Maldives Country Paper

SUB-REGIONAL WORKSHOP ON STRENGTHENING ICT POLICIES AND APPLICATIONS TO ACHIEVE MDGS AND WSIS GOALS IN SOUTHEAST ASIA AND THE PACIFIC

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Introduction

The Republic of Maldives is an archipelago of 1,190 small coral islands, of which 199 are inhabited. The total area including land and sea is about 90,000sq.km. The length of the archipelago is 823km while it is 130km at its greatest width. The geographical structure of the Maldives and the distribution of population into tiny communities throughout the country pose a unique challenge to the telecom service providers. The country has an area of 300 square kilometres. Population of the country is about 300,000 with some 80,000 expatriate workers. The median age of the population is about 26. Male' is the capital of Maldives with a population of about 100,000, almost one third of the country's population.

Telephone voice services, cable TV and Internet services are all available across the capital, Male'. Other islands have at least access to basic telephone services. Inter island communication is mainly through microwave systems although satellite and undersea cables are also used.

Maldives Background

- Archipelago of 1,192 coral lying islands (200 islands inhabited)
- □ Area : 115,000 sq km (induding sea)
- □ Population : 309,575 (~30% youth)
- Key Industries: Tourism & Fishing
- □ Literacy :98%
- □ Per Capita GDP : ~ USD 2830.0
- Currency Maldivian Rufiyaa, RF (Exchange Rate: US\$ 1 = Rf 12.75
- ICT is an important tool for economic development and improving quality of life

ICT Environment

Currently, the Ministry of Civil Aviation and Communication is the line ministry responsible for policy-making in the ICT sector. The Communications Authority of Maldives (CAM) is responsible for the development and regulation of telecommunications. It was established in September 2003 as a separate entity with a mandate of regulating the telecommunications sector, creating a conducive environment for fair competition and developing the sector in line with the national policies and regulations. The Authority is empowered by the Maldives Telecommunication Regulation 2003 which was enacted through presidential decree to provide the Authority with the flexibility for carrying out its objectives.

The National Centre for Information Technology (NCIT) looks after IT development and the establishment and the operation of the government network and the services that are provided through the government network.

Within the telecommunications sector, there are currently three licensed operators. The national telecom service provider Dhiraagu provides all telecommunication services, including mobile phone and Internet services. Focus Infocom is the second Internet service provider, while Wataniya Telecom Maldives provides mobile services as the second mobile telephone operator. Competition in the telecommunications sector is still in the early stages, with the new players working hard to gain a market share. Focus Infocom and Wataniya have become significant in the market, but Dhiraagu still has the largest share both in the Internet and mobile services market.

Telecommunications Status

Maldives adopted an accelerated development policy with regard to the vital domain of ICT when it launched its first Telecommunications Policy in 2001. In accordance with this policy, the government went ahead with the liberalization of the internet and mobile services in the Maldives. The second internet service provider was licensed in May 2003 and their services have commenced December 2003. The second GSM mobile licence was issued to Wataniya Telecom Maldives in February 2005 and their services commenced in August that year.

The positive results of the development of telecommunications benefit all social strata. Comprehensive communications services, including telephone on demand and ADSL broadband Internet, are now available in Male' and the major population centres. These areas cover 13 of the 200 inhabited islands, corresponding to about 50% of the population. All inhabited islands have access to fixed line telephones. Cellular telephone services are available throughout the country. The teledensity as of end 2008 is 151.9%.

According to ITU, Maldives are among the top ten economies that have gained most in value on the ICT access subindex between 2002 and 2007 (2.30 points or 114 per cent, see Chart 4.5). During this time period, mobile cellular subscriptions have grown from 13.7 per100 inhabitants to 102.6, and international Internet bandwidth from 466 bits/s/user to over 37'000.)

The Table 1 below shows the results of the ITU ICT Development Index (IDI) 1 in Asia and the Pacific for two benchmarking years, 2002 and 2007, ranked by the 2007 values where ranking of Maldives improved from 16 in 2002 to 13 in 2007.

ICT Development Index (IDI) (2002-2007), Asia and the Pacific.									
	Rank	IDI	Rank	IDI		Rank	IDI	Rank	IDI
Country	2007	2007	2002	2002	Country	2007	2007	2002	2002
Korea (Rep.)	1	7.26	1	5.83	Fiji	16	2.73	14	2.00
Hong Kong, China	2	6.70	2	5.10	Mongolia	17	2.67	15	1.97
Japan	3	6.64	6	4.82	Philippines	18	2.63	13	2.07
Australia	4	6.58	3	5.02	Viet Nam	19	2.61	20	1.59
Singapore	5	6.57	4	4.83	Sri Lanka	20	2.38	19	1.75
New Zealand	6	6.44	7	4.79	Indonesia	21	2.13	21	1.54
Macao, China	7	6.25	8	4.41	Bhutan	22	1.63	23	1.17
Taiwan, China	8	6.04	5	4.82	Lao P.D.R.	23	1.60	24	1.08
Israel	9	5.60	9	4.24	India	24	1.59	22	1.19
Brunei Darussalam	10	4.80	10	3.27	Cambodia	25	1.53	25	1.07
Malaysia	11	3.79	11	2.74	Pakistan	26	1.46	29	0.89
Thailand	12	3.44	12	2.17	Bangladesh	27	1.26	27	1.02
Maldives	13	3.16	16	1.96	Nepal	28	1.23	28	1.01
China	14	3.11	17	1.95	Papua New	29	1.14	26	1.05
Iran (I.R.)	15	2.94	18	1.93	Guinea				

Table 1: ITU ICT Development Index (IDI) for Asia Pacific

In order to reap the benefits of ICT, the government is moving forward on a project to connect government institutions via a comprehensive computer network. This e-government project has two major components: developing the physical network, and building the applications that would run on the network. It is expected that citizens will start using e-government services by the last quarter of 2007'.

The Network

The telecommunication backbone is realized with digital microwave networks that runs from north to south of the country. With the establishment of the 2nd mobile operator, two independent networks now serve the country. Fixed line switches are installed in Male' and the far south while remote local switches are located in the other major population centres where on demand fixed line services are available. In these islands comprehensive underground cable network are laid to distribute telephone services. For other islands, point to point radio systems are used to provide the last mile access. In addition to the terrestrial microwave network, VSAT systems are also used to provide high speed internet services to remote islands.

The current international gateway is established via satellite. However, plans are underway to connect the Maldives to the international optical submarine cable network. To this end, two submarine cable projects were undertaken in 2005. One of the cable projects was undertaken by Dhiraagu while the other was undertaken by company formed amongst other telecom service providers in the country. The cable systems were fully functional by the first quarter of 2007, relieving the Maldives from the inherent limitations of satellite technology in the international gateway.

Mobile Telephony

Maldives introduced cellular mobile services in 1997 using AMPS technology. The system was implemented more or less on a trial basis. It turned out to be a great success in terms of demand. As a result the service was upgraded to GSM in 1999. As is the case almost everywhere in the world, the growth of mobile telephony here in Maldives is phenomenon. In 2005 a 2^{nd} GSM network was established in the enabling competition in the cellular market place.

In Maldvies, 3G is regarded as feature of the mobile service and as such GSM operators can offer 3G without an additional licence. Wataniya Telecom, the 2nd mobile operator had trialed 3G services in the capital area in 2005, and soft launched it in 2007. Both of the cellular phone networks have GPRS/EDGE technology countrywide.

Internet and Broadband

Internet service was introduced by Dhiraagu in 1996 with dialup access. ISDN and leased line services were offered shortly thereafter. In 2002, ADSL was introduced, extending broadband services to homes and small businesses. 2003 saw the introcudction of competition in the internet services market with Focus Inforcom licensed as the 2nd ISP.

In addition to ADSL, broadband Internet is also available via cable TV networks in Male and a some other islands. Forty-five percent of the population thus have access to broadband Internet services. For the busdiness sector such as the outer lying resort hotels, internet is also provided by VSAT. In the islands that do not yet have broadband access, the Internet is accessed primarily via small telecentres and through the use of mobile phones.

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