

# Maldives Telecom Brief



By Ken Zita

Maldives is a tropical paradise situated in the Arabian and Laccadive Seas whose economy depends on tourism. Prior to 1995, the archipelago of 1200 islands had only 3000 phone lines and the weakness of the communications infrastructure served to constrain economic growth. Since that time, the capacity of the public network has leapt to 30,000. The GSM network – a crucial support for tourists, mostly from Europe – tops more than 60,000 lines in service. The country's teledensity is now the highest in the South Asian region.

The market environment is a monopoly. All basic network services are provided solely by Dhiraagu, a joint venture between the Government and Cable and Wireless. In the mid 1990s Dhiraagu extended its period of exclusivity until 2009, but the government hopes to progressively introduce competition in alternative service areas such as mobile and Internet. Voice over Internet, especially, is encouraged so as to help reduce the high cost of domestic and international toll service to consumers. A second mobile operator may be introduced and a second is planned by a local company, Focus Computers.

As a country with limited natural resources, Maldives considers advanced communications to be a critical tool for developing skills, increasing productivity, and promoting the nation's export and business interests in the global market.

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## Key Indicators

Republic of Maldives	
Population	280,000 (2003)
GDP	\$639.5 million (2002)
GDP growth rate	6.0%
GDP per capita	About \$2,279.
PPP	\$1.25 billion (2002)
PPP per capita	\$3,900 (2002)
Pop. below poverty	NA
Literacy	97.1%
Phone lines	30,056 (2003)
Telephone density	11.13
Mobile phones	66,466
Mobile density	23.74

Sources: CIA World Factbook 2003, U.S. Department of State and World Bank 2003

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## Political and Economic Brief

The Maldives is an archipelago of about 1200 islands that lie due southwest off the Indian sub-continent. It was governed as an independent Islamic sultanate for most of its history, first under Dutch and then under British protection. The constitution was proclaimed in 1932 and Maldives briefly became a republic within the British Commonwealth when the sultanate was abolished in 1953. It gained independence in 1965 and established a republic with executive, legislative, and judicial branches of government in 1968. Ibrahim Nasir, prime minister under the previous sultanate, became president from 1968 to 1978 and was succeeded by the current president, Mahmoos Abdul Gayoom, who has been elected for six consecutive five-year terms since 1978, the latest in 2003.

President Gayoom has led the Maldives for twenty-five years and is Asia's longest-serving leader. His long tenure has given Maldives' relative political and institutional stability, despite coup attempts in 1980, 1983, and 1988. A serious challenge to government authority occurred in November 1988 when Sri Lankan Tamil mercenaries tried to overthrow the Maldivian Government. At President Gayoom's request, the Indian military suppressed the coup attempt within 24 hours. President Gayoom's government is currently facing a serious challenge from Maldivians who want more political openness in the country (see below).

The president is chosen in a yes-no referendum where the *Majlis*, the national parliament, selects and presents a single candidate to voters. The president has substantial powers and appoints members of the cabinet, the judiciary, and eight of the 50 members of the *Majlis*. The Maldivian legal system, derived mainly from traditional Islamic law, is administered by secular officials, a chief justice, and lesser judges appointed by the president. President Gayoom has received more than 95 percent of the vote in past elections – but all parties are banned. The Maldivian Democratic Party has been declared illegal and there is limited tolerance for organized criticism of the government.

In July 2003 human rights group Amnesty International accused the government of political repression, citing the "arbitrary detention" of its critics and the torture of political prisoners. There was serious rioting on Male Island in September 2003 after a prison shooting on a nearby island. In February 2004, the government arrested eight pro-democracy activists who were organizing a demonstration to demand the release of political prisoners and call for press freedom, police said, including the family of a prominent activist exiled in Sri Lanka, Mohamed Latheef, spokesman for the Maldives Democratic Party and a former head of the chamber of commerce. Freedom House, the international monitor of press and political freedom, rates Maldives as a "not free" society, its lowest ranking. Pressures for reform are mounting. The government says it understands this and has announced that it will work to bring more political openness.

In foreign relations, Maldives follows a nonaligned policy and is committed to maintaining friendly relations with all countries. The country has a UN Mission in New York with an Ambassador also accredited to the United States. The U.S. Embassy in Sri Lanka is also accredited to the Maldives and makes periodic visits.

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## Demography and Economy

The Maldives are a group of atolls in the Indian Ocean, south-southwest of India with a land area twice the size of Washington, DC. The archipelago includes 1190 islands and 25 protected coral reefs. Of the islands only 199 are inhabited islands and 83 have been developed entirely as tourist resorts. The archipelago enjoys a strategic location astride major sea lanes in the Indian Ocean. None of the islands, however, measures more than 1.8 meters (6 feet) above sea level making the Maldives extremely vulnerable to global warming and sea rise. As sea levels rise, island countries such as the Maldives and the Marshall Islands may disappear. Aside from the island capital Male, outsiders are only permitted onto inhabited islands for brief visits to limit the impact on traditional Muslim communities.

Maldives' population of approximately 280,000 is a melding of three basic groups: South Indians, Sinhalese and Arabs who are Sunni Muslim. Maldivian Dhivehi (dialect of Sinhala, script derived from Arabic) is the national language but English is spoken by most government officials. Literacy is exceptionally high at about 98% and equal, remarkably, between men and women. There is an inward migration trend from the other inhabited islands to Male' as people seek employment and better education. Those living outside Male' depend mainly on fishing, agriculture, and other primary industry – related activities for their livelihood. The decentralization of economic activities away from Male' is hampered by the lack of basic infrastructure and poorly developed inter island transportation system.

Maldives lives on the front line of the effects of global and regional pollution. There is growing concern about coral reef and marine life damage because of coral mining (used for building and jewelry making), sand dredging, and solid waste pollution. Mining of sand and coral have removed the natural coral reef that protected several important islands, making them highly susceptible to the erosive effects of the sea. The practices have recently been banned. In April 1987, high tides swept over the Maldives, inundating much of Male' and nearby islands. The highest point in Maldives is about eight feet above sea level. In 1998 El Niño temporarily raised the temperature of the sea, and local coral died, with an impact on the economy estimated at \$63 million in one year. In 2002, concern over Maldives' vulnerability to rising sea levels prompted the government to take legal action against US for refusing to sign the Kyoto Protocol. The Asian Brown Cloud, a U.S.-sized area of pollution over the Indian Ocean, also has the potential to devastate Maldives' tourism and fishery-based economy.

The Maldives has experienced relatively low inflation and remarkable growth. GDP in 2002 totaled \$640 million; real GDP growth averaged about 10% in the 1980s, expanded by an exceptional 16.2% in 1990s though it declined to 4% in 1993. Growth picked up to 10% in 1998 and has since leveled to the 5-7% range. The economy is based almost exclusively on tourism and fishing. In recent years, Maldives has successfully marketed its natural assets for tourism -- beautiful, unpolluted beaches on small coral islands, diving in blue waters abundant with tropical fish, and glorious sunsets. Tourism now brings in about \$198 million a year. Tourism and related services contributed 31% of GDP in 2002. The sector also accounts for more than 60% of foreign exchange receipts and 90% of government tax revenue, including import duties. The number of tourists (mainly from Europe) visiting the Maldives increased from 1100 in 1972 to about 500,000 in 2003. Fishing is a second leading sector and employs about 11% of the labor force and contributes 7% of GDP or 10%, including fish preparation. The use of nets is illegal, so all fishing is done by line. Total export proceeds from fish were about \$56 million in 2002.



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The government began an economic reform program in 1989, lifting import quotas, opening some export industries to the private sector and, subsequently, liberalizing foreign investment regulation. Maldives' exports ran around \$91 million in 2002, with 51.7 percent destined to the U.S., mainly in fish products and garments. The expiration of the Multi-Fiber Agreement in 2005 will likely lead to the dissolution of the garment industry in Maldives; the sector exists solely for foreign manufacturers to take advantage of Maldivian export quotas. Import markets, including food staples and a wide range of commodities. It has been running a merchandise trade deficit in the range of \$200 to \$260 million since 1997, which declined to \$208 in 2002.

### Telecom Policy Environment

Responsibility for telecom sector planning and regulation lies with the Ministry of Communication, Science and Technology (MCST) ([www.mcst.gov.mv](http://www.mcst.gov.mv)), and specifically, the Post and Telecommunication Section, which handles registration and licensing of telecommunication equipment. Its responsibilities include sector regulation, policy formation, licensing, license compliance, tariffs, service quality monitoring, and so on.

Maldives has no statutory legislation for telecom. A draft Telecommunication Law has been proposed but no action has been taken; the legislation is believed to focus primarily on administrative issues (such as the separation of government and private sector activities) and rules for radio frequency allocations.

The key guiding documents for the sector are the Telecommunications chapter of the Science and Technology Master Plan<sup>1</sup>, and the Maldives Telecommunications Policy<sup>2</sup>, both prepared by MCST. The Master Plan is a detailed and well-structured analysis of the government's strategic assets and goals for the sector; the Policy identifies specific tactical changes expected to be addressed from 2001-2005.

The restructuring of the Maldivian telecommunications sector began in 1988 with the incorporation of the Maldivian Telecommunication Company, Dhivehi Raajjeyge Gulhun Private Limited, known as "Dhiraagu". Dhiraagu is a monopoly joint venture company, owned 55 percent by the Government and 45 percent by the British firm Cable and Wireless plc. The firm's exclusivity over basic services was renewed in 1995 and is not currently scheduled to expire until 2009. Some question if Maldives will follow the example of other small nations that sought to break long-term exclusivity agreements with C&W (such as the Caribbean island states), but the prospect seems doubtful. A significant portion of state revenues are believed to be derived from Dhiraagu revenue sharing and taxation, and the government is wary of rocking the boat. According to the Master Plan, "Before any broad reform (regulatory or market) can be introduced, it will be necessary to analyze the "cross-subsidization" that occurs among Dhiraagu services and for the Government to decide whether it can substitute other revenue sources for reduced profitability in Dhiraagu."

Dhiraagu's monopoly rights do not extend to other services areas, such as mobile and the Internet. It is likely that meaningful competition in basic services will be introduced through

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<sup>1</sup> <http://www.mcst.gov.mv/Downloads/Documents/S&T/Part2-04Telecommunication.pdf>

<sup>2</sup> <http://www.mcst.gov.mv/Downloads/Documents/Telecom%20Policy-Public.pdf>



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VoIP, especially for toll voice. Lowering the cost of services in communities outside of Male is a political issue, and VoIP is seen as a viable solution for dropping service costs. Not surprising, with no effective competition, the cost of high-margin services such as cellular and long distance remains high relative to Maldivians' current average level of incomes. Internet access services have until recently also been prohibitively priced for the academic community. The government has specifically stated that it does not want to block competition in Internet-based services in order to encourage technological innovation and lower consumer costs.

The Policy states further that even though Maldives is a small market, there is sufficient demand to sustain more than one operator. While no specific details are available, the government is believed to be preparing to introduce competition in GSM mobile services, possibly as early as 2004.

A Regulatory Authority is also in the process of its formation. The structure of the Regulatory Authority will consist of a collegial body, an executive head of the Authority, the secretariat and special services sections such as spectrum management and standards. To separate government from private sector operations, MCST expects to have its interests in Dhiraagu represented by a separate organization other than the Regulator or the Ministry, perhaps by transferring shares to a independent ownership vehicle. While the current status is not known, the intention is to prevent representation of any member of the government or regulatory authority to sit on the board of any telecommunications enterprise.

### **Telecom Market Environment**

Prior to 1995 telephone service was available only to a few islands, with a total of about 3000 subscribers. By the mid 1990s – beginning at approximately the time C&W negotiated its extended period of exclusivity – infrastructure expansion advanced rapidly. By 2000 all inhabited islands had access to basic telecom service and Internet connectivity.

Maldives has a total of 30,056 phone lines as of December 2003, of which 21,858, or 73 percent, are in the capital and next four largest towns. Teledensity is estimated at 11.13, among the highest in the South Asia region. Switching capacity is about 34,000 lines, with infrastructure supplied by NEC and Ericsson.

An AMPS mobile network was introduced in 1997 and GSM in 1999. By the end of 2003, “DhiMobile” GSM service reached 19 of the 20 Atolls in the country covering 73% of the population, including all 88 resort islands. The subscriber base is already double that of the fixed network. There are a total of 66,466 mobile customers, about a fifth of which are prepaid subscribers.



The backbone network has been expanded from the capital to the north include Shaviyani, Haa Dhaalu and Haa Alifu, and to the south to Gaafu Alifu and Gaafu Dhaalu, Gnaviyani and Seenu, connecting a total of 20 atolls. Connections are made by microwave trunk network operating with both SDH and PDH systems, mostly through 155Mbps and 34 Mbps links, though slower routes exist. Two 400 ft radio transmission towers in Fuah Mulah and Gadhdhoo are the tallest structures in the Maldives. A 65km microwave link is believed to be one the world's longest microwave links above water.

Maldives is connected to the outside world via satellite links mainly using standard A satellite earth station through Intelsat. A second satellite link was established in 2003 to Singapore Telecom's Satellite. The government and Dhiraagu are planning a feasibility study to determine the viability of a submarine link to regional optical fiber submarine cable systems.

## Existing Telecom Network

