

**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
MINISTRY OF INFRASTRUCTURE MONGOLIA*
MONGOL POST COMPANY**

**THE STUDY
ON
THE POSTAL SERVICE IMPROVEMENT PLAN
IN
MONGOLIA**

**FINAL REPORT
[MAIN REPORT]**

March, 2001

NOMURA RESEARCH INSTITUTE, LTD.

PADECO CO., LTD.

*Due to a change of national organization in August 2000, the former Ministry of Industry and Development was replaced by the Ministry of Infrastructure.

Referential Exchange Rate (Monthly Average in November 2000)

One US Dollar = 109.95 Japanese Yen = 1,040 Tugrik

Sources: Bank of Tokyo-Mitsubishi (for USD – Yen conversion)

Trade and Development Bank of Mongolia (for USD – Tugrik conversion)

March, 2001

PREFACE

In response to a request from the Government of Mongolia, the Government of Japan decided to conduct Study on The Postal Service Improvement Plan in Mongolia and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA selected and dispatched the study team headed by Mr. Akira Noda of Nomura Research Institute, Ltd. And consist of Nomura Research Institute, Ltd. And PADECO Co., Ltd. To Mongolia, 4 times between March, 2000 and December, 2000. In addition, JICA set up the advisory committee headed by Mr. Hideki Bando, Senior Researcher, Institute for Posts and Telecommunications Policy, Ministry of Posts and telecommunications between July, 2000 and March, 2001.

The team held discussions with the officials concerned of the Government of Mongolia, and conducted field surveys at the study area. Upon returning to Japan, the team conducted further studies and prepared this final report.

I hope that this report will contribute to the promotion of this project and to the enhancement of friendly relationship between our two countries.

Finally, I wish to express my sincere appreciation to the officials concerned of the Government of Mongolia for their close cooperation extended to the Team.

Kunihiko Saito

President

Japan International Cooperation Agency

March, 2001

Mr. Kunihiko Saito
President,
Japan International Cooperation Agency
Tokyo, Japan

Letter of Transmittal

We, the members of the JICA Study Team, hereby submit the final report on the findings of the study on planning for improvement of postal services in Mongolia. Field studies commenced in March 2000, and the entire study was completed in March 2001.

The report sets forth the proposed master plan for improvement of postal services in Mongolia and the business of the Mongol Post Company (MPC). Care was taken to see that the master plan achieved a conformance among the component plans for postal services and the MPC in the aspects of new services, organizational setup, human resource development, and finances. Besides formulating plans for the balance of payments, we also made evaluations, from the technical and social aspects as well as the economic aspect, of cash flow and the feasible amounts of investment in facilities and equipment. The findings provided footing for preparation of plans for phased implementation extending to 2010 as the target year. We are convinced that their implementation will make a great contribution to improvement of levels of efficiency and productivity in postal services.

We are deeply indebted to the concerned personnel at JICA, the Ministry of Foreign Affairs, the Ministry of Economy, Trade, and Industry, and the Ministry of Public Management, Home Affairs, Post and Telecommunications in Japan for their invaluable guidance and support in the execution of the study, as well as to the concerned personnel at the Ministry of Infrastructure, MPC, and other institutions in Mongolia for their kind cooperation and assistance with our activities.

Very truly yours,

Akira Noda
Leader

JICA Team for Study of Plans for Improvement of Postal Services in Mongolia

Summary

1. Backgrounds and Objectives

In the field of postal services, the Japanese government dispatched one expert in postal administration to Mongolia for short-term stays in each of the three years 1995, 1996, and 1997. These experts assisted human resource development, identified major problems, and noted the need for a development study of postal services.

In October 1998, the Mongolian government requested Japanese assistance with the formulation of a master plan for improvement of postal services based on the advice of these experts.

Upon receiving this request, the Japanese government sent a preliminary study mission to Mongolia in October 1999 for discussion of the S/W agreement. S/W agreement copies were signed and exchanged on 2 November, 1999. Based on the agreement the main study for the postal service improvement was conducted from March, 2000 until March, 2001.

This study has two major objectives.

- (1) To formulate a master plan for the improvement of postal service.
- (2) To pursue technology transfer to counterpart personnel in the course of the Study.

2. Outline of the JICA Study

The JICA Study commenced in earnest in March 2000. The Study Team consisted of seven members with special competence in the fields of general control/postal services, postal policy and planning, transportation planning, market surveys and planning for new services, collection and delivery planning, analysis of management and finances, and systems of human resource development and organization. To startup the study, the Study Team prepared the inception report in late March, and started discussions with Mongol side and field survey.

The field survey was carried out in Mongolia from April to September 2000, with cooperation by counterparts such as MPC(Mongol Post Company) and MOI(Ministry of Infrastructure) in Mongolia. The Study Team examined the postal service business (including the postal service system, transportation network, market, needs for new services, and management and finances). In this series, the Study Team prepared the progress report and the interim report and provided analysis and comments on the current status, issues, future directions, etc. in order to facilitate adequate discussions with Mongolian side as well as to promote technology transfer to Mongolia.

In December 2000, the Study Team drafted a master plan for postal services, evaluated planning proposals, made estimates of investment costs, and put together financial plans and phased service plans. Based on these plans, it then prepared the draft final report presenting

the assortment of specific plans for service improvement and the estimated course of improvement (costs and schedule) in accordance with these plans. The final report was prepared in March, 2001.

3. Social and Economic Environment in Mongolia

Mongolia is a large country with a total area of about 1.56 million square kilometers. Topographically, it can be divided into three major zones such as the tableland zone, the desert zone, and the mountainous zone. In terms of administrative units, it consists of 21 Aimags (provinces) with subsidiary units of Soums (townships) and bags (villages). It has a continental climate, and temperature differences between January and July reach 38 degrees (centigrade) on the average and 51 degrees at the maximum. The population is dispersed over the vast expanse, and this makes it extremely hard to construct not only the postal network but also networks for transportation, electricity, and telephone service. In postal services, trains and aircraft are used for long-distance transport, and trucks and buses, for short-distance transport.

In 1999, Mongolia had a total population of 2,417,000. Of this total, some 691,000, or 28.6 percent, lived in the national capital at Ulaanbaatar (UB). The pattern of population concentration in Ulaanbaatar is anticipated to deepen. In almost all of the 21 Aimags, the population density is very low at only about three persons per square kilometer. In Ulaanbaatar, use of communication means applying new technology (e.g., cellular telephones and the Internet) is increasing. In addition, ownership of automobiles is also increasing, and the number of vehicles on the road is steadily rising, especially in Ulaanbaatar.

The Mongolian economy went into stagnation following the shift to a market economy in 1990, but returned to the growth path in 1994 and has been expanding ever since. For 2000 and succeeding years as well, the government of Mongolia is forecasting real GDP growth rates in the range of 2.9 - 4.1 percent. In industrial activities, too, there is also a trend toward gravitation in Ulaanbaatar. Ulaanbaatar accounts for 46.2 percent of the country's total industrial product and 25.3 percent of the total number of employees. As such, it should continue to be the main engine of the Mongolian economy.

4. Current Status and Issues on Postal Services

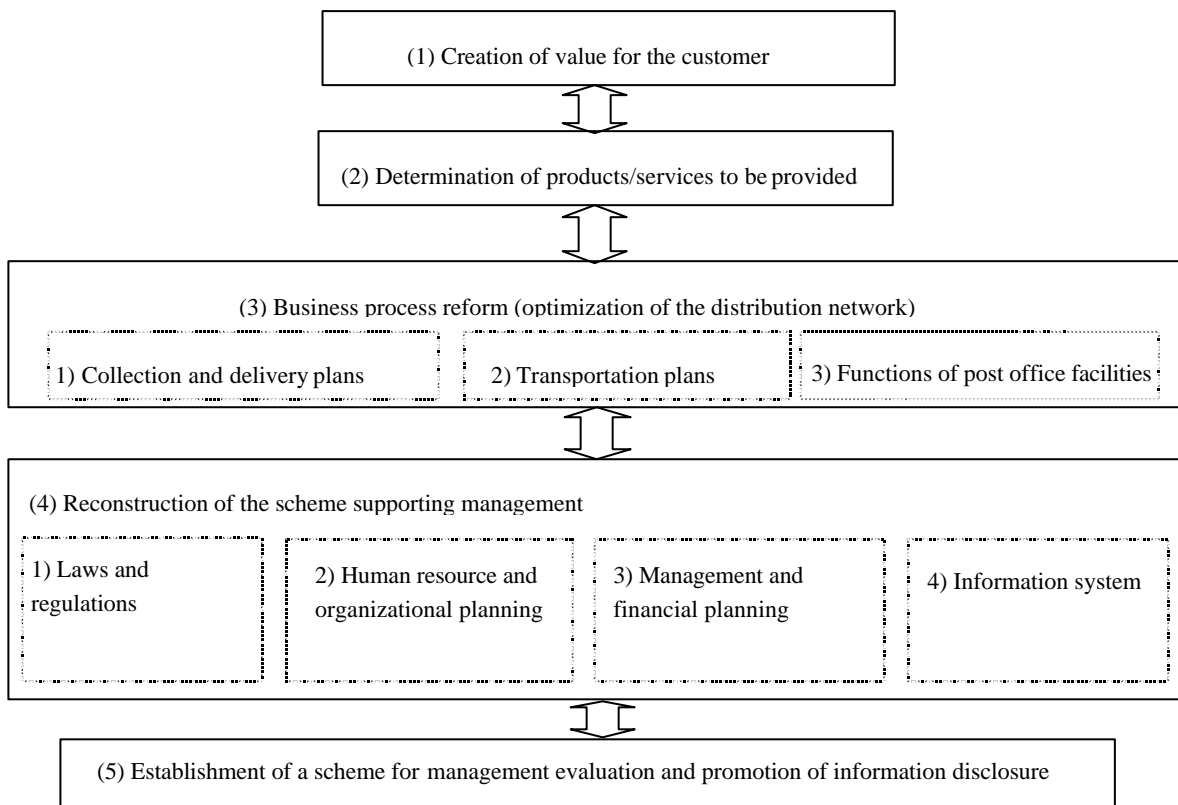
As the postal service entity in Mongolia, the MPC provides newspaper and mail delivery services and various other services through its post offices. It also provides incidental services such as passenger transport using postal vehicles. However, use of postal services is on a very low level, and it would be no exaggeration to say that the postal network is currently supported by delivery of newspapers and magazines. Postal services have fallen into a vicious cycle,

whereby use is being held down by the loss of popular confidence in them through the high postage rates and problems such as mail item loss, non-arrival, and damage. Furthermore, private carriers such as DHL have entered the market, mainly in the international parcel segment in Ulaanbaatar, and this is causing a problem of so-called "cream-skimming," since Ulaanbaatar constitutes the biggest market.

In spite of these circumstances, the MPC has posted a net surplus each year since 1998, and there was no major issue on the financial aspect. For the MPC in its capacity as the postal service supplier in Mongolia, the major tasks for the future appear to be approaches to increasing the reliability of postal services, expanding the service demand while getting an advantage in the competition with other carriers in Ulaanbaatar as the most promising market, maintenance and reinforcement of distribution and the post office network on the Aimag level, and response to new wants and needs emerging in the transition to a market economy.

5. Results of the Study

The operators of postal services in other countries rebuild their services with the creation of value for the customer as the foremost consideration. The use of postal services in Mongolia is very limited, however the MPC has an important mission as described in 3. In consideration of the situation in Mongolia as well as foreign practices, the Study Team conducted the study.



According to the extensive questionnaire surveys and face-to-face interviews of general public/consumers, companies and government/international organizations conducted in Mongolia by the Study Team, the important value desired by the customers are reliability and speed, and it is suggested that MPC must urgently improve reliability and speed of its services and simultaneously provide various products/services based on needs of customers. Needs for new services include door-to-door delivery service in Ulaanbaatar, massive volume user services, EMS (Express Mail), remittance and payment services, and various convenient services at post offices.

In addition, the Study Team conducted various field surveys in such areas as collection/delivery, transportation, organization and personnel training, and management and finance, etc. by following such analysis and issues as described in the previous section, and summarized the detailed results in the report.

6. Postal Service Improvement Plan (Master Plan)

Outlook for the postal service market is that the main market is the Ulaanbaatar city, followed by four Aimags including two cities such as Darhan and Eldenet where increase in the population is estimated. It is important for the MPC to gradually expand services in other

Aimags than Ulaanbaatar city, while carefully looking at market and risks according to items of services.

Based on the extensive field surveys, MPC must overcome the difficulties and transform the current situation to the “beneficent circle”.

Issues for MPC

Short term issues	Long term issue
<ul style="list-style-type: none"> • Establishment of reliability and speed • Gradual expansion of services 	<ul style="list-style-type: none"> • Construction of a postal system with extensibility

The master plan for improvement of the MPC must be formulated in accordance with the following three guidelines.

- (1) Provision of services that match customer needs
- (2) Establishment of a self-funding capability
- (3) Establishment of accountability

The master plan was formulated in consideration of the difference in market between Ulaanbaatar city and other Aimags as well as the priority of measures, and phased plan was prepared. The following are the description of the characteristics.

- Plans for improvement and new services are separately proposed in Ulaanbaatar and other Aimags.
- In Ulaanbaatar city, postal market should be expanded while winning competition with private companies during the year from 2001 to 2005 . In order to do that, it is necessary for MPC to establish modern new postal services called “Pigeon Mail” and gradually replace existing mail services. Other new services including remittance and payment services and post office services should be also provided in consideration of the demands while accumulating business know-how.
- The next step will be the long term from 2006 to 2010, and MPC should rapidly increase “Pigeon Mail” services and expand various services in other Aimags while in the transition to the market economy.
- MPS should maintain the postal delivery network nationwide, at least the current level of delivering to Soums once a week in minimum.

The Pigeon Mail services are the totally modern new services with such functions as door-to-door delivery, timely, convenient and high quality without lost or damage, flexible operation depending on the demands, and introduction of the private sector vitalization. Other

new services proposed include remittance and payment services which are commonly an important function of postal services, and other various post office services such as mail order, retail, business center, government entrusted services, etc.

The assumed scenario of new services and growth will change the picture of financial situations significantly. MPC require some level of investment of about 1 billion Tg in cash in 2003, which needs to be acquired through borrowing, aid or increase in equity, however future improvement of management which will be followed by the increase of profit can be expected.

7. Estimated Operation Expense

Base on the comprehensive analysis until above mentioned, the following six programs for MPC's investment are considered to be required. The total amount of investment is about 980 million Tg (Note. Items #2 and #4 are annual invest amount). In the short term, the investment is mainly for fixtures and small conveyer equipment, etc and is not so high in amount, but in the long run, investment will increase due to the rapid expansion of Pigeon Mail services and related investment for vehicles, new facilities and PCs.

(1) Program for improvement in collection, delivery, and sorting work

This investment is for conveyers, etc. which increase the reputation of MPC services by removing problems of lost, damage, etc. The amount is 74 million Tg. which is considered not large, however the consequent effect on improving reputation is expected significant.

(2) Program for investment in improvement of post delivery

In consideration of the road, geographic, and weather conditions in Mongolia, Russian jeep is assumed. As the average durable period for postal vehicle is considered seven years, 15 vehicles will be replaced each year out of total 102 vehicles in operation. The amount of investment will be 75 million Tg each year.

(3) Program for investment in management support system

About 200 PCs will be introduced for the purposes of utilizing as the management support system and as the new services such as remittance and payment services, etc. The amount of investment will be 400 million Tg.

(4) Program for training

Investment for training executives, managers and staffs will be 8.29 million Tg each year.

(5) Program for investment in mail handling facilities

In the Ulaanbaatar city, it will be necessary to cope with handling of increased mail volume in the future, and the amount of investment in such facilities will be 360 million Tg.

(6) Programs for investment in vehicles for Pigeon Mail services

In order to improve Pigeon Mail services, it will be necessary for MPC to operate 3 to 4 vehicles additionally. If assumed with light vehicle of Japanese made, the amount of

investment will be 30 million Tg.

8. Evaluation

Evaluation was made on the six programs described in the previous section, from technical, economical and social points of view. There are many problems in the current mail handling operation, and improvement of such situation as well as expansion of the market in Ulaanbaatar city is urgently necessary. Including volume user needs such as mobile phone company (to send invoices), the proposed six programs are technically feasible.

For the economic evaluation, initially, it was proposed to assess economic effect based on analysis of benefit versus cost (B/C). The MPC, while a state enterprise, is nevertheless being exposed to tough competition with private enterprises. It must maintain its profitability in order to survive as a company and continue to provide universal postal services. Therefore, the decisions on facility investment must be based on the results of economic assessments with indicators for the prospects for realizing profit and ability for reinvestment. In other words, the major determinant must be whether or not the investment will contribute to increased income and profit (and especially the latter). Six programs require investment of about 980 million Tg in amount, however, effects on improvement of reliability, demands for new services, and effectiveness of management will be totally generated.

It is essential for pushing forward the market economy that the mailing services work efficiently. In addition to the improvement of reliability and establishment of modern postal services, provision of delivery services at least to Soums minimum once a week is a base of future reinforcement of universal service in Mongolia, and taking such social benefit this master plan is efficient.

Consequently, phased implementation plan is proposed in two phases, one is the year-by-year steps until 2005, and secondly from 2006 to 2010. The phased plans were provided with careful examination of each area of new services, collection/delivery, transportation, organization, training, and finance.

9. Recommendation and Conclusion

This master plan is built consistently with plans such as improvement of services, new services, organizational setup and human resources training and financial conditions, while following the initial plan and communicating with Mongolian side.

The study team understand that the contents of this master plan has already been well understood and transferred among Mongolian side thorough series of discussions with MPC, MOI, etc. as well as technology transfer seminar, and some of the measurements has already

been initiated.

As seen in the improvement of financial conditions of MPC in the recent years, even before this master plan is provided, MPC's effort and the consequent results should be highly admired. From now, while attaching weight to financial independency, MPC especially have to improve reliability and speed of mail handling, transportation and mail collection and delivery while expanding postal market and introducing new services such as home delivery in Ulaanbaatar. Also, it is necessary for MPC to introduce new services depending on the market potential and risks by different types of services.

This master plan contains various measures which do not require much investment and are practicable in the short term within 5 years, and it is expected that MPC utilize this plan and execute such measures with its leadership. Six programs provided in the estimated operation expense will be beneficial for both short-term improvement and big jump in the long-term.

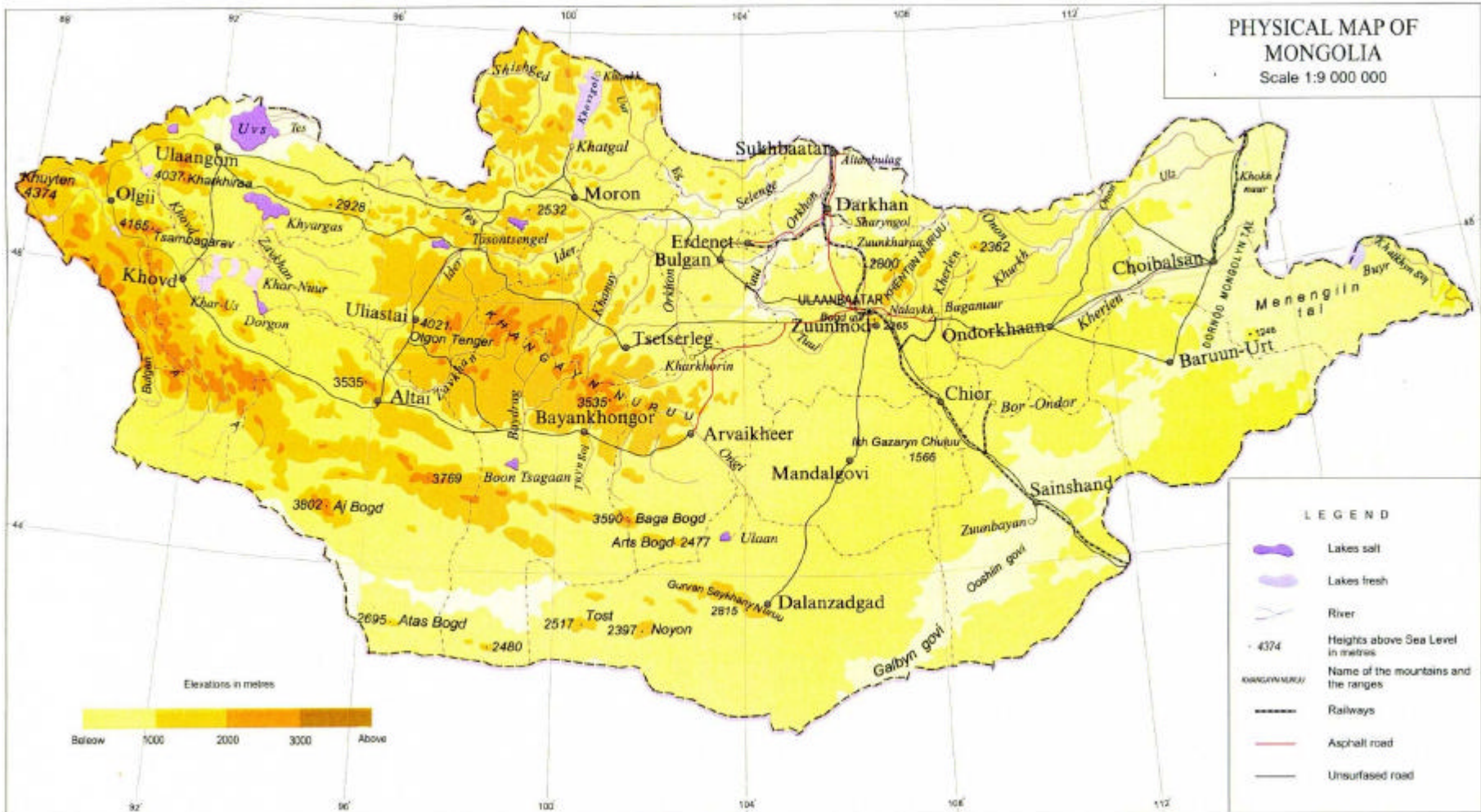
Currently, MPC deliver subscriptions and mails to Sum post offices at least once a week, and take up important mission of universal postal service in Mongolia. It is suggested that delivery to bags is within the long term issues, and never force MPC to start delivering to many bags at once, and it is necessary for the government of Mongolia and MPC to set priorities which bags to start while well examining necessary supports from the government of Mongolia. Thus, it is proposed to initiate delivery to bags gradually in good consideration of the feasibility of costs and resources, etc. of MPC. Such support from the Mongolian government, for instance, include subsidies for delivering costs, tax exemption for MPC, provision of necessary facilities for free of charge, assignment of local government personnel for delivery, etc.

Postal services and post offices have important roles and functions for the infrastructure of Mongolia and contribute to regional development. It is important that the government of Mongolia regards MPC or postal services/post offices not only as the company organization but also as the important terminal positions for the government, and use MPC more actively in order to increase social welfare and health of Mongolian citizens.

MPC will be preparing its own business plan in response to request from Mongolian government. This master plan is provided in the timely manner for such use. MPC has already initiated various actions from customer development and delivery services, to service improvement, and to information sharing among MPC staffs about good practices within MPC, while understanding necessity of service improvement by its strong leadership and role to provide traction power towards market economy in Mongolia.

MPC provides universal postal services in Mongolia while expected to be financially independent from Mongolian government, and the study team wish that the government of Mongolia through understand MPC's business and its new plan and provide all necessary support.

PHYSICAL MAP OF MONGOLIA
Scale 1:9 000 000



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ACRONYMS / ABBREVIATIONS

AB	Agricultural Bank
Aimag	Prefecture
APPTC	Asia-Pacific Postal Training Center, located in Bangkok
ATD	Auto Transport Department
Bag	County
BOM	The Bank of Mongolia
BSB	Name of a company, a wholesaler
EOJ	Embassy of Japan
GAAP	Generally Accepted Accounting Policy
GDP	Gross Domestic Product
Gers	Tents;also known as "Yurts"
GOLMT	GOLMT Bank
LETAX	Fax - mail
MIAT	Mongol Irgenii Agaaryn Teewer in Mongolia, or Mongolian Civil Air Transport in English
MOF	Ministry of Finance
MOI	Ministry of Infrastructure Mongolia
MOJ	Ministry of Justice
MPB	Mongol Post Bank
MPC	Mongol Post Company
MTZ	Mongolin Tomor Zam in Mongolia, or Mongolian Railways in English
NIC	National Petroleum Company
NOMIN	Name of a company, a consumer electronics wholesaler
OJT	On the Job Training
PDCA	Plan - Do - Check - Action
PTA	Telecommunications Authority of Mongolia
Soum	City
SPC	State Planning Commission
TDB	Trade & Development Bank
UB	Ulaanbaatar
Tg	Tugrik, Mongolian currency unit

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Chapter 1

Backgrounds

1. Backgrounds

1.1. Backgrounds

In the field of postal services, the Japanese government dispatched one expert in postal administration to Mongolia for short-term stays in each of the three years 1995, 1996, and 1997. These experts assisted human resource development, identified major problems, and noted the need for a development study of postal services.

In October 1998, the Mongolian government requested Japanese assistance with the formulation of a master plan for improvement of postal services based on the advice of these experts.

Upon receiving this request, the Japanese government sent a preliminary study mission to Mongolia in October 1999 for discussion of the S/W agreement. S/W agreement copies were signed and exchanged on 2 November, and it was consequently decided to initiate the main study for preparation of the master plan for improvement of postal services.

1.2. Outline of the JICA Study

The JICA Study commenced in earnest in March 2000. The Study Group consisted of seven members with special competence in the fields of general control/postal services, postal policy and planning, transportation planning, market surveys and planning for new services, collection and delivery planning, analysis of management and finances, and systems of human resource development and organization. Upon the collection, compilation, and analysis of available documentation as well as studies of basic policy, contents, and methodology, the Study Group prepared the inception report in late March.

The first field study was carried out in Mongolia from April to September 2000. The Study Group first examined the postal service business (including the postal service system, transportation network, market, needs for new services, and management and finances). In the survey of customer needs and degree of satisfaction, the Study Group surveyed individuals (private persons), companies, and government officials with the help of the local firm Premier International, Inc. After compiling and analyzing the results of the examination of the postal service business and the survey of customer needs and degree of satisfaction, the Study Group conferred fully with the Mongolian side in studying the orientation and possibilities for the incorporation of new services.

The interim findings of the study were compiled into an interim report presenting the current status and advisable orientation for the future. The Study Group then determined basic

guidelines for further study of plans for improvement of existing services, incorporation of new services, income and services over the years 2000 - 2010, the postal information management system, human resource development, organizational setup, etc.

In December 2000, the Study Group drafted a master plan for postal services, evaluated planning proposals, made estimates of service costs, and put together financial plans and phased service plans. Based on these plans, it then prepared the draft final report presenting the assortment of specific plans for service improvement and the estimated course of improvement (costs and schedule) in accordance with these plans.

In March 2001, the Study Group prepared the final report by making additions and revisions in line with the comments on the Mongolian side about the draft version and suggestions made by the Japan International Cooperation Agency (JICA).

Chapter 2

Objectives and Scope of Work

2. Objectives and Scope of Work

2.1.Objectives & Target Year

2.1.1. Objectives

The major objective of this study is to prepare a master plan for improvement of postal services in Mongolia. This study has two major objectives.

- (1) To formulate a master plan for the improvement of postal service.
- (2) To pursue technology transfer to counterpart personnel in the course of the Study.

2.1.2. Target Year

The investigation was conducted in accordance with the S/W and MM agreements that had been concluded, signed, and exchanged with the Mongolian government on 2 November 1999. The target (terminal) year of the master plan is 2010. Mongolia has been in the process of transition to a market economy, and it should be added that this project has been executed as a part of this transition and it was not aimed a mere improvement of physical logistics.

2.2. Contents of the Study

2.2.1. Contents of the Study

In order to improve the postal services in Mongolia, the study examined the advisable setup for postal services that would be efficient and contribute to the development of Mongolia. The project work was divided into two categories, based on the location of implementation: field studies (in Mongolia) and domestic task (in Japan).

In Mongolia, the parties in question include not only the supplier of postal services, i.e., the Mongol Post Company (MPC), but also the governmental agencies supervising and guiding the MPC and all segments of Mongolian society in the broad sense of the term. The JICA Study Team has analyzed various data provided by the MPC and other related parties. In-depth Interviews with the staff and related organizations were performed in order to confirm various data.

The following propositions was also considered.

- (1) Clarification of the division of responsibilities and mutual consultation

There was a clear division of responsibilities among experts involved in the project. These experts also fully cooperated with each other so that the works should proceed smoothly.

(2) Efficient execution in cooperation with the Mongolian side

The work of the study should be coordinated not only with the Ministry of Infrastructure (MOI) and Mongol Post Company (MPC) but also with State Property Committee and other organizations concerned. To this end, all of these parties reached agreements on and engage in dialogue about the contents of the study as necessary while cooperating with the steering committee established by mutual agreement at the stage of the pre-study.

The Team also undertook a series of extensive field trips to almost all of the Aimags around the country, in order to acquire an accurate first hand information of the overall situation of the postal system and the needs towards postal services across the country. Further more, a detailed market survey was made by conducting questionnaire surveys and focus group interviews, in order to assess the needs of the people towards postal services and the necessary improvements to the existing postal services.

2.2.2. On- site Measures

(1) Transportation and lodging

Geographically, the study covered the entire country, i.e., all parts of Mongolia. The study team members traveled by car within Ulaanbaatar and for distances of up to about 200 kilometers, and by airplane for longer distances. For automobile transport, up to two JICA cars were available for hire, but additional cars were hired from local agencies. The study team members stayed in Ulaanbaatar during studies within that city and its environs, and locations as necessary in the Aimags/Soums on field trips to such sites.

(2) Safety measures

The study team members took full consideration for management of their health before, during, and after the trip to Mongolia. In executing field studies, they communicated closely with and followed the instructions of the MOI, MPC, Embassy of Japan (EOJ) and local JICA office on matters such as road and weather conditions. They did their utmost to ensure safety.

(3) Undertaking of the Mongolian Side

The study should be done in accordance with the S/W and MM which had been agreed between the Japanese side and the Mongolian side. The Mongolian side took the necessary measures to facilitate the smooth conduct of the study as mentions in the S/W and MM.

2.2.3. Set- up for Operation

(1) Set- up for domestic operation

The concerned divisions of Nomura Research Institute, Ltd.and Padeco Co.,Ltd.made all arrangements for full back-up of the study as needed for efficient execution in a short time.

(2) Set- up for on-site operation

The energies of the steering committee was efficiently used for control of the pace of overall progress, detailing of the study, adjustment of the schedules, and over all communication among all concerned parties.

In addition, the execution included collection of extensive information from international donors which has been carried out studies of Mongolia..

2.2.4. Methodology

In order to understand the current situation of the Mongolian postal system, the team members analyzed the existing statistical and operational data that had been prepared by MPC and other parties. Due to various changes during the recent years, these data had to be cross checked, and then confirmed through an extensive series of field interviews all over the country. With the cooperation of the MPC, the team also collected various qualitative information on the work conditions and facilities.

Furthermore, a detailed market survey was made by using questionnaire surveys and focus group interviews, in order to assess the needs of the people towards postal services and identify problems in the existing postal services.

With the cooperation of the Ministry of Infrastructure (MOI) and the MPC, the Study Team also obtained documentation on laws, scope of business, licenses, and contracts in order to understand the institutional structure concerning the Mongolian postal system. The findings from these legal documents were also cross checked with the actual practice through a series of in-depth interviews with the related staffs.

The following outlines the various studies and surveys that were undertaken by the team:

2.2.5. Field Surveys: Postal Facilities Visited

(1) Ulaanbaatar

- The Central Post Office, Ulaanbaatar branch post offices (all), railway station, airport, bus terminal, business center (stamps and mail-order sales), and facilities on the outskirts of Ulaanbaatar.

(2) Aimags

- Aimag center post offices (20)
- Post offices and mail handling offices in Soum centers under the jurisdiction of Aimag centers (over 40)

2.2.6. List of Various Surveys

- Mail survey about the contents of services, work loads, operational procedures, facilities, etc. conducted with all post offices in Aimag centers and Soum centers
 - Understanding of the business and other items at each one
- Status of exchange of each type of mail between Aimags and Ulaanbaatar (statistics, interviews, etc.)
- Survey of postal service needs - questionnaire surveys
 - Questionnaire survey with general public
 - Questionnaire survey with companies (state-run and private-sector)
 - Questionnaire survey with government/international organizations
- Interview survey
 - Private interview survey - with companies and government/international organizations
 - Group interview survey - with general public

2.2.7. Basic Philosophy Behind the Team's Study

It was possible to conceive an infinite number of postal system configurations, each with their specific merits and demerits. In order to select a single configuration and a master plan, there must be a philosophy to determine what is desirable for the welfare of Mongolia as a whole. This section discusses the basic philosophy of the study and the views on various important issues that dictate the orientation of the study.

- (1) To assure the postal network as an information-communications infrastructure supporting the future economic development of Mongolia

Mongolia has been in the process of transition to a market economy. For the country's future economic development, it was of paramount importance to maintain and improve the communication infrastructure.

Postal services should provide low-cost means of communication that can readily be used by all parties, from national and local governments and companies to private citizens. The widespread provision of these services could help to support all kinds of activities in the

national life, in the cultural as well as economic spheres. In this sense, postal services have an exceedingly strong connection with the public welfare.

In countries around the world, postal services have been operated directly by the national government or as state enterprises except for some exceptions. Even in countries where privatization of posts and telecommunication services have been implemented or discussed, postal services in many cases have basically retained their position as state undertakings, albeit with some change in the form of management.

The introduction of competition through private sector participation does have an advantage of higher efficiency, responsiveness to new needs and faster innovation. However, in order to maintain universal service of postal services, i.e., nation-wide availability of uniform postal services, some level of regulation is often considered necessary to prevent the so-called "cream-skimming" by the private sector. In other words, services in the unprofitable regions (often rural areas) that the private sector may not be willing to operate in, still need to be maintained.

MPC, which is at the moment almost synonymous to the Mongolian postal system itself, has maintained delivery service with a minimum frequency of once a week to the Soum centers. Judging from the questionnaire survey results, the field surveys of Aimags, and the trends of postal service use at present, there appear to be little problem in providing this level of service. Also, there seems to be no private sector operator that are willing to extend their service to this level.

This implies that the postal network should be maintained by the MPC for the time being in order to provide a certain level of universal postal services including the rural areas. This recognition forms the basis of the study.

(2) To improve the level of "Universal Service"

The concept of universal service ultimately should mean that every single person should have their mails directly handed to themselves. It should be recognized, however, that even in Japan and other advanced countries, this is not achieved. It is considered sufficient to have mails delivered to their mail boxes at their address. Levels of universal services can and will differ depending on policies, economic conditions and customs of each country. In Mongolia, although the current condition of minimum once a week delivery service to the Soum centers may not seem to be "Universal", it is the closest thing available in Mongolia.

It should also be noted that Aimag centers and Soum centers form the backbone of the country. Bags and other smaller communities below Soums levels have entered a phase of flux in the process of the change of economic order, and are not necessarily the key elements in the

national makeup at present. Delivery to Soum centers will practically allow the postal services to be accessed by the majority of the population. Therefore, it is concluded that the postal services that must be assured as the minimum communications infrastructure are those down to the Soum centers.

The desires for an extension of services to the Bag level from the standpoint of universal service provision are understandable. However, this should be viewed as a long-term issue. The study, therefore, takes the current MPC service level as the starting point and focus on the question of how to maintain the current delivery system for the time being. Matters can proceed to the next step only after the system has been established that will enable maintenance of this minimum level into the future.

(3) To improve the position of the MPC in the national context and legislative conditioning

The importance of providing basic postal services all over the country, and also the importance of providing various new services to meet new demand is undeniable. However, the level of profitability in the rural area does not justify an operation on a purely commercial basis. In order to compensate for the low profitability in some areas, national postal systems are often granted a certain level of monopoly in mail handling by legislation.

In Mongolia, however, five private-sector firms have already been licensed for participation in postal business. These firms are mainly operating in the areas of international mail and parcels, and are more or less confined to Ulaanbaatar, which has the most needs and turns the greatest profit. They compete directly with MPC in its most profitable domain. None extends their services to the Aimag level.

Under this competition, MPC were to lose the Ulaanbaatar market, which is the pillar of its income, it would obviously be very difficult for MPC to maintain basic services in unprofitable Aimags.

This situation demands a clarification of the position of MPC in the institutional framework of Mongolia. If MPC were to continue its service in unprofitable areas, it would be necessary to provide a legal status or advantage that will make that possible.

Although it is not entirely clear-cut, the current legal position of the MPC may be paraphrased as: "The MPC is a state-owned enterprise under the supervision of the SPC and MOI, and is responsible to the government and the people for the provision of basic postal services in Mongolia". Many issues can be resolved through enforcement of the law, provided that, in the execution of their authority, the SPC and MOI establish policy to foster the development of the MPC as a public enterprise and furnish suitable guidance for the same.

This study, therefore, will focus on the advisable approach to postal services in Mongolia with the MPC uppermost in mind as a public enterprise for the time being. This is because, as

noted above, the provision of a vital national service will not be possible as a purely profit-oriented private company.

According to the license, the form of MPC management is to be changed by 2007. Whatever form of management is taken, the change must be accompanied by a conditioning of the related legislation for correspondence with this form. This applies to laws governing postal services as well as the position of the MPC as the provider of basic postal services in Mongolia.

(4) Basic consideration in operating the MPC

Although the MPC is a public enterprise, it cannot afford to act as a monopoly, since competition has already entered its market. It needs to provide services that are both efficient, competitive and meets user needs adequately. From this viewpoint, the current level of service at MPC is far from satisfactory.

To this end, the following five points can be cited as basic perspectives on operation.

- 1) The postal services must have the trust of the public.
- 2) The services must meet the national needs.
- 3) The services must be operated under a customer-first policy.
- 4) The financial foundation must be solidified to enable operation into the future.
- 5) The operation must be efficient.

This report sets forth specific orientations for improvement derived from studies grounded in these five basic perspectives.

For preparation of the master plan, the Study Team intend to view matters from a medium-to-long-term standpoint and to present specific issues and plans for both the short term and the medium- and long terms.

For short-term issues, the aim is measures that will take immediate effect and are highly workable, as far as possible.

From the experience of the members of the Study Team, the success of programs of reform depends greatly on people, and particularly the will to achieve reforms and improvements among rank-and-file personnel. For this reason as well, it is vital for plans to have a high feasibility and to produce visible results.

In their visits to post offices, the Study Team members have interviewed many post office heads. These interviews have confirmed that many heads are enthusiastic about reorganization and the development of new markets. They are actively exercising their authority to improve the performance of work, and significantly bettering their business result.

(5) To introduce new service

It is extremely important for the MPC to determine how to launch new services in addition

to the basic and conventional postal services.

This importance can be immediately explained in terms of the following two points.

- 1) As was made clear from the study of finances, the development of new services is essential for securing the basic postal services down to the Soums as the minimum level.
- 2) Response to the needs for such services in Mongolia is also vital as viewed from the standpoint of national policy.

In light of this importance, a clear business model grounded in a solid concept must be built for the new services. Success cannot be expected unless this is done.

As an initial step, the study takes up the kinds of new services noted below, which are already being offered by some post offices. It considers concepts and business models with a view to identifying the kind of model needed for their establishment as MPC services.

- 1) Door-to-door delivery
- 2) EMS
- 3) Remittance and payment
- 4) Post office services including mail-order sales

Postal savings is beyond the scope of work for the Team's mission as confirmed and agreed in the Minutes of the Meeting. It requires a much more broader study, not only from the postal service side but also from the issues of national financial policy.

As a practical consideration, however, it is true that these services are already through partnership with the Mongol Post Bank (MPB). It should be pointed out that if the MPC embarks on high-risk business and fails, it could have serious adverse consequences for the primary objective of securing basic postal services.

Risks that could jeopardize postal services should be carefully studied and researched with a view to applying a risk-free model. Until the establishment of this risk-free model, the MPC should exercise extreme caution in business concerning savings, deposits, loans, and management of funds.

(6) To improve the policy on issuance of stamps

Considering the high share of all postal service income in Mongolia occupied by issuance of stamps, it is vital to revise the policy on issuance. From the results of the study thus far, it can be inferred that the MPC does not have an exclusive right to issue stamps. The use of stamps issued by a third party means that the MPC is providing services without receiving adequate compensation in return. There are also other questionable aspects of policy on stamp issuance.

Chapter 3

Environment of Mongolia

3. Environment of Mongolia

3.1. Geographic Conditions

3.1.1. Terrain

Mongolia is a large country with a total area of about 1.56 million square kilometers. In terms of terrain, it can be divided into three major zones of terrain as well as the rivers and lakes: 1) the tableland zone in the central and western regions, 2) the desert zone in the southern and southwestern regions, and 3) the mountainous zone in the western region. The tableland zone is occupied mainly by the Aimags of Tov, Dundgovi, Ovorhangai, Selenge, and Hentii; the mountainous zone, mainly by Bayan-Olgii and Uvs in the west as well as Arhangai and Bulgan; and the desert ("govi," i.e., "Gobi") zone, by Omnogovi, Dornogovi, and Bayanhongor. The mountainous zone contains some peaks with an elevation of over 4,000 meters. The main rivers are the Orhon (which has an extended length of over 1,000 kilometers), Selenge, and Kherlen. There are also the large lakes of Uvs and Hovsgol.

The country is divided into regions defined by these zones. Studies of the postal network must bear in mind the related division of roads and other elements of the infrastructure.

3.1.2. Climate

Mongolia has a continental climate, and there is a great difference in temperature between winter and summer. The temperature gap between January and July averages 38 degrees (centigrade) and reaches 51 degrees at the maximum. Temperatures fall to minus 40 degrees in the coldest part of winter and climb above 30 degrees in the hottest part of summer.

These harsh climatic conditions cause a swift deterioration of buildings, roads, and other structures. They also mean a big difference in traffic conditions between summer and winter. A trip that can be made in a single day in summer may take two days in winter.

Table.3-1 Climate of Aimags & City

Aimags & city	Precipitation mm	Temperature	
		January	July
Arhangai	350.5	-14.9	14.3
Bayan-Olgii	115.5	-17.2	16.3
Bayanhongor	199.4	-18.3	16.2
Bulgan	344.2	-20.5	16.0
Gobi-Altai	204.1	-18.0	13.7
Dornogovi	116.7	-17.8	22.8
Dornod	247.7	-20.5	19.9
Dundgovi	156.0	-17.5	18.7
Zavhan	217.7	-22.6	15.0
Ovorhangai	245.2	-14.7	15.3
Omnogovi	127.1	-14.9	21.1
Suhbaatar	201.8	-21.5	19.9
Selenge	289.7	-23.2	19.1
Tov	272.5	-20.4	15.6
Uvs	138.4	-32.3	19.0
Hovd	127.4	-24.4	18.5
Hovsgol	236.9	-22.6	16.2
Hentii	259.4	-23.4	18.7
Ulaanbaatar	258.5	-21.8	16.9
Orhon	263.8	-16.8	15.5
Govisumber	196.5	-20.5	18.6

Source : Mongolian Statistical Yearbook 1999

3.2. Demographics and Infrastructure

3.2.1. Sparse Population Distribution

The city of Ulaanbaatar is divided into wards, which are comprised of Horoos. Outside Ulaanbaatar, the largest administrative units are the Aimags (provinces), followed in order by Soums (districts) and Bags (villages). Mongolia currently consists of 21 Aimags (including Darhan-Uul and Orhon), 343 Soums, and 1,681 Bags and Horoos. Aimags have a population in the area of 100,000. The average Soum has a population of about 1,000. Bags contain a few dozen households. Population is concentrated in the centers of the Aimags and Soums. Distances between adjacent Soum (or Aimag) centers average about 100 kilometers, and those between adjacent Bags (including Soum centers), about 40 kilometers.

The centers of population are therefore scattered here and there over Mongolia's vast land. This presents great difficulties in the construction of networks, not only for postal services, but also for transportation, electricity, and telephone service.

Table.3-2 Administrative of Aimags & City

Aimags & city	Number of soums and districts	Number of bags and horoos	Territory thous. km ²	Population density Pop./km2
Total	343	1,681	1,564.2	1.55
Arhangai	19	99	55.3	1.89
Bayan-Olgii	14	81	45.7	2.19
Bayanhongor	20	98	116.0	0.80
Bulgan	16	69	48.7	1.38
Gobi-Altai	18	83	141.4	0.52
Dornogovi	14	57	109.5	0.46
Dornod	14	58	123.6	0.68
Dundgovi	16	73	74.7	0.73
Zavhan	24	113	82.5	1.26
Ovorhangai	19	109	62.9	1.88
Omnogovi	15	54	165.4	0.28
Suhbaatar	13	63	82.3	0.73
Selenge	17	51	41.2	2.63
Tov	27	111	74.0	1.51
Uvs	20	95	69.6	1.41
Hovd	17	84	76.1	0.85
Hovsgol	23	125	100.6	1.24
Hentii	19	90	80.3	0.98
Darhan-Uul	4	24	3.3	29.21
Ulaanbaatar	9	117	4.7	147.02
Orhon	2	17	0.8	88.45
Govisumber	3	10	5.5	2.40

Source : Mongolian Statistical Yearbook 1999

Table.3-3 Distance Between Aimags & Ulaanbaatar

PROVINCES	Aimag	ARTS Aent Gs Aerlig	BOYAGNI OLGIL	BYAYANAGNONOR	BULGAGAN	GOBLITAI	GOVHOLIMBER	DARHANUL	DORANONOHAND	DORRNOIDALAN	DUMANDGOL	ZAVHAN	ORHON	OVORHANGAI	OMNOGOBI	SUHBAATAR	SELENGE	HOVD	HOVSGOL	HENTII	TOV	UVS	Ulaanbaatar	
ARHANGAI	Testserleg																							430
BAYAN OLGII	Olgii	1220																						1636
BAYANHONGOR	Bayanhongor	214	1006																					630
BULGAN	Bulgan	289	1334	503																				318
GOBI-ALTAI	Altai		635	371	874																			1001
GOVISUMBER	Choir	630	1644	638	456	1009																		238
DARHAN-UUL	Darhan	537	1582	751	248	1122	457																	219
DORNOGOBI	Sainshand	855	1869	863	781	1234	225	682																463
DORNOD	Choibalsan	1108	2291	1285	973	1656	439	874	531															655
DUNDGOBI	Mandalgovi	500	1314	508		879	186	479	355	741														260
ZAVHAN	Ulaistai	531		459	807	195	1153	989	1322	1639	967													984
ORHON	Erdenet	357	1402	571	68	942	609	180	834	1026	631	809												371
OVORHANGAI	Arviheer	266	1206	200	348	571	494	596	663	1085	308	659	416											430
OMNOGOBI	Dalanzadgad	643	1583	577	725	948	479	772	516	1074	293	1036	793	377										553
SUHBAATAR	Baruun-Urt	1013			878		462	779	340	191	613	1544	931	990	856									560
SELENGE	Suhbaatar	629		843	340	1214	549	92	774	966	571	1147	272	688	864	871								311
HOVD	Hovd		211	795		424	1489	1519	1658	2080	1303	465	1339	995	1372		1612							1425
HOVSGOL	Moron	413	981	617	353	583	909	601	1134	1326	913	388	421	679	1056	1231	693	853						671
HENTII	Ondorhaan	784	1967	961	649	1332	233	550	302	324	417	1315	702	761	710	229	642	1756	1002					331
TOV	Zuunmod	496	1591	585	361	956	224	262	449	661	225	1027	414	385	518	536	354	1380	714	337				43
UVS	Ulaanoom	883	301	988	1033	662	1569	1281	1738	991	1383	529	1101	1188	1585	1896	1373	238	680	1667	1379			1336
Ulaanbaatar	Ulaanbaatar	430	1636	630	318	1001	238	219	463	655	260	984	371	430	553	560	311	1425	671	331	43	1336		

Source: Road Map of Mongolia (Cartographic Enterprise of the State Adm. of Geodesy Cartography)

3.2.2. Transportation Infrastructure

The major means of transportation in Mongolia are railways, automobiles, and airplanes. There is also some water transport. Freight transport is increasing in terms of ton-kilometers but remains on the same level in terms of tons only. Similarly, passenger transport is increasing in terms of passenger-kilometers but has leveled off in terms of the number of passengers only. The preferred means are trains and airplanes for long distances and automobiles (trucks and buses) for short distances. Per capita annual volumes for passenger transport and freight are 36.2 trips and 3.9 tons respectively. These figures appear considerably low when compared to the corresponding volumes of 671.3 trips and 53.0 tons in Japan.

Table.3-4 Main Indicators of Transport

	1990	1995	1996	1997	1998	1999
Freight turnover, mln t. km						
Total	6,971.6	2,437.1	2,685.4	2,686.1	2,946.1	3,623.3
Railway	5,087.8	2,279.5	2,528.6	2,554.2	2,815.3	3,491.7
Road	1,870.9	152.9	152.4	125.4	123.0	123.2
Air	8.0	4.5	4.3	6.3	7.7	8.2
Water transport	4.9	0.2	0.1	0.2	0.1	0.2
Carried freight turnover, thous. tonnes						
Total	54,038.5	8,950.8	9,451.8	8,436.5	8,867.3	9,534.0
Railway	14,517.1	7,298.0	7,466.0	7,309.7	7,615.1	8,199.3
Road	39,438.9	1,648.5	1,982.0	1,121.4	1,247.4	1,330.4
Air	10.9	2.7	2.7	3.8	3.5	2.8
Water transport	71.6	1.6	1.1	1.6	1.3	1.5
Passenger turnover, mln pass. km						
Total	2,056.1	1,424.2	1,541.1	1,725.7	1,789.7	1,800.7
Railway	570.1	679.7	733.4	950.6	981.3	1,009.6
Road	914.6	424.3	425.1	331.7	339.9	358.4
Air	571.4	320.2	382.6	443.4	468.5	432.7
Carried passenger turnover, mln pass.						
Total	232.2	110.3	109.1	80.8	81.5	87.6
Railway	2.6	2.9	3.0	3.7	3.9	4.1
Road	228.8	107.2	105.9	76.8	77.3	83.3
Air	0.8	0.2	0.2	0.3	0.3	0.2
Freight turnover / Carried freight turnover, km						
Total	129.0	272.3	284.1	318.4	332.2	380.0
Railway	350.5	312.3	338.7	349.4	369.7	425.9
Road	47.4	92.8	76.9	111.8	98.6	92.6
Air	733.9	1,666.7	1,592.6	1,657.9	2,200.0	2,928.6
Water transport	68.4	125.0	90.9	125.0	76.9	133.3
Passenger turnover / Carried passenger turnover, km						
Total	8.9	12.9	14.1	21.4	22.0	20.6
Railway	219.3	234.4	244.5	256.9	251.6	246.2
Road	4.0	4.0	4.0	4.3	4.4	4.3
Air	714.3	1,601.0	1,913.0	1,478.0	1,561.7	2,163.5

Source : Mongolian Statistical Yearbook 1999

The underdeveloped state of the transportation infrastructure is largely responsible for this situation. According to data for the period 1997 - 1999, the total extended length of railways in Mongolia stayed at 1,815 kilometers over these years; no new sections were added. The main rail line runs from Russia in the north to China in the south and passes through the cities of Darhan, Ulaanbaatar, and Sainshand. Per square kilometer, the extended length of railways amounts to 1.2 meters, as compared to about 72.1 meters in Japan. The extended length of roads has been increasingly slightly but has basically remained on the same level. There have been almost no new road construction projects. The extended length per square kilometer is also on a very low level at about 2.2 meters, as compared to about 3,049.5 meters for Japan. Furthermore, the rate of paved roads is fairly low, and funding shortages in recent years have prevented adequate maintenance. As a result, many roads have problems with ruts, potholes, and loss of the asphalt cover in patches.

The country's expansive size increases the amount of spending required for the transportation infrastructure, and construction (improvement and expansion) is lagging as a result. One of the key questions is how to make the most effective use of this limited transportation network in building the postal network.

Table.3-5 Extension of Railways and Roads per Square Kilometer

(Unit: m/km²)

	Extended length of railways per km ²	Extended length of roads per km ²	Extended length of auto roads per km ²
Mongol	1.2	2.2	1.0
China	6.0	127.6	-
Korea	31.4	855.9	-
India	19.1	1,000.5	-
Australia	4.7	103.8	-
Japan	72.1	3,049.5	2,285.5

Source : Prepared by the JICA Study Team from data from Mongolian Statistical Yearbook 1999 and other sources

3.2.3. Ulaanbaatar

In 1999, Mongolia had a population of 2.417 million. Of this total, some 691,000, or 28.6 percent, lived in Ulaanbaatar, the national capital. Ulaanbaatar's share of the national population has been rising, and this indicates a continuing gravitation into it. In almost all

Aimags except Ulaanbaatar, Darhan-Uul, and Orhon, the net social change derived from the number of births and deaths is one of decrease, and there is a significant social shift toward Ulaanbaatar.

As a result, the relative position of the Aimags is declining in spite of the fact that population is rising in almost all of them due to an increase in the number of births. In Zavhan and Uvs, population has declined for three consecutive years.

3.2.4. Rural Areas

As indicated by the data in Table 3-6, all Aimags other than Ulaanbaatar, Darhan-Uul, and Orhon have a population density of less than three persons per square kilometer. They therefore have only a scant potential as markets. As of 1999, in all Aimags other than Darhan-Uul, Orhon, and Govisumber, the share of the total population occupied by the Aimag center (i.e., its major city) averaged 25.2 percent. In other words, the Soums and Bags outside the Aimag centers are even less populated and make very limited markets.

Table.3-6 Population of Aimags and Capital City

Aimags and capital city	thous.persons						
	1989	1990	1995	1996	1997	1998	1999
Total	2,017.4	2,103.3	2,312.8	2,347.1	2,379.6	2,413.0	2,416.7
Arhangai	87.0	89.2	103.0	104.0	103.6	103.7	104.3
Bayan-Olgii	93.5	99.2	90.1	91.6	94.1	96.2	100.0
Bayanhongor	76.7	78.6	89.5	90.5	90.9	91.6	92.3
Bulgan	53.3	56.7	63.3	64.1	65.2	66.1	67.3
Gobi-Altai	64.5	65.1	74.1	74.8	75.2	74.9	74.1
Dornogovi	57.6	57.6	48.2	48.8	49.4	49.9	50.5
Dornod	76.1	76.6	84.6	85.5	83.7	84.3	84.5
Dundgovi	50.6	51.9	52.7	53.4	53.9	54.4	54.8
Zavhan	90.9	93.5	105.8	106.5	106.4	105.0	104.0
Ovorhangai	99.3	100.3	112.9	113.8	115.6	116.9	118.4
Omnogovi	43.5	43.6	44.8	45.5	45.7	46.2	46.3
Suhbaatar	52.3	53.5	59.1	59.5	59.8	59.7	59.7
Selenge	88.6	91.2	102.9	104.3	105.5	107.0	108.5
Tov	102.8	105.8	110.9	112.3	113.8	113.7	111.9
Uvs	56.2	91.5	101.9	102.9	101.8	100.5	98.4
Hovd	78.4	80.8	90.4	91.8	93.0	93.0	64.5
Hovsgol	104.4	106.6	120.1	121.3	122.7	123.6	124.5
Hentii	72.3	74.2	75.2	76.3	77.3	77.7	78.3
Darhan-Uul	81.4	82.2	89.4	90.9	92.5	94.2	95.8
Ulaanbaatar	540.6	555.2	616.9	629.2	645.6	668.8	691.0
Orhon	47.4	50.0	64.6	67.3	70.8	72.5	74.3
Govisumber	-	-	12.4	12.8	13.1	13.1	13.3

Source : Mongolian Statistical Yearbook 1999

3.2.5. Methods of Communication

In Mongolia, use of means of communication applying the latest technology, such as cellular telephones and the Internet, is spreading, especially in Ulaanbaatar. According to MobiCom Corporation, the major cell phone firm, the number of subscribers has steadily increased since its establishment in March 1996 and now tops 35,000. Cell phone services are available in the areas of Ulaanbaatar, Darhan, Erdenet, Suhbaatar, and Nalaikh. The company is planning to expand its network along the national railways for the time being, and to extend services to the Aimag centers (and to the Terelj in the Ulaanbaatar area) from five to ten years in the future. It does not recognize any market potential in other areas. In other words, provision of cell phone services will basically be confined to areas with a relatively high concentration of population, and it will take longer for it to extend down to the level of Soums and Bags outside Aimag centers. In addition, use is limited to those with a certain level of income.

Subscription to ordinary (cable) telephone service has been steadily increasing since 1995. The average annual increase rate has been high, on the order of 10 percent, in Ulaanbaatar, but only a few percent in the Aimags. As of 1999, some 62.5 percent of all cable telephones in Mongolia were installed in Ulaanbaatar. Per thousand of population, the installation volume averages about 94 in Ulaanbaatar and only about 19 in the Aimags.

Table.3-7 Number of Telephones

Aimags and capital city	1990	1995	1996	1997	1998	1999
Total	66,357	75,481	82,121	86,754	93,801	104,101
Ulaanbaatar	31,890	45,100	49,846	51,147	56,412	65,103
Darhan-Uul	3,425	3,840	3,869	4,270	4,585	5,022
Orhon	2,396	2,338	2,535	3,500	4,421	5,160
another Aimags	28,646	24,203	25,871	27,837	28,383	28,816

Source : Mongolian Statistical Yearbook 1999

Table.3-8 Number of Telephones (Thous. POP.)

Aimags and capital city	1990	1995	1996	1997	1998	1999
Total	31.5	32.6	35.0	36.5	38.9	43.1
Ulaanbaatar	57.4	73.1	79.2	79.2	84.3	94.2
Darhan-Uul	41.7	43.0	42.6	46.2	48.7	52.4
Orhon	47.9	36.2	37.7	49.4	61.0	69.4
another Aimags	20.2	15.7	16.6	17.7	18.0	18.5

Source : Mongolian Statistical Yearbook 1999

There is a similar trend for radio outlets as means of one-way communication. The total number has stayed on roughly the same level since 1995. Per thousand of population, the volume averages about 130 in Ulaanbaatar but only about 30 in the Aimags.

3.2.6. Motorization

Mongolia is rapidly becoming more motorized; the total number of vehicles on the road is increasing. By type of vehicle, the biggest increase is in the category of passenger cars. The number of personal-use vehicles is also swiftly rising. These trends indicate the progress of motorization on the popular level.

As a site of ownership, Ulaanbaatar accounts for about 60 percent of the passenger cars, 70 percent of the buses, and 50 percent of the total number of vehicles. It can be seen that the Ulaanbaatar area is leading the motorization.

Table.3 -9 Number of Vehicles by Type

		1990	1995	1996	1997	1998	1999
Total		43,792	56,428	65,020	70,088	71,490	74,840
of which	passenger automobile	7,962	23,975	30,001	35,578	37,795	39,921
	truck	24,400	25,198	26,877	26,473	25,473	25,049
	bus	2,591	2,790	3,784	3,982	4,579	6,012
	tank car	4,754	2,258	2,146	1,868	1,678	1,615
	special purpose	4,085	2,207	2,212	2,187	1,965	2,243
personal		6,660	26,785	35,449	43,291	46,082	50,810

Source : Mongolian Statistical Yearbook 1999

3.3. Industry and the Economy

3.3.1. The Transition to a Market Economy

Since 1990, the Mongolian Economy had suffered significantly during its transition to a market economy. The situation since then improved somewhat, and the Mongolian economy finally showed some growth starting from 1994. The Mongolian government expects this expansion to continue, and is predicting real GDP growth in the range of 2.9 - 4.1 percent even after 2000.

Table.3-10 Main Economic and Social Development Indicators

Indicators	1993	1994	1995	1996	1997	1998	1999*	2000	2001	2002	2003	2004
Economic Development Targets												
GDP growth	-3	2.3	6.3	2.4	4.0	3.5	2.5	4.2	4.4	5.1	5.9	5.4
industry	-6.4	1.7	17.4	-2.0	4.4	3.2	1.0	2.1	3.4	4.4	5.3	4.4
agriculture	-2.7	2.7	9.5	4.7	4.8	3.1	3.4	3.5	3.0	3.2	3.7	4.0
GDP growth per capita /constant price/ As % of GDP	-5.1	0.8	4.7	0.8	2.6	2.1	2.1	2.5	2.9	3.3	4.1	3.9
Consumption	87.6	88.7	78.2	80.1	77.8	78.1	74.7	76.2	76.0	74.1	73.1	72.3
Private	61.0	60.4	63.0	63.7	60.6	60.4	59.0	60.2	61.7	61.1	60.8	60.0
Public/Government	26.6	28.3	15.1	16.4	17.2	17.8	15.8	16.0	14.3	13.0	12.3	12.3
Investment	25.7	22.0	21.3	23.1	23.8	24.0	24.2	24.0	24.1	23.9	24.9	25.0
CPI	183.0	66.2	53.3	44.6	20.5	6.0	9.7	13.6	7.5	5.5	5.0	5.0
CPI average			56.9	46.9	36.4	9.5	7.6	13.6	9.1	5.8	5.3	5.1
Net International Reserves	25.23	37.18	70.65	56.8	90.0	80.3	96.7	95	106	110	115.5	125
equivalent of weeks imports				5.8	9.3	7.6	9.7	9.1	10	10.1	10.4	11.2
Unemployment rate	8.5	8.7	5.4	6.5	7.5	5.8	5.3	5	5.1	5.1	5.1	5.1
Policy indicators												
Budget (as % of GDP)												
Total revenues and Grants	34.7	31.0	33.7	27.8	29.3	27.4	26.4	27.8	24.1	22.2	23.0	23.5
Current revenues	32.9	29.6	31.6	26.6	27.1	24.8	24.2	26.2	22.8	21.0	22.0	22.5
Tax Revenues	31.7	24.4	24.6	20.6	21.6	17.6	18.6	20.4	17.9	16.4	17.3	17.8
Capital revenues												
Total expenditures and Net Lending	52.5	44.2	40.4	36.0	37.9	39.1	38.7	36.8	36.6	29.9	28.2	27.7
Current expenditures	27.0	26.4	23.7	22.1	25.4	25.4	23.9	24.2	21.6	19.6	18.3	18.3
Capital expenditures and Net Lending	25.5	17.9	16.7	13.9	12.5	13.7	14.8	12.6	14.9	10.3	9.9	9.4
Current balance	5.9	3.2	8.0	4.5	1.8	-0.6	0.3	1.9	1.2	1.4	3.7	4.2
Overall balance	-17.7	-13.3	-6.7	-8.2	-8.6	-11.7	-12.3	-9.1	-12.5	-7.7	-5.2	-4.2
Financing	17.7	13.3	6.7	8.2	8.6	11.7	12.3	9.1	12.5	7.7	5.2	4.2
Foreign (net)	13.4	8.5	5.6	6.0	12.2	7.8	12.2	7.9	10.9	6.4	7.1	5.5
Domestic (net)	4.3	4.8	1.1	2.2	-3.6	3.8	0.1	1.1	1.5	1.3	-1.9	-1.3
Money (in comparison to previous year)												
Cash in circulation	272.4	102.2	36.5	54.9	23.3	8.7	27.2	14.5	13.5	12.0	15.0	10.0
M1	142.8	77.2	29.7	50.8	18.4	8.5	10.3	15.0	13.5	12.0	15.0	10.0
M2	227.6	79.5	32.9	25.8	32.5	-1.7	10.9	15.1	13.5	12.0	15.0	10.0
Change in Domestic Net Assets	69.6	91.6	18.1	1.9	-41.6	117.4	25.4	25.7	13.2	5.0	22.1	0.0
Change in Domestic Loan	53.1	100.8	-7.5	98.2	-24.9	101.0	26.6	18.7	11.1	6.6	17.2	0.0
Change in Manufacturing Loan	65.4	67.7	18.3	12.1	-22.8	74.2	25.1	27.2	17.7	11.3	23.6	0.0
Velocity	3.9	3.7	4.2	4.6	4.5	5.2	5.5	5.4	5.3	5.3	5.2	5.2
growth / change %	7.6	-5.0	14.1	8.6	-2.4	17.3	4.3	-0.5	-2.4	0.0	-2.5	0.7
Exchange rate /\$1/		4.4	14.4	46.4	17.3	10.9	19.7	5.6	-1.4	4.0	2.6	5.0
Balance of Payment, million US\$												
Trade balance	-8.7	-7.9	48.5	-35.0	53.4	-88.6	-45.0	-35.7	-24.0	-18.1	-15.3	-12.5
Exports	365.8	367.0	537.4	475.8	556.5	462.4	475.0	504.3	528.0	547.9	563.7	567.5
growth, %			46.4	-11.5	17.0	-16.9	2.7	6.2	4.7	3.8	2.9	0.7
Imports	-374.5	-374.9	-488.9	-510.8	-503.1	-551.0	-520.0	-540.0	-552.0	-566.0	-579.0	-580.0
growth, %			30.4	4.5	-1.5	9.5	-5.6	3.8	2.2	2.5	2.3	0.2
Foreign Transfers	71.1	74.6	76.3	64.2	63.0	50.9	42.5	31.5	30.5	27.0	27.0	27.0
Official	71.0	77.6	79.1	64.8	58.8	48.4	40.0	29.0	28.5	25.0	25.0	25.0
Individual	0.1	-3	-2.8	-0.6	4.2	2.5	2.5	2.5	2.0	2.0	2.0	2.0
Current trade balance/excluding official transfers/ Capital and financial accounts balance	-39.9	-40.3	-11.0	-43.2	-37.0	-95.3	-53.7	-48.3	-40.6	-32.2	-30.4	-16.2
Population and labor force												
Population average(thous.person)	2,224.8	2,259.0	2,293.7	2,329.9	2,363.3	2,396.3	2,430.5	2,466.4	2,503.8	2,543.1	2,583.8	2,625.1
growth, %	2.2	1.5	1.5	1.6	1.4	1.4	1.4	1.5	1.5	1.6	1.6	1.6
Labor force	1,037.9	1,050.4	1,084.4	1,120.4	1,213.0	1,253.9	1,293.0	1,334.3	1,379.6	1,426.5	1,476.4	1,529.5
Economically active population	844.7	861.4	839.8	847.2	852.0	859.3	915.3	944.1	973.2	997.4	1,022.1	1,047.4
Employees	772.8	786.6	794.7	791.8	788.3	809.5	866.5	896.6	923.1	946.2	970.0	994.2
Unemployed	71.9	74.8	45.1	55.4	63.7	49.8	48.8	47.5	50.1	51.2	52.1	53.2
Basic indicators												
GDP in current price / billion tugs /	166.2	283.3	429.2	586.5	758.9	875.9	1,012.8	1,160.1	1,285.1	1,439.1	1,614.3	1,788.3
GDP per capita /thousand tugs/	75.0	125.0	187.0	252.0	321.0	366.0	417.0	470.0	513.0	566.0	625.0	681.0
GDP per capita (constant price)	75.0	75.0	79.0	79.0	81.0	83.0	85.0	87.0	90.0	93.0	96.0	100.0
GDP deflator growth	262.3	66.6	42.5	33.5	24.4	11.5	11.7	10.1	6.1	6.7	6.1	5.0
Interest payments, as % of GDP		4.6	5.3	4.4	3.1	1.6	3.6	2.4	2.5	2.6	2.5	2.6
Foreign Debt (million US\$)		423.5	493.7	525.4	590.9	673.1	790.2	888.2	1,021.6	1,095.4	1,130.5	1,170.0
Foreign debt/GDP, %		61.3	51.7	50.0	61.8	64.8	80.4	84.7	90.1	87.3	81.4	79.5
GDP (million US\$)		691.0	954.3	1,051.4	956.1	1,038.0	983.0	1,048.7	1,134.2	1,254.1	1,388.7	1,471.9

Source : Ministry of Finance

3.3.2. Industrial Agglomeration in Ulaanbaatar

Ulaanbaatar accounts for 46.2 percent of Mongolia's entire industrial output. Ulaanbaatar's share of industrial production is therefore even higher than its share of population. The Ulaanbaatar area is expected to continue functioning as the engine of the Mongolian economy. The disparity between it and Aimags will probably widen. In some cases, banks and other such enterprises have closed offices outside Ulaanbaatar. The future course of provincial economies and the postal market is consequently an issue of extreme importance.

The industrial output in Mongolia can be divided into mining, electricity & thermal energy, and manufacturing. The trends from 1995 to 1999 are that Mining increased by about 150%, electricity & thermal energy stayed almost stable, and manufacturing decreased slightly.

Table.3-11 Industrial Output

Aimags & City	1989	1990	1995	1996	1997	1998	1999
Ulaanbaatar	4,669.4	4,700.8	112,843.2	136,662.1	191,436.1	206,316.9	222,336.9
Darhan-Ul	903.1	816.9	15,679.4	19,121.1	17,772.3	17,289.9	16,324.8
Orhon	1,097.0	1,127.2	124,425.5	108,085.1	164,777.3	124,935.2	145,819.4
Other Aimags	1,662.1	1,780.3	43,808.2	50,554.5	84,736.7	91,412.5	96,542.2
Total	8,331.6	8,425.2	296,756.3	314,422.8	458,722.4	439,954.5	481,023.3

Source : Mongolian Statistical Yearbook 1999

3.3.3. Rural Area: High Unemployment

Like population, employment is concentrated in Ulaanbaatar; it had the lion's share of the total number of employed at 25.3 percent in 1999. Considering its 46.2-percent share of the industrial product, its labor productivity per worker is also high. This suggests a growing gap between Ulaanbaatar and the Aimags in the aspects of income and standard of living as well.

Employment opportunities also seem to be more plentiful in Ulaanbaatar than in the Aimags. The number of unemployed as percentage of the labor population is on the order of 5 percent in the Aimags as compared to 2.9 percent in Ulaanbaatar.

Table.3-12 Employed Labor Force

	thous.persons					
Aimags & city	1994	1995	1996	1997	1998	1999
Total	786.5	794.7	791.8	788.3	809.5	830.0
Arhangai	38.7	38.9	39.5	37.3	37.3	38.1
Bayan-Olgii	23.2	23.4	23.2	23.4	29.2	30.9
Bayanhongor	31.5	35.1	33.5	34.1	35.1	34.2
Bulgan	25.0	24.3	23.2	21.3	22.7	22.7
Gobi-Altai	26.4	26.9	29.0	29.5	30.4	30.0
Dornogovi	16.5	16.8	15.5	16.8	16.2	17.2
Dornod	22.9	22.5	18.1	18.2	15.2	17.0
Dundgovi	21.0	22.1	21.6	21.7	22.0	22.1
Zavhan	41.4	42.8	43.7	43.5	42.0	41.7
Ovorhangai	41.8	43.4	43.0	46.0	47.2	49.5
Omngovi	15.5	16.4	16.5	16.8	18.9	20.0
Suhbaatar	21.7	20.6	21.7	20.5	21.3	21.7
Selenge	28.9	26.1	25.4	26.3	28.8	31.8
Tov	34.1	34.4	35.5	33.7	35.4	35.8
Uvs	33.4	35.2	34.8	33.5	34.5	31.3
Hovd	32.9	32.7	36.4	31.4	32.5	32.8
Hovsgol	40.5	42.1	41.9	42.4	44.0	46.6
Hentii	24.1	25.9	25.1	22.7	22.6	22.9
Darhan-Uul	25.7	29.1	28.5	25.3	25.3	27.2
Ulaanbaatar	194.4	186.7	182.6	192.0	201.7	209.8
Orhon	16.8	19.3	28.1	26.3	26.7	26.7
Govisumber	2.9	3.0	2.7	2.6	3.4	3.5

Source : Mongolian Statistical Yearbook 1999

3.3.4. Need for Safe and Reliable Mode of Communication

The economic recovery since the mid 1990s has caused increased needs for postal services. In Japan, about 80 percent of the entire mail volume are occupied by business related mail. This category includes bills, tax statements, and other financial documents, and information-related items such as direct mails. There is a strong possibility that such needs will emerge in Mongolia, too.

In interviews, companies pointed out a problem with tardiness in retrieval of payments for telephone, heat, and light bills. MobiCom indicated that it was paying to send bills by registered mail. If bills are sent by fax, some customers claim that they were out of fax paper and did not receive them. And even if the bills are received by fax, customers have to go to MobilCom to pick up the original. Considering this kind of trouble and bother, interviewees noted that mail would be very effective by comparison.

As such, postal services should assume increasing importance as part of the social infrastructure supporting economic activities in Mongolia, and are expected to function as low-cost yet safe means of communication.