF



- It is not easy to establish own universal service fund because domestic market is not large.
- Some of domestic markets are still in monopoly, so it is not necessary to establish the USF to recover deficits from high costs area.

3. Financial supports from other countries

- Some countries like Japan and China provide financial supports as an Overseas Development Assistance (ODA).
- But this assistance is to be provided for constructing a number of infrastructures like bridge, road and airport.
- Telecommunication network is one of them. So assistance for them is limited.

4. International support mechanism



- Among 22 countries and regions, only 11 countries are the member of International Telecommunication Union (ITU).
- In addition, ITU provides training programs in telecommunication, but it does not have enough budget to develop telecommunication facilities and networks.

country	population	ITU members
Papua New Guinea	6,187,000 (2006)	yes
Tonga	110,237 (2004)	yes
Fiji	890,354 (2005)	yes
Vanuatu	202,609 (2004)	yes
Solomon Islands	534,000 (2006)	yes
Samoa	179,186 (2006)	yes
Tuvalu	9,652 (2006)	yes
Nauru	13,770*(2008)	yes
Kiribati	92,428 (2005)	yes
Republic of the Marshall Islands (U.S. compact)	62,000 (2003)	yes
Federated States of Micronesia (U.S. compact)	108,000 (2006)	yes
Republic of Palau (U.S. compact)	19,907(2005)	no
Cook Islands (NZ compact)	13,572 (2006)	no
Niue (NZ compact)	1,591 (2006)	no
Tokelau (NZ compact)	1,405 (2004)	no
CNMI	86,616 (2008)	no
Guam (U.S. Territory)	173,456*(2007)	no
American Samoa (U.S. Territory)	57,902*(2007)	no
French Polynesia (French Territory)	259,596 (2007)	no
New Caledonia (French Territory)	219,246 (2006)	no
Wallis & Futuna (French Territory)	15,734 (2003)	no
Pitcairn Island (U.K. Territory)	48*(2007)	no

5. Technical or educational supports by NGO

- JICA in Japan is one of NGO providing supports to the Pacific Islands.
- In case of JICA, the possible supporting field is limited. They can provide direct finance or loans for constructing infrastructures. But it may be not easy to use them as an assistance for constructing submarine cables for wide-band international connection.

From Universal Service to Universal Access



- Universal service is an essential service for daily life.
- It must be affordable and available in the all over the country.
- Universal access is a new concept which is the right to access the wide-band network by an affordable rate.

Universal Access



- Universal access will be essential service for daily life in the age of WEB 2.0.
- In order to provide universal access, wide-band domestic networks like ADSL, FTTC, or FTTH are necessary.
- In addition, wide-band international access is crucial to provide the universal access.

International Access



- Two Networks for international connection: International Satellite like Intelsat and Submarine Cable
- Major countries already have been equipped both connections. But both construction and maintenance costs are enormous.

Final Remarks



- Among five options some of them are able to apply to construct domestic wide-band network.
- But more crucial problem is to find the mechanism to establish international connections in the Pacific Islands.
- Ideally, to establish neutral *regional organization* which collects subsidies from governments or carriers in major countries and to provide them for constructing the international connections among the Pacific Islands may be the best solution.
- It is like an *Universal Service Fund* in major countries.



Thanks you!!

sugaya (2009)

