8th World Telecommunication/ICT Indicators Meeting (WTIM-10)
Geneva, Switzerland, 24 - 26 November 2010
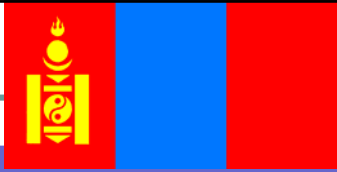
SOURCE: Communications Regulatory Commission, Mongolia

TITLE: ICT sector development policy and status of measuring the information society in Mongolia

ICT sector development policy and status of measuring the information society in Mongolia

Mr. T. Naranmandakh
Director
Legal, Information and Administration Department
Communications Regulatory Commission
MONGOLIA

8-th ITU World Telecommunications/ICT Indicators Meeting
24-26 November 2010
Geneva, Switzerland

Content of the presentation:

Sector development policy and regulatory frameworks

ICT/Telecommunications infrastructure and market

Measuring the information society (data/indicators)

Conclusions

2

Introduction of Mongolia

- Area: 1.5 mln. sq. km
- Population: 2.77 mln. (2010)
                                   In Ulaanbaatar (capital city):1'100'000
- Geography: Northeast Asian Region.
                                   Between Russian Federation and China,
                                   mountains, forest, steppe, desert
- Political system: President
                                   Great Hural (Parliament, 76 seats)
- Administration: Ulaanbaatar and 21 provinces
- GDP per capita: 3200 US $ (Source: Index Mundi)
- Membership: UN, ASEM, ESCAP, UNCTAD, WTO,
                                   WHO, ILO, ITU, UPU, APT, APPU, and etc.,

3

Governmental structure for ICT sector policy and regulation
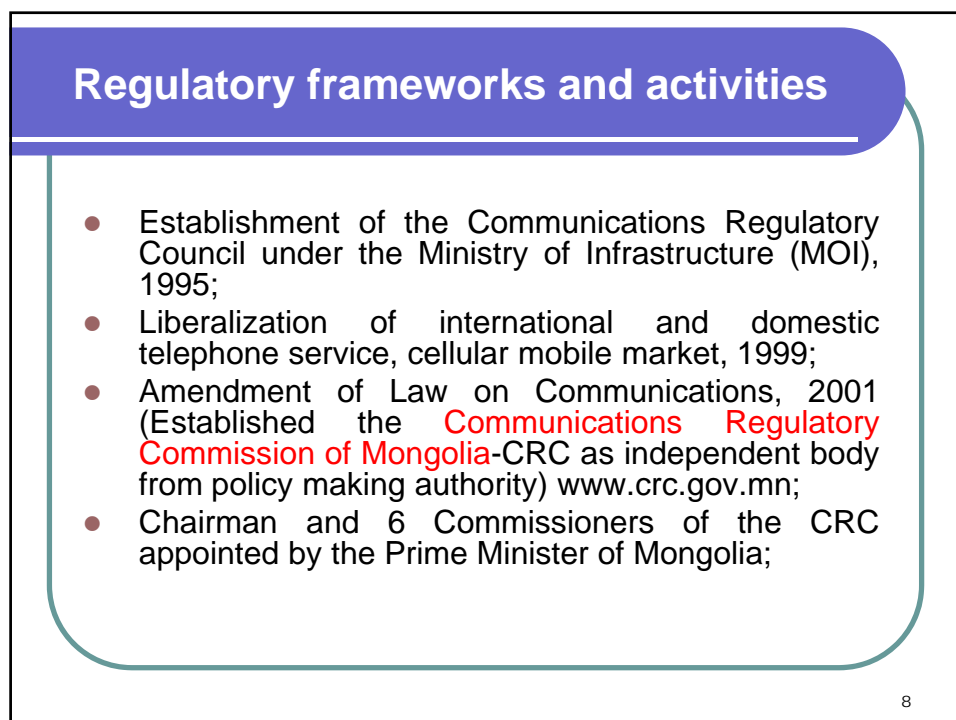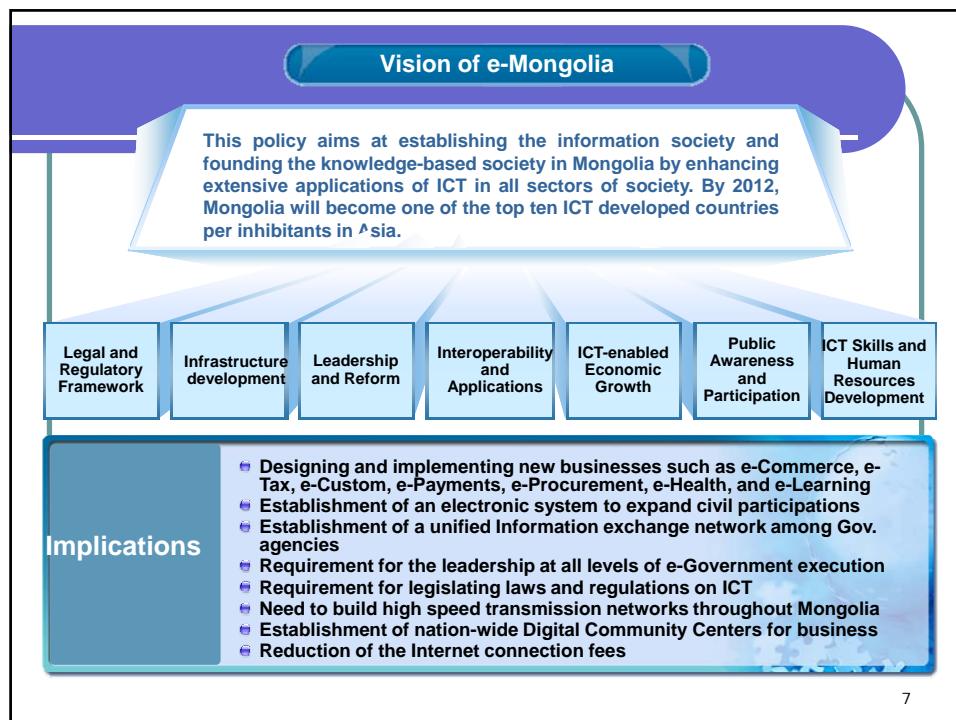

4

2
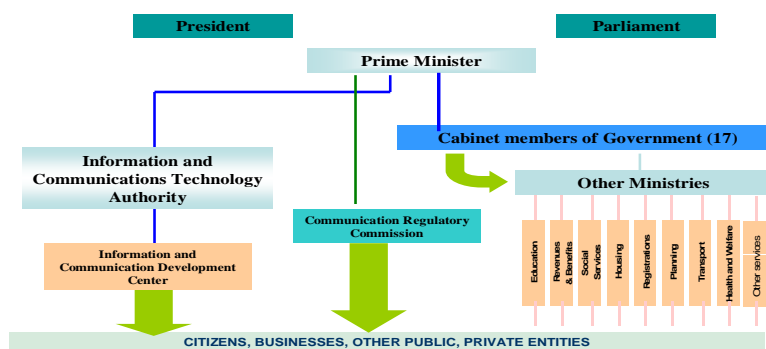
ICT sector legal framework

- Law on Communications, 1996 and 2001;
- Law of Radio wave, 1999;
- Postal Law, 2004 and 2007;
- Other laws: Civil code, Anti-Monopoly Law, Customer Protection Law, Company and Entity Law, Fair competition Law, and etc;
- Amendment of "Laws on Custom" tax-free for computer and its accessories and VAT exception for software products, 2005;
- Law on Governments' Special Funds (USO Fund-2% of all operators' gross revenues), 2006;
- Draft package law on ICT (Basic IT Law, Digital signature Law, e-Commerce Law, e-Governance Law), 2010;

5

Policy and Strategy

- Mongolian Telecom Master Plan up to 2010, Ministry of Infrastructure-MOI, 1994;
- ICT Vision up to 2010, Parliament of Mongolia, 2000
- Telecommunications Sector Mid-term Policy, MOI, 2001;
- Medium Term Strategy and Frameworks for ICT sector, MOI, 2002;
- "E-Government Master Plan" Study (2005-2010), ICTA and KIPA of ROK, 2005;
- "E-Mongolia" National Program 2005-2012, ICTA, CRC, 2005;
- Policy and Regulatory guideline on GSM, 3G, WLL, CDMA-450 business in Mongolia, ICTA/CRC, 2006-2008;

6

This policy aims at establishing the information society and founding the knowledge-based society in Mongolia by enhancing extensive applications of ICT in all sectors of society. By 2012, Mongolia will become one of the top ten ICT developed countries per inhibitants in Asia.

Legal and Regulatory Framework	Infrastructure development	Leadership and Reform	Interoperability and Applications	ICT-enabled Economic Growth	Public Awareness and Participation	ICT Skills and Human Resources Development

Implications

- **Designing and implementing new businesses such as e-Commerce, e-Tax, e-Custom, e-Payments, e-Procurement, e-Health, and e-Learning**
- **Establishment of an electronic system to expand civil participations**
- **Establishment of a unified Information exchange network among Gov. agencies**
- **Requirement for the leadership at all levels of e-Government execution**
- **Requirement for legislating laws and regulations on ICT**
- **Need to build high speed transmission networks throughout Mongolia**
- **Establishment of nation-wide Digital Community Centers for business**
- **Reduction of the Internet connection fees**

7

Regulatory frameworks and activities

- Establishment of the Communications Regulatory Council under the Ministry of Infrastructure (MOI), 1995;
- Liberalization of international and domestic telephone service, cellular mobile market, 1999;
- Amendment of Law on Communications, 2001 (Established the Communications Regulatory Commission of Mongolia-CRC as independent body from policy making authority) www.crc.gov.mn;
- Chairman and 6 Commissioners of the CRC appointed by the Prime Minister of Mongolia;

8

Regulatory frameworks and activities

Main functions of CRC, Mongolia include:
- Issuing telecommunications/ICT licenses (including TV and radio broadcasting, postal services, frequency, special number)
- Approving/monitoring the general terms of interconnection, between networks;
- Allocating and monitoring radio frequencies and planning;
- USO Fund administration and management;
- Approving accounting methodologies for the setting of tariffs and price;
- Approving and monitoring tariffs of dominant operators in the market;
- Developing and implementing a nationally integrated numbering plan;
- Settling disputes between license holders and customers;
- Telecom/ICT sector basic data/information collection and reporting to the related Government organizations such as ICTPA, NSC and others;

9

ICT/Telecommunications infrastructure

Name of biggest company, operator	Service, number of Subscribers	Transmission network, [km]	Comment
Information and Communications Network Company , 2007	Backbone network asset management	Optical fiber-8500+ Digital MW-1,400+ Analog MW-524.7+ VSAT-350	State owned backbone network 21 province center and 360+ districts
Mongolia Telecom Joint Stock Company, 1994	50,100 NGN, CDMA 2000 1X 161,200 Fixed telephony	-	Fixed telephone /WLL service 21 province center and 300+districts
MobiCom Corporation, 1996	1,050,200 GSM GPRS 11,800 WLL CDMA	Optical fiber-3100+ Digital MW-2100	(International open tender) 315 sites
Skytel company, 1999	310,600 CDMA-2001xEVDO	Optical fiber-340 Digital MW-1700 VSAT-50	(International open tender) 300+ sites
Unitel company, 2006	250,000 GSM	VSATs, Digital MW	(International open tender) 200+ sites
G-Mobile company, 2007	120,000 CDMA-450	Digital MW	(International open tender) 150+ sites

10

ICT/Telecommunications infrastructure

Монгол Улсын дамжуулах байгууламжийн нэгдсэн сүлжээ

11

Government bodies related to the telecom/ICT sector statistics

Information, Communications Technology and Post Authority -ICTPA (www.ictpa.gov.mn)

Communications Regulatory Commission (CRC-www.crc.gov.mn)

Telecommunication and ICT sector data/statistics

National Statistical Commission (NSC-www.nso.mn)

12

6

Government bodies related to the telecom/ICT sector statistics

Established: 1924
Employees: 120+
Main functions: Implementation of laws, formulation of statistics policy, census
Homepage: www.nso.mn

ICTPA

CRC

Telecom/ICT sector data/statistics

NSC
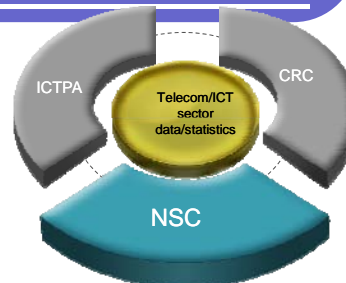
National Statistical Commission

- To implement related laws ("Law on Statistics", "Law on the Population and Housing Census", and other laws);
- To formulate policy and coordination of statistical data collection and statistics information dissemination;
- To organize and conduct population and housing census;
- Report to the Parliament and Government of Mongolia;

13

Government bodies related to the telecom/ICT sector statistics

Main functions of NSC, Mongolia include:

- ❖ Implementation of national statistics related laws. For example, Law on Statistics of Mongolia (1997, 2004), Law on the Population and Housing Census (2008);
- ❖ Annual and mid-annual population and housing census in Mongolia;
- ❖ Approving and monitoring of national and sector statistics methodologies for the census;
- ❖ Statistical data collection and dissemination of statistical information (monthly and quarterly bulletin);
- ❖ International cooperation (ITU, UNESCAP, UNSD, UNCTAD, … NSO);

Note: Nationwide annual census 2010 year (Mongolia)

14

Government bodies related to the telecom/ICT sector statistics
(Law on the Population and Housing Census, 2008)

Article 11. Census data
11.1.The following major data collected by the census:
11.1. 1 . demographic and social indicators:
-clan name, surname and name,
-date of birth,
-age and sex,
-ethnicity/nationality
-citizenship,
-education and literacy,
-religion,
11.1.2 Geographic and migration data place of birth:
-place of usual residence and residence on census days,
-duration of residence,
-place of residence five years ago from the census period,

11.1.3 economic indicators:
a. employment status,
b. occupation,
c. types of industry,
d. unemployment and its reasons,
11. 1.4 data on housing conditions:
a. type and ownership of dwelling,
b. number of rooms and floor space,
c. kitchen,
d. water supply, bathroom and shower,
e. waste disposal, toilet
f. electricity, heating and telephone/communication
11.2. The National Statistical Commission can include additional indicators, which required to demographic, migration, socio-economic and housing condition survey except of indicators specified in 11.1 of this law to census data regarding to particular situation.

15

Government bodies related to the telecom/ICT sector statistics

Established: 2004
Employees: 40+ (4 Departments)
Main functions: ICT sector development policy & strategy
Homepage: www.ictpa.gov.mn

ICTPA

CRC

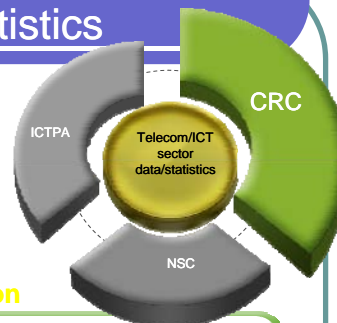Telecom/ICT sector data/statistics

NSC
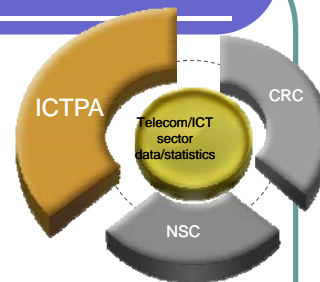
Information, Communication Technology and Post Authority

- **To formulate ICT/Telecommunications sector; development policy and strategy;**
- **To provide policy guidance for ICT/Telecom statistics data collection and reporting to the Government;**
- **To contribute ICT/Telecom related statistical programs;**

16

Government bodies related to the telecom/ICT sector statistics

Established: 1995
Employees: 50+ (4 Department)
Main functions: ICT sector regulations
and issuing licenses (including postal and
broadcasting sector)
Homepage: www.crc.gov.mn

CRC

ICTPA

Telecom/ICT
sector
data/statistics

NSC

Communications Regulatory Commission

- **To issues license and regulatory frameworks;**
- **To collect ICT/Telecom sector data/statistics from licensed operators (subscribers, market and demand) and to report to the ICTA and Government;**
- **To make lists and formats of the required new statistical data and indicators in sector with ICTA and NSC;**

17

Government bodies related to the telecom/ICT sector statistics

CRC is collecting the following the Telecommunications and ICT data and statistics from licensed operators and report to the ICTA/NSC:

1. Telecommunications (including postal and broadcasting):
a. Number of subscriber, density and sites (telephone, mobile, FM, TV sets, CATV);
b. Incoming and outgoing international/domestic traffics (fixed, mobile);
c. International and domestic postal market information;

2. Information technology:
a.Types of internet subscribers and users (internet, ADSL, VDSL, wireless access, broadband);
b.Market information (ISPs, share market);
c.Number of PCs (office and house);

3. Finance and HRD information:
a. Investment and finance information (revenue, cost, investment);
b. Tariff and price information;
c. Human resource development information (employees, average salary);

18

International partnership on measuring ICT for development

Partnership and development on Measuring ICT for Development:
➢ Basic ICT infrastructure & access indicators (ITU);
➢ Indicators on access to, and use of, ICT by households and individuals (ITU);
➢ Indicators on use of ICT by businesses (UNCTAD);
➢ Indicators on the ICT sector and trade in ICT goods (UNCTAD);
➢ core indicators for Measuring ICT in education (UIS);
➢ ITU-WTI and Regional events on ICT Standardization: ITU World Telecommunication /ICT Indicators Meeting, Egypt, 2008
➢ ITU-T Research project-Measuring and Reducing the Standards Gap, 2009
➢ IDI-ICT Development Indicator, ITU, 2009

19

Cooperation between the ITU/other organizations and Mongolia

- ITU Membership in 1964: Mongolia
- Pilot and consulting projects: Numbering planning, SMS4D software, NGN network study (2010) and HRD,
- ITU-T Research project-**Measuring and Reducing the Standards Gap**, 2009: National Standards Assessment Case Studies-Mongolia included the report,
- UNSD Statistical Databases and ITU indicators: Undata and ITU-ICT indicator database,
- UNDP/ESCAP-SIAP/UNFPA support and Government of Mongolia: **2010 Population and Housing-Mongolia**, November 11-17, 2010 (According to Law of Census information on total number of 49 major indicators will be collected by the Census)

20

Future Objectives

- To develop and implement an integrated policy and guidelines of the sector on international cooperation and national statistics/ICT core indicators and IDI;
- To create reliable ICT/Telecom database of statistics and broadband technologies including wireless (3G, WiMax, Digital and IPTV);
- To implement the "Recommendations on Bridging the standardization gap report" (ITU, 2009) and measure/guidelines of ITU-IDI in national level;
- To improve the qualitative and quantitative metrics for ICT statistics and assessing standards capability parameters;
- To improve cooperation with Government/Public organizations and NGOs in data collection/dissemination of statistical data, promote their activities in line with public interest and access to knowledge policy;
- International organization and regional cooperation;
- HRD and capacity building;

21

Conclusions

Key challenges:

- Specific problems for Mongolia (nomadic lifestyle and population diversity, terrain and natural conditions, lack of basic infrastructure such as road, energy);
- Appropriate legal and regulatory environment, specially IT applications, frequency allocation and pricing, interconnection and tariff, network security, e-commerce and etc.,
- Limited availability and processing of data, and reliability of data sources;
- Lack of compatibility to use of ICT/Telecom core data/indicators and IDI in national level;
- Digital divide and USO fund operation;
- Lack of investment to introduce new ICT/Telecom business and need to improve data format and collection process;
- Lack of HRD and capacity building ICT/Telecom data collection and processing;

22

Conclusions

Key Success Factors:

- Strong Political & Governmental Leadership;
- Improvement of legal and regulatory environment (fair, transparent regulation, One window approach, Government portal, web information on statistics/data);
- Technology neutral policy and improvement of data collection/processing;
- Bridging Digital Divide and Government special programs, for example "PC for All Children", "Rural internet connection" program, "Rural mobile coverage project", "IT literacy";
- Strengthening of international cooperation and use of internationally recognized statistical data format and core indicators in national level (ITU, UNCTAD, World Bank...);
- Investing Human resource development/capacity building;
- Partnership with Private Sector and Civil Society;

23

Thank you for attention

Contact address:
T.Naranmandakh
 Director
 Legal, Information and Administration Department
Communications Regulatory Commission of Mongolia (CRC)
Metro Business Center, 5-th Floor
Sukhbaatar Street-13, Ulaanbaatar 14201
MONGOLIA
Tel/Fax: 976-11-300237, 327720
E-mail: naran@crc.gov.mn
http: www.crc.gov.mn