

CURRENT ECONOMY AND ICT DEVELOPMENT SITUATION OF MONGOLIA

1. General Development

1.1 Introduction to the country

Mongolia has an extensive plateau with an average height of 3,000 meters above the sea level, with the Gobi desert in the south. Mongolia has 1'566'500 sq. Km of territory and 2'385'500 inhabitants (2001) giving a population density of 1.5 persons per square Km. Nearly one-fourth of the population live in the capital city, Ulaanbaatar, the capital and administratively, Mongolia is divided into 21 aimags (provinces).

Between 1924 and 1990, Mongolia was a one-party state and had a central-planned economy. Mongolia had first democratic election in July 1990 and establishing a parliamentary republic.

The strengths of Mongolian human resources are youthful population (50 % of its population 20 years old or younger) high literacy rate (96,9 %), safe and stable society, linguistic competence and perseverance. Agriculture employs 40% of workers, while services employ 39%. Per capita gross domestic product is about US\$359,5, according to the statistics of 1999 at the current price.

Its main weakness is the lack of experience in the market economy. Further, a small population scattered over a huge land, which makes unit cost high.

1.2 Economic development

Since 1990s Mongolia started its transition to a democratic and market oriented country with democratic elections in 1990. Prices were liberalized starting in 1991. The privatization program started also in 1991. A new Constitution providing guaranteed human rights and private ownership was adopted in January 1992. Foreign trade was liberalized and import duties nearly abolished. Mongolia has joined the WTO in 1997. It was the first transition economy outside Eastern Europe to do so.

The economic development of Mongolia during the transition to a market was characterized by a decline in GDP. However, in 1994 Mongolia achieved a positive GDP growth. The GDP per capita is constantly growing since 1993 in real MNT terms. GDP growth was 2,4% in 1996, 4% in 1997, 3,5% in 1998 and 3% in 1999. The Asian Development bank expects a growth rate of 4% in 2000 and 4,5% in 2001¹.

	1995	1996	1997	1998	1999
GDP Million. MNT at 1995 prices	550.253	563.201	585.719	606.409	624.723
GDP per capita at 1995 prices MNT	239877	241728	247840	253061	257119
GDP growth 1995 prices		2,35%	4,00%	3,53%	3,02%

Source: National Statistics Office, 2000

2. ICT Development

¹ Asian Development Outlook, 2000.

The information and telecommunications sector has an important role in improving the country's economic potential and competitiveness in international market. For Mongolian situation it can be expected that the indirect contribution of info-telecommunication sector to the growth of the GDP is higher than in other countries.

2.1 Government policies and legislation

In May 1996 Parliament of Mongolia has adopted the Concept of Development of Mongolia in which the key strategy of national development in the nearest 15-25 years. For achieving of this conceptual goal under the Government Action Programme-2000 the concrete projects to be implemented last few years are envisaged.

Communications and Information technology development related laws are as Law on status of Mongolian Academy of Science, Law on Patent, Law on Copyright, Law on technology Transfer and Law on Telecommunications. The Law on Telecommunications promulgated in November 1995. The enactment of the Law on Telecommunications should be proceeded urgently so that a legal framework for policy, investment and regulation can be established.

In December 1998, Approved by Minister's Council of the Ministry of Infrastructure Development has adopted the Mongolian Telecommunications Sector policy Statement for the 2010 years. The main purpose of this policy statement is to implement the efficient objectives for improving the quality and for increasing the types and coverage of info-telecommunication services for the purpose of meeting the increasing socio-economic demand and accelerating further development of other sectors of the economy.

In February 2000, Parliament of Mongolia has adopted the "Concept on Information and Communications Technology Development of Mongolia up to 2010 years". The mission of the ICT development concept in Mongolia is **"to develop a society based on knowledge and intellectual potentials and to develop the quality of people's lives"**. A principle to ensure accessible and flexible info-structure promoting dynamic and sustainable development in an open and fair society shall be pursued to achieve the mission. The government, the private sector and the public, indeed all sectors of society and of the economy, needs to harness the potential of the information and knowledge revolution to improve the health, wealth and well being of everyone.

The National Seminar on "Development of Mongolia-Information and Communication Technology," held on February 7, 2001, is an evidence of that Mongolian Government has been furthering its strategic policies to support ICT development initiatives and implement corresponding. As result of this event, the National Committee for ICT, headed by Prime Minister, is established and approved by Government.

The first ICT sector donors' meeting was held on January 30, 2002. The meeting has two objectives: a) to outline the current situation, issues and strategic options of the ICT sector of Mongolia in the form of a draft Information Communications Technology (ICT) Strategy and National ICT Action Plan; b) to take stock of ongoing work in the ICT sector and to integrate National strategies and donor programmes in ICT for Development into a matrix outlining future cooperation and priorities.

2.2 Institutions and organizations

Information and Communications Division of the Strategic Planning & Integrated Policy Department, Ministry of Infrastructure Development (MOID) is responsible for policy and decision-making, administering, legislation and management of the posts, broadcasting and frequency, information and telecommunication sectors of the Mongolia.

The Communications Regulatory Body, MOID was established in October 1995. In the info-communications sector there shall work Regulatory with duties to create efficient and fair competitive

environment for entities or organizations of all property type or form, to draft their manual working conditions, terms and rules, and to make a professional evaluation and recommendations.

Posts & Telecommunications Agency of MOID is responsible for implementing national policy on posts, broadcasting and telecommunications sectors of the Mongolia.

2.3 Current ICT Infrastructure Development

2.3.1 Telecommunications

2.3.1.1 Telecom networks

Since 1995 Mongolia Telecom a state ownership dominated shareholding company, provides the basic telecommunication services such as international, domestic long distance and local telephone services leasing the basic telecommunication network assets from the Posts and Telecommunications Authority which owns all the basic network assets.

The overall telecommunications network of the country consists of 3000km analogue and about 1000 km digital microwave lines, connecting Ulaanbaatar and aimag centers. Using VSAT systems connected 13 aimag centers and soum (districts of aimag) centers. More than 55% of the total switching capacity and 30% of the transmission network are digital.

Small capacity switches, a network of open wire lines (12 channels) and HF radio system, provide the telephone services to the rural areas. The national long distance network comprises analogue microwave links, extensive networks of open wire lines and a trunk exchange in the capital.

There are 332 switching facilities with the total capacity of 132 thousand exchange lines from which 120 thousand lines are in service. The telephone density per 100 population is about 5.45 in the country and 9.8 per 100 inhabitants in Ulaanbaatar at the end of 2001.

From January 1999 the Mobicom Corp. has started telephone service using WLL technology in Ulaanbaatar.

International: International call service is provided to over 140 destinations through International Switching Center NEAX61 which was put into operation in 1993 and "Naran" Earth Station by using INTELSAT, INTERSPUTNIK satellite links and analogue microwave lines. There is also an Intelsat earth station which uplinks domestic TV for broadcasting to remote TV receiver (TVRO), and receiving a variety of regional satellite TV channels for programming in Ulaanbaatar by 1 April 1998.

2.3.1.2 Railway communications

The Mongolian Railway (MR) Company is a joint venture between the Governments of Mongolia and the Russian Federation. It provides public domestic and long distance telephone services as well as meeting the telecommunications needs of the Mongolian railway service.

The network has a total nominal capacity of 6,300 lines provided by 17 exchanges alongside the railway network. Digital telephone switches were installed for 3,000 subscribers in some cities alongside the railway in the end of December 1995.

They currently established optical fibre cable network along railway from north border to south border (1600 km). It is strategically important to have international information and telecommunication network of Mongolia connected to the optical fibre and railway networks in Russia and in PR of China. Such connection with neighboring networks will increase international traffic, introduction of new data and

telecommunications services and subsequently, enable maximum utilization of the installed capacity of the new optical fibre transmission system.

2.3.1.3 Cellular network

Two private companies are providing GSM and CDMA cellular phone services in Ulaanbaatar and other 6 provincial center. They have more than 200 thousand mobile users today.

2.3.1.4 TV/CATV and Radio Broadcasting

Radio Broadcasting started in 1934 and first TV broadcasting launched in 1967. It was supported to cover 75 percent of the whole territory by reliable radio broadcasting but due to electricity power shortage and obsolete equipment this task hardly can be fulfilled.

There are several private cable televisions (CATV) service providers have been established in Ulaanbaatar and other main cities. Currently CATV is provided to more than 30 thousand households in Capital City and some province centers.

2.3.2 Internet

In December, 1994 Mongolia has inaugurated first Internet based services: E-mail service & Internet, and starting from January 1996 full Internet service get available for 24 hours.

At present there are seven Internet Service Providers in Mongolia: DataCom Co., Ltd., the first data-communication provider; MiCom, owned by Mongolian Telecom; BodiComputer, MobiCom. The other two ISP established to serve specific market; for example, ISP at the Computer Science and Management School (CSMS) provides services to 12 universities and 40 schools, and ONet, private company operating in Erdenet city. Last ISP – MCSCom was established in September of 2001.

It is estimated that there are approximately 9,000 Internet subscribers including corporate customers and more than 30,000 users accessible to Internet as of 2001. The total international bandwidth of Internet is about 10Mbps².

In June 2000 Government of Mongolia has made a decision to interconnect Educational, Scientific and Cultural organizations to Internet, and the result ErdemNet operated by CSMS.

Datacom and other private companies are to make available fax and voice message services over IP. E-commerce services are getting available in Mongolia such as e-banking, online shopping and e-services introduced, initiated and experimented by Datacom, BodiComputer etc. Currently, there are more than 50 Internet Cafes, which are mushrooming in Ulaanbaatar, use the services of the Internet service providers and offer Internet access to the public.

² ISP in Mongolia, Report 2001 by Infocon