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## Social and Cultural Issues: Information and Communication Technology Policy in Mongolia

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## Information and Communication Technology Policy in Mongolia

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## Introduction

In the networking age, every country needs the capacity to understand and adjust global technologies for local needs.

In the mid-seventies, the Government of Mongolia was giving much emphasis to science and technology information, having State Committee on Science and Technology and research institutions underneath. The main purpose of the State Committee was to focus on the provision of the science and technology information mainly received from academic institutions of former Soviet Union and socialist system countries. A number of the policy regulatory documents were developed to address the issues of the science and technology information.

The transition to a market economy has changed Mongolia with the economic strategy of the country more focused on first priority issues, rather than on the issues of the use of information and communications technology. In the late 1980s and 90s, the emphasis was more on the communications rather than information and technology.

This changed in the mid-90s when the first Internet service provider introduced Internet and its services to the citizens of Mongolia. Since then, a number of computer companies operating in the information and communications technology area have increased dramatically and the types of services were following the trends of the world ICT development.

These changes increased the need to address information and communications issues and the first Working group on Internet issues chaired by Mr. Badral, advisor to the Prime Minister was set-up by the decree of the Prime Minister. The objective of the working group was to address the issues of policy and regulations in Mongolia. Even though the Working group has not developed any particular documents on ICT, the fact that the Government of Mongolia attempted to address the ICT issues at the Government level showed the emphasis to this issue in terms of addressing the Digital Divide and providing Internet access.

## CURRENT SITUATION

### *A. Governing bodies*

#### *I. National ICT Council.*

National ICT council was established during the First National ICT summit in Mongolia in 1999. MFOS, UNDP Mongolia and APDIP have supported the national ICT Summit. The initial initiative of National ICT Council comprised the representations of government, private and non-government organizations and had 21 members, seven representatives from each sector. Even though the National Summit selected representatives from private and non-government organizations, the absence and inactivity of the Government representatives affected to the functionality of National ICT council as a legal entity. However, some of the active members of the ICT council were working on voluntarily basis as ICT experts of the country. The MFOS and UNDP supported their initiative through the joint project called MIDAS – Mongolian Information Development Application Scheme. (See more detail description in MIDAS)

#### *II. National ICT Committee.*

The National ICT Committee was established by the decree of Government of Mongolia No. 82. The NICT committee has representatives of government, public and NGOs and education sectors. The committee is headed by the Prime Minister of Mongolia and is the advisory body to the Government of Mongolia on information and communications technology development issues. The objectives of the NICT Committee is to develop recommendations to the Government of Mongolia in the following areas:

- Creation and establishment of a favorable legal environment for the ICT development in Mongolia
- Creation of the system of IT policy regulations and mechanisms, development of government information systems through supporting the development of the ICT.
- Expansion of ICT related businesses and development of ICT into highly efficient and economic branch,
- Establishment of economically and business effective and operative information system
- Implementation of ICT into local processing, service and education of sectors.
- Creation of opportunities for equal participation of public in the citizen-society decisions making via information services
- Wide implementation of ICT for the public services
- Monitor over the current situation and results of implemented initiatives in the ICT area and provide evaluation on constant basis. (Annex 1. Degree of the Government of Mongolia on the setup of the National ICT Committee and its attachment)

The committee has a secretariat headed by Mr. Gerelt-Od, economic advisor to Prime Minister. There is no full-time staff in the committee secretariat. The NICT committee is planned to organize its meetings at least once within 3 months. Since its establishment

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the NICT Committee already held 3 meetings. (Annex 2. List of members of National ICT Committee)

*III. ICT Advisor to Prime Minister.*

Mr. Bat-Erdene has been appointed as an ICT Advisor to Prime Minister on September 17, 2001. The position is not full-time. At the moment, there is no any relationship between the ICT advisor and the National ICT Committee.

*IV. ICT Officer at the Ministry of Infrastructure.*

The current government has assigned ICT related issues to the Ministry of Infrastructure due to the close relationship between Information technology and Communication infrastructure. The Ministry of Infrastructure has only one full-time officer responsible for the ICT policy issues.

*V. Regulatory council on implementation of the ICT in education sector.*

The regulatory council on implementation of the ICT in educational sector has been setup by the degree No. 151 of the Minister of Science, Technology, Education and Culture. It has 7 members and is headed by Mr. Batjargal, Chief of Information and Statistics department of the MOSTEC. (Annex 4. Degree No. 151 of Minister of Science, Technology, Education and Culture).

***B. Institutional initiatives.***

*1. Mongolian Information Development Application Scheme (MIDAS).*

The MIDAS is the follow-up on the establishment of the National ICT Council to assist with the operation of the ICT Council as well as to perform the coordinating agency role among different players of the ICT in Mongolia. The project has started from April 2001. Recently, upon the completion of the MIDAS project supported by the MFOS and UNDP offices, the MIDAS office together with the active members of the ICT Council has applied and received the status of non-government organization in Mongolia, changing their name into the Mongolian Information Development Association. The MIDAS Association is represented by government, non-government and business organizations. Currently, there are 11 active members. Mr. Enkhjargal is the manager of MIDAS and responsible for the coordination of activities between different players of ICT in Mongolia. MIDAS is one of the active initiators and participants of ICT development in Mongolia.

*2. ICT Association.*

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ICT Association was established in May 26, 1999 and is comprised from representatives of government, non-government and private organizations. Since its establishment it has participated in the organization of the ICT Summit in 1999. The main purpose of ICT association is to develop information and communication technology in Mongolia. Not much of activities have been organized since then. Mr. Buyanjargal is the director of the ICT Association.

### 3. National Association of Information Technology.

This NGO has been established in early 90s. The members of this association include all heads and directors of the Technical institutions in Mongolia. The mission of the National Association of Information Technology is to implement and develop government decisions on introducing high-effective information and communication infrastructure of informatics, computers, electronics, communication based on the modern technology. The National Association has been registered on January 22, 1999.

### 4. Mongolian Internet Exchange Point.

By the initiative of the Infocon Co. Ltd, the Mongolian Internet Exchange Point has been established in October 2001. The main purpose of the Mongolian Internet Exchange Point is to enable the exchange of contents among the local ISPs through local Internet Exchange Point. Currently there are 4 ISPs signed for Mongolian Internet Exchange Point: Datacom, Bodicomputer, Erdemnet and Mobicom companies.

## **C. *Legislative documents***

### 1. ICT Vision – 2010.

The blueprint of Mongolia ICT Development by year 2010 has been developed by contributions of Mongolian ICT experts in 1999 with support from UNDP Mongolia, MFOS and APDIP. Multiple discussions and workshops were organized within government, non-government and private business sectors to ensure every sector involvement in this blueprint. The ICT vision – 2010 has been approved by the Parliament of Mongolia in February 4, 2000 by degree No. 21. The mission of ICT vision – 2010 is to “develop a society based on knowledge and intellectual potential and to improve the quality of people’s lives”. ICT Vision – 2010 has three major components – government, business and civil society, which cover Visions within each of these sectors to be achieved by year 2010. (Full text of ICT Vision-2010 is to be provided upon request)

### 2. Action Plan of Government of Mongolia.

The Action Plan of the Government of Mongolia has few major points related to the development of ICT in Mongolia. According to the Action plan, out of 1079 activities to

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be implemented within 4 years of election, 67 activities planned activities are related to the ICT development in Mongolia. (Annex 5. Abstract from the Action plan of Government of Mongolia).

### 3. *ICT Vision-2010 in education sector.*

The Minister of Science, Technology, Education and Culture has approved ICT Vision-2010 in educational sector on by degree No. 151. The Vision has 4 components: training, equipment, human resources and information provision. The Vision developed the strategy and activities to be implemented within each of these components. (Annex 6. Degree No. 151 of Minister of Science, Technology, Education and Culture)

### 4. *The Action Plan to implement Vision-2010 in educational sector.*

The Action Plan to implement ICT in education sector has been approved by the same degree covering the period of 2000-2004. It has 9 articles, covering the activities to be implemented by year 2004 and necessary funds for implementation of these activities. The Action plan includes the following ideas:

- Introduction of at least 70 hours of informatics classes before the 8<sup>th</sup> grade complex in secondary schools
- For schools without computer labs distribution vouchers worth of 15,000T to pupils of 5-8<sup>th</sup> grades, 7,500T worth vouchers for pupils of 9<sup>th</sup> and 10<sup>th</sup> grades each.
- Introduction of the mobile computer labs to provincial schools without computer labs to teach “Informatics” subject
- Setup and function of the computer lab with necessary equipment in the regional centers and aimag centers.
- Inclusion of 30,000USD worth investment into the state budget for the upgrading of computers
- For 588 schools and 660 kindergartens implementation of a 1 computer with a modem and a printer facility through THE state budget or donations, contributions, loans and projects of international donor organizations.
- Resolution of an issue of financing textbooks on “Informatics” subject from the publications resources.
- Setting up of the goal of reaching teachers of information and communication technology to 50% in 2003 and 90% in 2007
- Organization of necessary training for teachers interested in ICT and use ICT in their subjects
- Ensure the increase of the percentage of education of teachers in developed countries and increase the percentage of teachers with Masters and higher degrees. (Annex 7. Action Plan of implementation of ICT in education sector)

### 5. *Telecommunications Law.*

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The Government of Mongolia has approved a new telecommunications law on October 18, 2001. The initial Telecommunications law was approved on November 15, 1995. The purpose of the Telecommunications law is to coordinate relationship between government and service providing organizations, citizens, economic entities and other organizations in issues of creation of telecommunications networks, utilization and protection. The old telecommunications law had 29 articles, covering the issues of terminology, utilization, service provision, organization, licensing, monitoring and rights and responsibilities of service providers and users.

The new version of the Telecommunications law has approved the new issues to be covered by the Telecommunications Law. In particular, a government entity will deal with the issues of removing the overlapping management structure, transparent and understandable structure through changing the process of decision-making, defining the responsibilities and authority, introducing substantial structural changes. (Annex 8. Amendments made to the telecommunications law)

#### 6. Patent law – Article 5.

The patent law has a few points on the issues related to the information and communications technology.

According to the patent law “the following shall not be considered to be inventions:

- 1) discoveries, scientific theories and mathematical methods;
- 2) computer program and algorithms;

[“Utility model” means an industrial device, product, their basic part and a new industrially applicable solution”] \*\*

Computer program can be a utility model. (See Patent Law, p. 9)

#### 7. Copyright law.

Current copyright law has only Article 3, related to the information and communications technology issues.

According to Article 3. “Subject matter of copyright”

10) Computer programme;

11) [Encyclopedia, dictionary, other database compilation that compose an intellectual creation by its content and purpose. However, the copyright in the original works shall not be affected. (See Copyright Law, p. 14)

#### 8. Law on radio frequency.

The law on radio frequency was approved on June 4, 1999. The purpose of the radio wave law is to regulate distribution, utilization, protection, proprietorship and ownership of radio frequencies. It has 21 articles, which covers terminology, government rights, licensing, authorization and monitoring of radio frequency related issues. According to the radio frequency law, the Government has a full pledged right to make decision on the

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use of the distributed for Mongolia satellite connection. (See Law on radio frequency, p. 10).

#### ***D. Other documents***

1. Action Plan developed by Richard Labelle. UNDP Mongolia office has engaged Canadian Consultant in December 1999 to develop Action Plan to implement “ICT Vision-2010”. The Action Plan was developed in close cooperation with representatives business, government and non-government sectors, and specialists in ICT area.
2. Tokyo declaration “Asia-Pacific Renaissance through ICT in the 21<sup>st</sup> Century” was declared during the Asia-Pacific Tele community summit of the Ministers of Information and Communications of the member countries, which was held 31 October – 2 November 2000. The purpose of the declaration was to establish a sound information based society of the region and concentrated on the following issues: The Forming a shared vision, Bringing the Digital Divide, Developing Information and Communication Infrastructure, Essential Applications for the Information Society and Human Resource Development and Enhancement of ICT Literacy, Regional Co-operation and Global Co-ordination and Target for Internet Access “Phase One”.

#### ***E. Donors initiatives***

##### ***1. United Nations Development Programme.***

UNDP Mongolia office has been and is one of the leading donor organizations to support the ICT in Mongolia. In 1998, the UNDP supported the participation of Mongolian policymakers to attend the Internet Policy Seminar. Within “Information and communications technology for Sustainable human development” project implemented with the Cabinet Secretariat of the Government of Mongolia, a substantial contribution has been made to the setup, functionality and operation of the Public Management Information System. The main objective of the PMIS was to provide the opportunities to share the information within government organizations and agencies, as well as to the general public through Citizen Information Service Centers. Another project of UNDP is the support and assistance to the CISCO academy, established with the assistance of Asia Pacific Development Information Program at the Computer Science and Management School.

##### ***2. Mongolian Foundation for Open Society (Soros foundation).***

Since the establishment of the MFOS office in Mongolia, one of the programme of their activities was Internet program with focus on the information and communications technology. The Internet programme had 3 major components, consisting of the ICT policy development, introduction of ICT for civil society through Open Web Center project to serve non-government organizations and enable the outreach to the countryside

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through community Information center projects in three aimags. The MFOS has provided the full support for the development of the “ICT Vision-2010 in Mongolia”, supporting multiple workshops and training for policy makers and ICT professionals to develop the Vision-2010.

### 3. Asian Development Bank.

Asian Development Bank project is focused on the educational sector development. Within the first project of ADB implemented in cooperation with the Ministry of the Science, Technology, Education and Culture, the ADB has provided assistance to supply one school in aimag centers with 10 computers to facilitate the shortage of the computers in aimag levels and enforce the informatics subjects in the local levels. This project was implemented in the period of 1998-1999. Currently, ADB is in the stage of compiling the project document for the second stage of the educational sector development project. There was no project to support the ICT policy development in Mongolia.

### 4. Japanese International Cooperation Agency (JICA).

JICA’s office in Mongolia was established in 1997. The main areas of the activities are as following:

- building economic infrastructure and upgrading conditions to promote industry (rehabilitation of infrastructure, including energy, transportation and communication),
- intellectual support and human resources development for the transition to a market economy,
- revitalization of agriculture and livestock industry,
- support for basic human needs (BHN) (education, health and medical services, and water supply).

The technical cooperation project The program is largely implemented in four sectors: social development; public health and population/family planning; agriculture, forestry, and fisheries; and industrial development. There is no support from JICA on the ICT policy development so far.

### 5. TACIS.

Within framework of assistance and cooperation with the Government of Mongolia, the European Union Agency has allocated for the period of 1996-2001 of total sum of 26,5 M Euro. The TACIS projects are mainly in the field of structural and institutional reforms, support to enterprises and financial development, infrastructure development and Small project programs. TACIS Small Project Program includes Tempus, Lien, Democracy, City Twinning, Productivity Initiative Program, ESSN, Statistics, and Customs. There are no substantial ICT program or project within TACIS so far. (See <http://europa.eu.int> web site)

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6. GTZ.

Till present, the German Technical Assistance to Mongolia has provided the assistance of total of 6.9 million Euro, which is only 3 percent of the total assistance provided by the GTZ to Asian countries. According to their resources GTZ “supporting the private sector, promoting environmental protection and resource conservation measures and helping to advance rural development and energy supplies.” One of ICT projects of GTZ successfully implemented in the Ministry of Justice and Jurisprudence was the development of the database of laws and regulations adopted by the Government of Mongolia and the Parliament.

7. International Development Research Center of Canada (IDRC).

IDRC started to provide assistance and cooperation with Mongolia since 1996, when the first Internet Service Provider has started its services with assistance of the IDRC. The total amount of the IDRC assistance up to date equals to around 400,000 CA\$. Current field of interest for IDRC lies in the distance education and set-up of the remote Internet centers in aimags. There was no ICT policy related activities whatsoever funded and supported by the IDRC.

8. Indian government.

The Government of India, represented recently in Mongolia by the Minister of Informatics of India has committed one million US dollars for the renovation of the communications and Information School of the Mongolian University of Science and Technology (Former Mongolian Technical University).

9. Government of Korea.

Government of Korea recently committed to provide one million USD for the support of the development of ICT in Mongolia. The Government of Mongolia has not made any substantial decisions on how to spend this grant.

10. World Bank.

World Bank is one of the major donor organizations for Mongolia. World Bank supported different projects in Mongolia, but only since 2001, the ICT has become the focus of their support and assistance. A new project called “Mongolian Development Gateway” has started to implement since June 2001. The World Bank also initiated another project “Global Development Learning Network” to setup GDLN center in the premises of the National Information Technology Center. It’s expected that more projects will be supported and financed from World Bank.

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## FINDINGS

### *I. Policy and regulatory issues*

- There is no regulating agency in ICT field. The National ICT Committee is the only organization with consulting functions to the Mongolia's government in the ICT field. Currently, NICT Committee does not have any full-time employer.
- There is no law on information and communications technology to handle the issues of the use of Internet and services over the Internet.
- There is no detailed Action Plan for implementation of the Vision-2010. The Action Plan drafted by a consultant of UNDP is still in the draft status.
- There was no organization to regulate initiatives of donors on ICT. As it was mentioned above, the donor organizations supported a lot of initiatives in information and communications technology area. However, there is no report developed combining all donor activities in ICT field.
- Telecommunication monopoly still exists. The monopoly in telecommunications sector affects the use of the Internet and its services in rural areas since the price is not decreasing and even increasing.
- Currently, there is no system of statistical data collection in ICT field, indicating the affect of the use of the computers and tools of information and communications technology.
- According to the Government resolution, each Ministry must have their own Action plan for implementation of ICT within their Ministry by year 2010. However, only MOSTEC has developed Vision-2010 in education sector.

### *II. Application issues:*

1. Since there is no legal environment for implementation and development of information and communications technology in Mongolia, the ICT development is still in the beginning stage:
    - The current monopoly of the Mongolian Telecommunications Company limits the competition to provide services to the rural area.
  2. The issue of the standardized Mongolian font is still not resolved.
    - The developed web sites and pages usually use the fonts available in the particular organization, which in most cases are not compatible with each other and with Unicode Standards. This creates frustration of using Mongolian web pages.
    - Moreover, downloading all the time Mongolian fonts from each web page viewed creates overload of the Mongolian fonts in the computer.
  3. Closely tied to the font issue is the issue of the Mongolian web page presence:
    - Mongolian content of the Internet is not enough to attract Mongolian speaking citizens. Even though, there are some web sites already developed in Mongolian language, but irregular updating of the web sites and lack of the advertisement to the public greatly influences public's interest for browsing the web sites
    - On top of this the font issue applies as well.
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4. Hardware support is not sufficient enough:
    - Most of the computers in schools or in organizations are used by the senior officers and management, who most of the time use it for document processing, but not Internet
    - A fewer organizations have a full set of hardware available and accessible by everyone in organizations.
  5. Human resources are not sufficient.
    - Most graduates of the secondary schools have a little knowledge and experience to use computers. As a consequence, the students in the tertiary educational institutions also become computer illiterate and at the end the employees become ignorant of computers
    - There is a limited number of students to get professional computer science degree, which influences to the issue of maintaining computers, software and hardware maintenance.
  6. Pricing issue of the subscription to the Internet services
    - Inappropriate price for Internet service in comparison with average salary of state and non-government organization employees.
    - Computer itself costs 5-10 times more than average citizen's monthly salary. The Internet connection fee ranges between 5\$-200\$.

## RECOMMENDATIONS TO MFOS on ICT POLICY

### A. *Policy related activities.*

1. Assist in the development of a detailed Action Plan to implement ICT vision 2010. Even though UNDP ICT Consultant Richard Labelle has developed draft plan of action "ICT development in Mongolia" in year 2000 but it's still tentative and remains as a draft since no decision was made by the Mongolian Government to implement this Action Plan. Thus, as it happened in 1999, all interesting bodies in ICT field could join again for the development of the detailed Action Plan with activities, schedule of implementation, required budget and responsible of entities to participate in the implementation of the Action Plan.
  2. Cooperate with all key players of the ICT in Mongolia. Recently by setting up of the National ICT committee, National ICT Council and others have expressed their willingness to cooperate with MFOS on ICT related activities and therefore, cooperation with these entities will ensure the proper implementation of ICT activities in Mongolia.
  3. Coordination of activities with other donor organizations. Currently, most of the donor organization is not aware of the activities of other donor organizations. This affects on the issue of the duplicating of the projects and under-utilizing resources of the donor organizations. MFOS could support conducting survey to define activities and future objectives of the donor organizations in ICT area. This is initiative to come from the national counter-parts.
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4. *Assist to improve legal environment of the ICT.* As it has been mentioned there is no legal environment on ICT in Mongolia. According to our discussion to the ICT experts and government official, there are two opposite points of views on legacy issues. Some of them do not agree of having legal regulations, which by their viewpoint might obstacle ICT. The others define the necessity of having legal documents to ensure proper management and implementation of the developments of ICT in Mongolia. The consultancy team considers that there is a need to have legal regulations, which will regulate day-to-day ICT activities and encourage ICT use.
5. *Assist in development of model laws or guidelines on legislative issues in ICT.* As it has been mentioned earlier, currently, there are no laws or legislation to deal with ICT issues. The main field of contribution of MFOS could be in the development of model laws with special consideration on socio-economic concerns: cybercrime, security, privacy, harmful content, taxation and the global nature beyond national jurisdictions.
6. *Assist regulatory bodies of ICT.* MFOS could assist in providing consultancy services to strengthen and implementation regulating bodies (e.g. independence, transparency, fairness, accountability, etc).
7. *Assist in providing consultancy services for regulatory frameworks.* MFOS could assist in providing consultancy services on establishment, improvement, and updating regulatory frameworks (e.g. interconnection, licensing, pricing, dispute settlement, quality of services) in the converged environment.
8. *Assist in consultancy services in ICT area.* MFOS could assist in the information collection, exchange and dissemination; local and regional workshops, case studies and surveys, including in the field with a view to identify common issues and success factors; and regional and global training on ICT regulatory issues and trends.
9. *Coordinate and support public sectors and NGOs.* Compare to the early and mid-90s, the Mongolian NGOs are becoming more active learning to work in the transition to market economy system. However, most of the NGOs are only learning, but haven't setup the full operational system to be sustainable in the market system. Therefore, MFOS could provide assistance of supporting the activities NGOs giving access to the tools of the ICT in Mongolia.
10. *Assist in establishment of statistical system on ICT.* As it has been mentioned in the report, there is no statistical system on ICT issues. There is a need of knowing exactly, the number of computers, users, Internet subscribers, etc. Having exact statistical system will facilitate in the decision making in the ICT area, providing clear picture of the ICT development in Mongolia.

#### ***B. Increase public awareness and decrease digital divide within country***

1. *Assist in having access.* Currently, most of the aimags telecommunications systems are switching into the digital communications. However, the price of the using digital telecommunications system will be much higher than using analogue system. Most of the people in rural areas will not be able to afford this service. But MFOS could negotiate with the service providers of receiving favorable and reduced price for services for schools, hospitals and other non-profit organizations.

2. Assist in the increase of Mongolian contents. There is not enough Mongolian contents on Internet, which influences the use of Internet on day-to-day basis. MFOS could play active role in providing assistance for the development of e-contents.
3. Assist in the development of on-line translator foreign language contents to Mongolian language. Almost 99.9 percent of information on Internet are in foreign languages. Lack of foreign languages puts barrier of using and obtaining proper information from the Internet. It is almost impossible to translate all contents of Internet into the Mongolian language. However, development of an on-line translator of foreign language content on Internet into the Mongolian language could somehow resolve the issue information.
4. Assist in the development of the computer applications for day-to-day activities such as e-commerce, e-job, tele-medicine, distance education, etc. E-commerce, e-job, tele-medicine, distance education – these are new terminology for Mongols. However, following the world tendency for the e-society and its implementation in Mongolia, MFOS could assist in the development of the computer applications for these initiatives. There could be a focal point for each of these issues, whom or which MFOS could support of having access and developing information and content for Internet.
5. Mobile computer classes. One method of assisting with access could be mobile classes. Some experts consider that mobile computer classes are not applicable for the conditions of Mongolia due to severe Mongolian weather. However, the consulting team proposes to implement these classes in line with the weather conditions of Mongolia. The mobile class could be mobile during the acceptable season reaching remote places and for the rest of the time it could be located in centers where population density is high and heating problems is already resolved.
6. Cooperate with e-cafes to serve public. As mentioned above most of the population does not have possibility to own computer and have Internet connection. MFOS could cooperate with e-cafes to serve public (civil society) based on the quality of service and price introducing some incentive forms of cooperation.
7. Assist in the creation of the rural area community information centers at soum level and all aimag centers. Once the issue of the telecommunications and Internet services will be resolved, there will be issue of providing access in soum level. MFOS could assist in this issue as well as it did with the provision of access to the aimag levels. Moreover, MFOS could work on the sustainability issue already based on the past experience of setting up of the Community Information Centers in aimags.
8. Cooperate with key players of ICT area in organization of national movement of computer literacy for all. Computer literacy is one of the main factors for the digital divide. MFOS could assist in the development of certain activities to introduce the use of the computers and applications starting from lower grades of the secondary schools.

### **C. Others**

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1. *Assist in the development of e-governance.* As it has been identified at the new Information Programme Strategy, the MFOS should focus their activities of developing e-governance. This could be done in cooperation with other donor organizations as well as key players of the ICT of Mongolia.
2. *Assist in the creation of the portal web site.* Currently, there is no unique web site, which provides links to all web sites related to Mongolia. Development of the Mongolian portal web site will save time of browsing Internet for Mongolia-related information and will give convenience for users as well as researchers.