Global Assessment Report

National Statistical System of Mongolia

August 2014

Table of content

Preface **4**
Executive Summary **5**
1. Legal Basis **18**
1.1 Law on Statistics of Mongolia 18
1.1.1 Background 18
1.1.2 Structure and scope of the Law on Statistics of Mongolia 19
1.1.3 Professional independence 25
1.1.4 Confidentiality 25
1.1.5 Mandate for data collection and obligation for respondents 26
1.1.6 Assessment and recommendations: 28
1.2 Census-related legislation 31
1.3 Other legislation affecting statistics 36
2. National Statistical System (NSS) **38**
2.1 Definition and delineation of the National Statistical System 38
2.2 National statistical programming and coordination mechanism 39
2.2.1 Coordination mechanisms 39
2.2.2 The multi-year and annual statistical programmes 41
2.2.3 The Council of NSOM 43
2.2.4 Assessment and recommendations 44
3. Statistics Authority of Mongolia (SAM) **47**
3.1 Structure and organisation of the Statistics Authority of Mongolia 47
3.1.1 Overview 47
3.1.2 Central Statistics Authority: National Statistical Office of Mongolia 48
3.1.3 Territorial Statistics Authority 51
3.1.4 Assessment and recommendations 52
3.2 Resources and infrastructure 53
3.2.1 Finance 53
3.2.2 Information and communication technologies 56
3.2.3 Staff, recruitment and training 57
3.3 Dissemination policy of NSOM 62
3.3.1 Legal framework, policies and principles governing dissemination of official statistics 62
3.3.2 Official statistics dissemination tools and procedures 63
3.3.3 Assessment 65
3.4 Communication, relations with users and stakeholders 66
3.5 International cooperation 68
4. Data Sources and Processing, Registers and Quality Monitoring **71**

4.1 Overview 71
4.2 Social and demographic statistics 75
4.2.1 Population and Household Register, Vital Register and the Census 75
4.2.2 Household Surveys 78
4.2.3 Classifications and nomenclatures 81
4.3 Economic and business statistics 82
4.3.1 Statistical business registers and censuses 82
4.3.2 Business surveys 85
4.4 Agricultural statistics 87
5. Statistical Domains 89
5.1 Social and demographic statistics 89
5.1.1 Demographic statistics 89
5.1.2 Gender statistics 90
5.1.3 Living Standards Statistics 90
5.1.4 Labour market statistics 92
5.1.5 Education and culture statistics 93
5.1.6 Public health statistics 95
5.1.7 Disability Statistics 97
5.1.8 Social protection statistics 98
5.1.9 Crime statistics 98
5.2 Macroeconomic statistics 99
5.2.1 National accounts 99
5.2.2 External trade statistics 105
5.2.3 Government Finance Statistics 107
5.2.4 Balance of payments statistics 110
5.2.5 Price statistics 114
5.3 Business statistics 118
5.3.1 Overview and definitions 118
5.3.2 Short-term business statistics (STS) 119
5.3.3 Structural business statistics (SBS) 125
5.4 Multi-domain statistics 128
5.4.1 Statistics on information and communication technologies (ICT) 128
5.4.2 Energy and environment statistics 129
Annex 1: Law on Statistics 131
Annex 2: Mongolia Statistics Code of Practice 146
Annex 3: Producers of Official Statistics and data providers 153
Annex 4: List of abbreviations and acronyms 166
Annex 5: People met during the 2 assessment missions 170

PREFACE

The Global Assessment (GA or the Assessment) of the National Statistical System of Mongolia was jointly undertaken by the European Free Trade Association (EFTA), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Economic Commission for Europe (ECE). The assessment process was initiated in response to a request by the National Statistical Office of Mongolia (NSOM) to the ECE Statistical Division.

The Assessment is based on an extensive review performed during two assessment missions, with the objective to describe and analyse institutional and organisational aspects of the National Statistical System (NSS), including the compliance of Mongolian official statistics with international and European standards, norms and recommendations. These encompass the United Nations Fundamental Principles of Official Statistics (UN-FPs) and relevant provisions of the European Statistics Code of Practice (ES-CoP).

The first mission took place during 30 September - 4 October 2013 and the second mission during 20-24 January 2014. The assessment team included Mr. Olav Ljones, Deputy Director General of Statistics Norway; Mr. Kurt Wass, Deputy Director of the EFTA Statistical Office; Ms Rikke Munk Hansen and Ms Zeynep Orhun, respectively Chief of the Economic and Environment Statistics Section and Statistician at the ESCAP Statistics Division; and Mr Gabriel Gamez, ECE Regional Adviser in Statistics (leading expert).

The missions to Ulaanbaatar included sessions with staff members of NSOM and territorial statistical offices as well as with experts from relevant ministries, the National Bank of Mongolia, members of the Parliament and other national and international stakeholders (see annex 5). NSOM completed a detailed guidance questionnaire, which was made available before the first mission to Ulaanbaatar and covered all relevant institutional, organisational and technical aspects, including compliance with the UN-FPs and the ES-CoP. The assessors also utilised materials available at ESCAP, ECE and other international organisations alongside detailed methodological descriptions provided by NSOM or available on its website.

NSOM management and staff were actively involved in substantive discussions during the two assessment missions and provided essential information about the NSS of Mongolia. The assessment team greatly appreciated the constructive dialogue with all stakeholders based on mutual trust and appreciation. The assessors acknowledge the huge amount of work provided by NSOM staff and thank Mr. Mendsaikhan, Chairperson of NSOM, and his deputies and staff members for their availability and openness in discussions. We would like also to express gratitude to the Foreign Relations and International Cooperation Department for the logistic support during our missions and coordination of work within NSOM as well as Mr. Evan Brand from the UNECE Statistical Division for his editorial work.

We hope that the Global Assessment report and its recommendations, addressed to NSOM but also to all producers and users of official statistics as well as other stakeholders of the NSS, will benefit the further development of statistical capacities in Mongolia. Recommendations provided in this report may also be used to adapt the objectives of the present National Programme for the Development of Statistics (NPDS) and widely incorporated in the upcoming programme.

EXECUTIVE SUMMARY

General information and the assessment process:

1. Coherent, reliable and internationally comparable statistics are crucial for the monitoring of social and economic progress of a country. Official statistics are essential tools for evidence-based policy making, ensuring transparency and accountability in the process of economic and social reforms and enabling decision makers to formulate policies and monitor and evaluate their deliveries. In that respect, a national legal, institutional and organisational framework securing and sustaining the application of international standards and best practices for official statistics, including the UN Fundamental Principles of Official Statistics (UN-FPs), is a prerequisite for building legitimacy and credibility in official statistics.

2. The objective of the Global Assessment (GA or the Assessment) of the National Statistical System (NSS) of Mongolia was to provide a comprehensive analysis of the institutional, organisational and technical capacity of the country to produce official statistics and comply with international standards and recommendations. The assessment does not focus exclusively on the National Statistical Office of Mongolia (NSOM) but encompasses all major producers and main users of official statistics in the country.

3. In the course of the transition from a centrally planned to market oriented economy, the statistical system of Mongolia was confronted with the necessity, but also the opportunity, for a rapid and complete transformation. NSOM and other producers of official statistics in Mongolia were, and still are, confronted with an increasing demand from the Government, the business sector, international organisations and civil society for timely, reliable and internationally comparable statistics for monitoring economic, social and environmental policies. This report takes stock of the progress made during these years by NSOM and other producers in the development of statistical capacity in Mongolia. International and bilateral partners actively supported this modernisation process.

4. The on-going process of building a modern NSS in Mongolia seems to be on a fruitful path and observations collected during the assessment indicate that NSOM is playing a leading role in this encouraging development. NSOM staff members, and in particular management, have shown professional considerations and understanding about framework requirements and mechanisms to be developed in order for the NSS to reach the highest international standards in official statistics. This broad understanding of what a modern NSS is and how to get there stimulated rich and constructive discussions between assessors and NSOM staff and contributed to the formulation of the recommendations incorporated in this report.

Main findings and recommendations on legal and institutional framework:

5. In all countries, it is important that official statistics are supported by sound legal instruments. If there are no strict international recommendations on how the legal statistical framework should be articulated, it is important that a Law on Statistics (LS) and relevant secondary legislation define the scope, activities and coordination

mechanisms of the NSS. The LS should also regulate the collection of data for statistical purposes, including the right to access administrative data and penalties for nonresponse, along with the principles of confidentiality and professional independence according to the UN-FPs. Thus a NSS can be defined as the set of government organisations and units within a country that collects, processes and disseminates official statistics in full compliance with the provisions of a national law on official statistics.

6. At this stage, it is important to mention that the purpose of official statistics is to produce and disseminate authoritative results designed to reliably reflect relevant economic, social and environmental phenomena in a given country. Official statistics shall be produced without any political interference, following internationally agreed nomenclatures, concepts and methodology. Results of official statistics shall be made available to all users simultaneously.

7. In contrast to providers of official statistics, producers of administrative data (administrative statistics) collect and process statistical information primarily for their own needs and according to their own legislation. This is mainly done for managing their administrative processes and reporting on their operations to higher authorities that monitor and control their activities. If the quality of administrative data is sufficient, they can ultimately be used as an input for the production of official statistics; but the collection of these primary data remains for administrative purposes and is therefore not strictly subject to a national law on official statistics.

8. In the framework of the Assessment, the Law on Statistics (LS) and secondary legislation of Mongolia have been carefully examined and the assessors came to the conclusion that there is a clear need for a fundamental revision. The present LS was adopted in 1994, and changes stimulated by national and international developments have been made to the LS in a flexible way through successive amendments (1997, 1999, 2004, 2008, 2012 and 2013).

9. The LS of Mongolia describes the mandate, role, rights and obligations of the National Statistical Office of Mongolia (NSOM) and to some extent other producers of official statistics. The LS regulates interactions among bodies of the Statistics Authority of Mongolia (SAM) and also between NSOM and major stakeholders such as the Parliament, Government, administrations at all territorial levels, holders of administrative data and users. However, the current law is ambiguous about the scope and the institutional boundary of the NSS. Presently, there are no clear criteria about which activities from other producers, and which other producers, are considered part of official statistics. This is a complex issue, since statistical activities subordinated to other agencies and ministries will have to comply with both the LS and the UN-FPs.

10. Proposals for further enhancing the compliance of the LS with the UN-FPs will require an in-depth revision of the LS. This revision will not be possible through amendments, since it is also recommended to restructure the LS and refine its scope. This would be a good opportunity to improve clarity and to avoid a few overlapping or contradictory provisions that have been identified.

11. In the process of the full revision of the LS, it is recommended to:

a) Align the scope and the institutional framework of the NSS with the UN-FPs and the relevant provisions of the European Statistics Code of Practice (ES-CoP) and, when needed, modify accordingly other primary legislation (e.g. laws on Population and Housing Census and Agricultural Census) and secondary legislation. Legislation governing the production of official statistics by other producers than NSOM should make explicit reference to the LS.

b) Make a clear reference in the LS to the *Standards for the Quality Management of the Mongolian Official Statistics*, which accurately reflects the UN-FPs and the ES-CoP. The *Standards* may be considered the Mongolia Statistics Code of Practice (MS-CoP) and as such the foundation of the LS and the NSS.

c) Reinforce the provision of the LS that establishes the Chairperson of NSOM as the authority in charge of the coordination of the NSS.

d) Add a provision in the LS on the annual and multi-year statistical programmes, which should cover all statistical activities of government bodies that fall within the boundary of official statistics according to the LS.

e) In order to safeguard professional independence and the choice of most appropriate data sources for the production of official statistics, consider mentioning the list of surveys to be conducted in the statistical programmes, as is done in many other countries, instead of in the LS. Furthermore, any references to methodology should be avoided in the LS and other statistical legislation (e.g. Law on Population and Housing Census), since it is up to the producers of official statistics, based on international recommendations, to choose the most appropriate methodology and the best data sources to compile official statistics.

f) Reinforce the LS provision on confidentiality and in particular regulate the storage of unit-level data. Ideally, confidential data should be stored centrally by the statistical authority that collected the information for a limited period of time and access to these data should be restricted to exclusive statistical purposes. After this time, only anonymised data should be stored.

g) NSOM should be granted by law (LS) and in practice full access to all unit-level administrative data and records, including confidential tax data and civil register information.

h) In the framework of exchange of confidential data, observe strict compliance with the single (one-way) flow principle of unit-level data collected for statistical purposes, regardless of the data collection method: censuses, statistical reporting and surveys, including administrative data collected by other agencies and transmitted to producers of official statistics. When data are collected simultaneously for administrative and statistical purposes, they should be labelled as administrative data.

i) Consider reinforcing the role of the Council of NSOM as the high-level advisory body of the NSS representing the users' communities from within and outside

ministries, agencies and other government bodies. Ideally, the Council of NSOM should be renamed Statistical Council to better reflect its mandate.

12. It is, of course, essential that the UN-FPs, the MS-CoP and provisions of the LS are explained, respected and implemented in everyday practice. Mechanisms should be developed for the follow-up of their implementations, in particular when it comes to professional independence and confidentiality. It is recommended to foresee in the LS that all staff and officials who have access to confidential statistical unit-level data should be required to sign legal undertakings about confidentiality.

Main findings and recommendations on the organisational structure and functioning of the NSS, and the Statistics Authority of Mongolia (SAM):

13. In Mongolia the production of official statistics is, from a functional point of view, centralised within the SAM (NSOM and territorial statistical bodies). NSOM is not only the main producer of official statistics in the country but also has de-jure (LS) a strong coordination role over all other producers of statistical information, including producers of administrative data. However, as mentioned earlier, the boundary of the NSS is not clearly defined in the present LS. This blurred delineation of the NSS impacts the actual capacity of NSOM to efficiently coordinate official statistics activities and restricts the scope of the main coordination tools, such as the statistical programmes, to coordinate activities conducted by the SAM.

14. Some recommendations about these issues have been formulated above (*main recommendations on legal and institutional framework*) but it is important to also implement the following:

a) It is for NSOM, with the support of the Statistical Council (Council of NSOM), to assess if a producer of statistics is to be considered a producer of official statistics according to the relevant provisions of the LS.

b) In order to safeguard the principles of confidentiality and professional independence, other producers of official statistics at ministries and agencies should be organised in specific structural units, independent (professionally) from other structural entities producing administrative data and policy departments. This provision is clearly stated in the LS but not fully implemented at the moment.

c) All activities and deliveries of producers of official statistics (NSOM and other producers of official statistics) should be mentioned in the statistical programmes as output while data sources including administrative data used for the compilation of official statistics should be mentioned as an input in the programmes.

d) The Council of NSOM, as the advisory body representing the interests of various users' communities, should have the clear mandate to support NSOM in the design and adoption process of the statistical programmes. It is recommended to enlarge the participation in the Council of NSOM to other users' communities (e.g. academia, researchers, business community, civil society, media…). It is also important to emphasise that the role of the Council is not to be involved in methodological issues.

e) For the organisation and structure of the Statistics Authority of Mongolia (SAM), this report supports the NSOM initiative to have at soum level one professional statistician financed by the central budget whose activities would be under exclusive subordination of NSOM. Statistical bodies and officials at territorial level that operate under the SAM should report directly to and be instructed by NSOM for all their activities related to official statistics (see figure 2, page 46, of this report).

f) Data collection at the level of bags (local communities) and khoroos (Capital-City sub-districts) is conducted by the respective Governors. These operations and maintenance of related databases on population, households and livestock should be considered collection of administrative data and processing of administrative registers. In order to avoid any potential conflict of interest, Governors of bags and khoroos should neither be considered part of the NSS nor of the SAM.

15. In any case, the implementation of new data collection methods (electronic access to administrative data, e-surveys and sample surveys), the development of integrated and comprehensive electronic statistical registers and the improvement of IT infrastructure at central and territorial level could present an opportunity to re-think the structure and organisation of the Statistics Authority of Mongolia (SAM), in particular the allocation of tasks and resources between NSOM and territorial statistical bodies (see also §24 of the executive summary).

Main findings and recommendations on the infrastructure and resources of NSOM:

16. The 5-year statistical programmes (strategic programmes) ratified by the Parliament and the annual budgets are well articulated. A monthly disbursement schedule is followed, adjusting the use of the budget to match as close as possible the annual work programme.

17. The rule allowing NSOM to keep up to 80% of the unspent amount of the current budget for the following years is a strong incentive to increase efficiency and allow, to some extent, more flexibility in the financial management of NSOM. Recently, with the support of the Monstat project, important efficiency gains were achieved by NSOM through the acquisition of tablets, which are progressively deployed for conducting surveys.

18. These last years, NSOM and the entire NSS of Mongolia received substantial financial and technical assistance from international and bilateral partners. These programmes and projects contributed to the remarkable development of statistical capacity in the country. We are confident that NSOM and other producers of statistics are on the right track to achieve the highest international standards. However, there is concern about the speed and long-term absorption capacity. Therefore, it is fundamental for the sustainable development of statistical capacity in Mongolia to fix clear priorities for the next years and also to gradually become more self-sufficient in term of expertise (human resources) and financial resources.

19. The NSOM Data Processing and Technology Department (DPTD) is commended for its professionalism, and the application of GSBPM (Generic Statistical Business Process Model) to carve out a long-term vision for ICT development deserves

particular praise. Recently, the development of the IT infrastructure benefited from the Monstat project and other technical assistance programmes.

20. However, some important challenges related to continued improvement of ICT, including additional financial support from the state budget and recruitment of qualified personnel to the DPTD, remain. At the time of the first assessment mission, three positions in the department were vacant due to inability to attract qualified staff. The latest three recruits were fresh graduates, reflecting the non-competitive salaries offered by NSOM and the employment opportunities for computer science graduates in the private sector.

21. Considering the recruitment issues pertaining to IT personnel and the workload of existing staff, options for outsourcing regular maintenance work and development of new applications should be explored. It is recommended that funding for maintenance of hardware and software procured or developed through external assistance (such as the Monstat project) is secured from the regular budget of the Government of Mongolia to ensure sustainability of the investments.

22. The Human Resources Development Policy of NSOM focuses on outreach, training and retention of staff. NSOM developed a training programme for staff members working at central and territorial statistical offices, including various modules at different levels, from basic to advance. At the time of the assessment missions, the personnel of NSOM included a large number of relatively inexperienced staff: 38% having 1-5 years of service. However, the majority of employees (84%) have a bachelor degree, 11% have a master's degree, 3% a PhD and 1% a secondary school diploma.

23. Major issues concerning human resources are of both a qualitative and quantitative nature. It is therefore recommended to implement the following measures:

    a) The selection procedure should be adapted in order to attract and select candidates that are fit for the job.

    b) The recently developed training programme should be implemented at central and territorial levels without delay. A priority is to increase analytical skills of NSOM staff at central and territorial levels. In that respect, necessary financial resources should be allocated from the state budget to the Information, Training and Advocacy Centre to ensure full rollout and sustainability of the training programme.

    c) The number of staff should be increased, in particular at NSOM. In the Central Office, employees are to a large extent absorbed by routine work and data processing, which does not allow them to work on more analytical tasks and quality check operations. This would also benefit NSOM publications that lack analytical information. The need for more explanations in publications issued by NSOM was mentioned several times by users.

24. The Chairperson of NSOM should have the sufficient managerial autonomy to allocate (and reallocate) human resources among central (NSOM) and territorial statistical bodies of the SAM, in order to secure quality, efficiency and effectiveness of statistical production.

Main findings and recommendations on dissemination, communication and relations with users and stakeholders

25. In the context of official statistics, credibility plays a basic role in determining the value to users of statistical products and services. Few users are in a position to validate the quality of data released by NSOM and therefore trust and confidence in the statistical authorities and their deliveries is a core issue. The credibility of the overall NSS could be easily challenged if their deliveries are based on inappropriate methodology, the principle of confidentiality is not respected or producers are suspected of political biases (professional independence).

26. During the two assessment missions, users that may be also respondents at the institutional or individual level indicated that they trust that NSOM respects the principle of confidentiality and professional independence. In recent years, NSOM has significantly improved user relations through the Monstat project and implemented a number of activities, made statistical products more user-friendly, applied a single corporate design to all disseminated statistical products and organised workshops among users to enhance their statistical literacy.

27. In order to further improve dissemination, communication and relations with major stakeholders, it is recommended to implement the following measures:

    a) Consider if it is necessary to have two NSOM websites: one for corporate information and another one with statistical information and databases. In general, users would welcome one statistical portal for the overall NSS, with links to the relevant producers for more detailed information and databases.

    b) Ideally, one advanced release calendar for all official statistics, regardless of the producers (NSOM, territorial statistical offices and other producers), should be available on the statistical portal. In the short run, the present NSOM release calendar could be improved by adding the time of statistical data releases in addition to the date. It would be also important to mention on the website the list of all institutions that have pre-release access to statistical information.

    c) NSOM should consider producing shorter publications with more analytical text and explanations. In general, NSOM may move towards reducing the number of publications and make further use of electronic means of dissemination.

    d) Data at territorial level should be disseminated under the strict control of NSOM and publications should follow the NSOM corporate design and highest quality assurance. Errors in publications at territorial level may affect the credibility of the entire NSS.

    e) It was observed that the printed and online publications did not cover sufficient metadata information. Users would also be interested to be informed about data revision policy in order to know in advance when data may be revised, e.g. quarterly statistics adjusted on annual provisional and eventually final estimates.

28. There is still some need to “educate” users and improve statistical literacy. Seminars and workshops could be organised at least with institutional users. It is a good practice to hold regular press conferences with the media. The outreach to the public can be

further improved by increasing participation in these press conferences and by preparing user-friendly press communiqués for wider dissemination.

Main findings and recommendations on data sources and processing, registers and quality monitoring

29. The main objective of **quality monitoring and management** is to ensure the effective design and improvement of processes that ensure that products and services are fit for their purpose and meet their specifications.

30. The seven quality components identified by the UN-ECE and mentioned in the Mongolia Statistics Code of Practice (MS-CoP) are the following: relevance, accuracy timeliness, punctuality, accessibility, clarity, and comparability and consistency over time. The notion of cost-efficiency should also be mentioned. Whilst this is not considered to be a dimension of quality, it is a factor that must be taken into account in any analysis of quality. If a product can be produced more efficiently, then resources released can be used to improve the quality of that product or other products. As such, quality management not only focuses on products or services but also on the means to achieve them (processes) from primary data collection to dissemination.

31. It is widely acknowledged that there are three essential tools to assess and ensure quality of statistical production and services:

    a) GSBPM: the Generic Statistics Business Production Model developed by the ECE under the auspices of the High-level Group on Modernisation of statistical Production. GSBPM allows mapping and describing each step of statistical business process in a coherent way. NSOM has started under the Monstat project to apply the GSBPM in order to plan the long-term ICT development.

    b) An international or national statistics code of practice based on the UN-FPs that sets the standard for developing, producing and disseminating official statistics and targets all relevant areas from the institutional environment, the statistical production processes to the output. NSOM has developed its own Code of Practice (MS-CoP) that strongly relies on the European Statistics Code of Practice (ES-CoP).

    c) A statistics assurance quality framework based on the CoP and the GSBPM (e.g. UN *Generic* National Quality Assurance Framework/NQAF or the European Statistical System Quality Assurance Framework/ESS-QAF) that describes activities, methods and tools that support the assessment of statistics quality and eventually helps statistical authorities to take the appropriate corrective measures.

32. The Statistics Authority (SAM) and in particular NSOM have achieved impressive progress in the modernization of data collection, statistical registers and data processing. The report welcomes this development and supports further improvement of the overall production processes from data collection to dissemination as planned in the NPDS.

33. Recently, a quality team was established within NSOM. This team consists of 16 staff members from different departments and divisions (horizontal group). The team

leader is the Director of Policy Implementation and Coordination Department, which is the department in charge of quality. The mandate of this horizontal group is to develop a quality policy and implement it throughout Mongolian Official Statistics (Quality Management Standards). The challenge of the Quality Team will be to migrate from a *cultural* and professional environment, where quality monitoring was mainly the responsibility of the heads of the substantive organisational units, to a more integrated and coherent quality monitoring system.

34. In order to support this process, the following cross-cutting recommendations are provided:

    a) In order to reduce burden on respondents and free resources within the SAM for more analytical, communication and quality related activities, NSOM is encouraged to continue expanding data collection through sample surveys, in particular for economic and business statistics, and explore further opportunities to use administrative data for the production of official statistics.

    b) A regular survey conducted by NSOM of available primary data from administrative sources, reporting systems and statistical surveys shall be conducted regularly in order to reduce inefficient data collection and overlaps.

    c) It is strongly recommended to establish a methodology/sampling unit within NSOM in order to handle the design and update of sampling frames as well as the monitoring of all stages of sample surveys data processing.

    d) As mentioned earlier, NSOM should be granted by law (LS) and in practice full access to all unit-level administrative data and records, including confidential tax data and civil register information.

35. Statistical production within the Statistics Authorities of Mongolia (SAM) strongly relies on bottom-up processes, where primary data are collected at territorial level, roughly checked, in some cases aggregated, and then sent to the next territorial level up to NSOM. This procedure does not ensure the highest quality standards and is in particular not appropriate for the compilation of official statistics through sample surveys. Therefore it is proposed to organise production process within the SAM in such a way that:

    a) Edited and documented unit-level data, including forms, collected and generated at territorial level for the production of official statistics is sent to and stored at the Central Office (NSOM).

    b) In order to ensure consistency of final deliveries, data processing for the production of national and regional statistics is carried out centrally (NSOM) and simultaneously.

36. Additional recommendations related to data sources and processing, quality monitoring, registers and nomenclatures for **social and population statistics** are the following:

    a) It is strongly recommended to establish a consolidated and central population register and to assign a unique ID to each person in the country. In that regard, it is

essential to distinguish the administrative population register from the statistical population register. In order to comply with the LS, in particular its confidentiality provision, the statistical register shall be run by NSOM, based on the administrative register and complemented with additional statistical information, while the administrative register shall be maintained under the supervision of a non-statistical authority (one-way principle).

b) For the next Population and Housing Census, methodology and definitions (e.g. resident population) should be aligned on international recommendations. It is also important, in order to secure statistical confidentiality of unit-level information, to store non-anonymised questionnaires at NSOM instead of the National Archives.

c) For migration statistics, the Household Socio-Economic Survey and the Labour Force Survey can be used for verifying and/or complementing the migration data collected from administrative sources. Ideally, mirror data sharing arrangements should be established with receiving and sending countries in order to have better estimates of migration inflows and outflows.

37. Additional recommendations related to data sources and processing, quality monitoring, registers and nomenclatures for **economic and business statistics** are the following:

a) A statistical business register is the main survey sampling frame and as such contributes to the improvement of the quality and the coherence of economic statistics. The statistical business register of Mongolia is broadly in line with international recommendations and is regularly updated using a large variety of data sources. One recommendation could be that a common IT platform should be developed and used by all providers of administrative data for the maintenance and update of the business register. An alternative could be the development of an application programme by NSO compatible with the various IT platforms used by other government agencies.

b) It will be important in the near future to improve records for individual entrepreneurs in the business register, since official statistics for these production entities rely mostly on sample surveys. In that respect, the next economic censuses should not only cover legal units but also individual entrepreneurs. In order to better apportion work load and financial resources over the years, some countries have developed a concept for sectoral rotating-scheme censuses of economic units with the objective to cover all economic activities within a five-year period.

c) The issue of sleeping units also needs special attention, since they represent close to 50% of the total entities recorded in the business register.

d) In general, and as mentioned above, it would be important to rethink the overall data collection system within the Statistics Authority of Mongolia (SAM), since sample surveys request a more centralised approach of data collection: sampling frame (business and population registers), sampling, data editing, quality check, non-response, replacement or imputation of missing values and extrapolation. For this purpose, a methodology/sampling unit should be established in the Central Office (NSOM) dealing with sample surveys for both economic and social statistics.

38. A large amount of information is collected and published on the **agricultural** sector, reflecting the economic and cultural importance, in particular of livestock, to Mongolian society. However, particular attention should be paid to the trade-offs between cost of data production and use of the resulting statistics.

39. Furthermore, for agricultural statistics, the delineation between data collection for administrative and statistical purposes is the least clear. It is urgent to resolve this issue, which may have a direct impact on the organisational structure of the Statistics Authority of Mongolia (SAM).

Main findings and recommendations on specific statistical domains

Implementation of the recommendations provided above (data sources and processing, registers and quality monitoring) should have a significant impact on the consistency, accuracy and international comparability of statistical outputs. Specific issues are listed hereunder while more detailed and technical findings and recommendations are discussed in chapter 5 of this report.

40. In general, for the compilation of **social statistics**, primary data, regardless of their origin (administrative sources and statistical surveys), should be systematically and carefully linked, crosschecked and eventually complemented. Administrative data are not collected primarily for statistical purposes and therefore do not comply systematically with international standards and definitions. For public **health statistics**, for instance, the reconciliation of data from the civil register and from the administrative register maintained by the Ministry of Health is essential. It is also important to continue to compare the figures for key health indicators based on register and survey data.

41. In some cases, size of sample surveys should be increased in order to get more robust information at territorial level; this recommendation is valid for social statistics as well as business statistics.

42. A major challenge for **labour market statistics** in Mongolia, given the seasonal nature of work in the country, is the definition of employment and unemployment using the criterion of *having worked at least one hour in the past week*. Furthermore, and not only for Labour Market Statistics, logistical difficulties of reaching herders, especially in the winter months, hamper data collection activities for most household surveys.

43. Intra-annual (e.g. monthly and quarterly) **economic and business statistics** should be collected and disseminated on a discrete basis (non-cumulative), which means that data for one specific period of time (e.g. month) is distinct and separate from the data set of the preceding or following period of time; the cumulative approach makes it more difficult to identify and analyse changes in time series and doesn’t allow for seasonal adjustment.

44. The reference period of intra-annual indicators and indices should be set to a year. Indices, along with growth rate, should be published and seasonally adjusted time series should be produced and disseminated.

45. For several **price indices** produced by NSOM, further improvements could be obtained by using geometric averages, chained price indices and seasonal adjustments. For the Housing Price Index, international assistance should be sought. For price indices and also to some extent other macroeconomic statistics, the assessors got the impression that the production was done in a rather mechanical way, following strictly guidelines provided by international experts, and that NSOM staff did not fully assimilate basic macroeconomic concepts. There is still a need to train staff not only on economic statistics but on modern economic theory and principles.

46. It is also recommended to gradually replace the concept of cash based recording (recording revenue and expenses when respectively cash is received or disbursed) with accrual basis recording (at the time the transaction occurs rather than when payment is made or received). **National accounts, balance of payment and government finance statistics** must be compiled according to the accrual concept, and it is therefore important that business statistics allow for this conversion.

47. Producers of major macroeconomic statistics should consider using a coordinated approach to implement the 2008 System National Accounts (2008 SNA), the 6th edition of the Balance of Payments Manual (BPM6) and the 2001 Manual on Government Finance Statistics (2001 GFSM)[1]. Ideally, users should simultaneously receive the revised data series according to the 2008 SNA and the BPM6; explanatory notes on the main conceptual changes and their impact on the data for both macro-economic statistics could be published jointly by the two organisations (NSOM and BoM)

48. Government Finance Statistics (GFS) produced by the Ministry of Finance (MoF) are a concern in several respects, not only in terms of standards and computation methods, but also in terms of professional independence, methodological awareness and human resources. It is recommended to establish an independent GFS unit in the MoF, to increase human resources and receive further technical assistance from international partners such as the IMF. The GFS are an essential input for the compilation of national accounts.

49. It is recommended to further improve the coverage and accuracy of macro-economic statistics through a better estimation of the **informal economy**, remittances and other non-observed transactions. In general, quality, reliability and coverage of macro-economic statistics could only benefit from a more extensive use of statistical information collected through household surveys like the Labour Force Survey, Living Standards Survey and the Household Budget Survey.

50. NSOM should consider compiling, on a more regular basis, **supply-use tables** (SUTs) at constant and current prices; SUTs are ideal tools for improving the quality of National Accounts by identifying major discrepancies and taking appropriate measures for reconciling both approaches (use and supply).

[1] During the drafting of this report, the 2014 version of the GFS manual (GFSM) was published by the IMF, bringing it in line with the revised 2008 SNA. The reference to the 2001 GFSM in this report should also be understood as a reference to 2014 GFSM. The assessment and recommendations provided in this report are not altered by this revision.

51. Stakeholders and NSOM should pay more attention and allocate adequate resources to the development of **multi-domain statistics**. In particular, NSOM should consider developing a concept for the production of comprehensive tourism statistics according to international guidelines.

1. LEGAL BASIS

1.1 Law on Statistics of Mongolia

1.1.1 Background

1. An essential element of a National Statistical System (NSS) is the legal framework: the Law on Statistics (LS). The LS should enforce sound statistical principles and create the basis for professional and independent data collection, processing, storage and dissemination of official statistics. The LS should also define the criteria for an organisation or a specific structural unit of an organisation to be acknowledged as part of the NSS and provide guidelines for coordination of the NSS at the country level. This delineation between producers of official statistics and other producers of data, such as producers of administrative data, is fundamental and will be further assessed in Chapter 2 of this report, along with the coordination mechanisms.

2. At the international level, there are several sets of principles governing official statistics and among them the United Nations Fundamental Principles of Official Statistics (UN-FPs). The objective of the UN-FPs is to secure core values of official statistics and therefore ensure that national statistical systems are able to produce appropriate and reliable data that adhere to certain internationally agreed professional and scientific standards, such as professional independence, objectivity, transparency, confidentiality, prevention of misuse and misinterpretation, national coordination and international cooperation.

3. Other international organisations have principles that give guidance to national LS, such as IMF and OECD. It is also worth mentioning that the European Statistics Code of Practice (ES-CoP), adopted in 2005 and updated in 2011, strongly relies on the UN-FPs. However, the ES-CoP goes further, since it builds upon a common definition of quality in the European Statistical System (ESS). Therefore, the ES-CoP can be considered an operational extension of the UN-FPs and as such targets all relevant areas from the legal and institutional environment, through the statistical production processes to the final statistical deliveries. The ES-CoP may also be relevant for national statistical systems that are not formally part of the ESS but are intended to gradually approach its values and standards.

4. The *Standards for the Quality Management of the Mongolian Official Statistics*, which reflect accurately the ES-CoP, may be considered the Mongolia Statistics Code of Practice (MS-CoP) and as such the foundation of the NSS of Mongolia. It seems nevertheless that the MS-CoP was never endorsed by the Mongolian legislator and that the Law on Statistics (LS) was not revised in order to reflect accurately the principles and indicators enshrined in the MS-CoP. The term *National Statistical System*, for example, is mentioned explicitly in the MS-CoP but neither defined nor used in the LS. This issue will be discussed further in this report.

5. In this Chapter, the LS of Mongolia will be assessed against the criteria stated in the UN-FPs and other international principles. The bridge between the law and the MS-CoP (Mongolian transposition of the ES-CoP) should be established and in particular the principles of professional independence mandate for data collection and statistical confidentiality. Other criteria related to the institutional environment, such as coordination of statistical activities and programmes, will be treated under Chapter 2

of this report; adequacy of resources and impartiality under Chapter 3; and commitment to quality, along with other considerations related to statistical processes, under Chapter 4. Principles related to quality of statistical output will be discussed and assessed in Chapters 4 and 5 of this report.

6. The LS was adopted in 1994 and successively amended in 1997, 1999, 2004, 2008, 2012 and 2013. The assessment team observed during the first mission that the structure of the English translation of the LS on the NSOM website did not match the original version in Mongolian. For the second mission, this issue was fixed (see annex 1), which allowed the assessors to further study and discuss the LS with NSOM management.

1.1.2 Structure and scope of the Law on Statistics of Mongolia

7. In Mongolia, the legislation on statistics consists of the Constitution of Mongolia, the Law on Statistics (LS) and other legislative acts and decrees subordinate to the LS, such as the Law on Population and Housing Census (LPHC).

8. The **first Chapter** of the LS on *General Provisions* deals with the purpose of the LS (art. 1), the system of legal acts on statistics (art. 2), definitions (art. 3) and principles of statistical activities (art. 4). This Chapter follows the structure of modern statistical laws rather well but lacks one important article about the scope and subjects of the LS. Article 3 (definitions) introduces the definitions of official statistics and administrative statistical data and emphasises that official statistics are articulated in the statistical programme (or plan of action). However, this distinction gets blurred further in the LS and there are no specific provisions on the statistical programme in the LS.

9. Article 4 mentions some of the basic principles of statistical activities but there is no reference to the MS-CoP. However, the principles of professional independence and objectivity, sound methodology, international comparability and minimising burden on respondents are clearly stated. But these principles are not defined and no further explanations are provided in the LS on how these principles should be implemented and monitored.

10. **Chapter 2** on the *System of Statistical Data* starts with Article 5, which makes the distinction between official and administrative data. No further guidance is provided on how to distinguish these two sets of data. Further in this article (5§3), it is stated that *Official statistics shall be produced by the National Statistical Office, ministries and other state organisations and Governors at all levels*. This definition of official statistics goes beyond the definition given in Article 3 of the LS (*definitions*). If Article 5 is about the distinction between data sources (administrative data sources vs. data collected directly by producers of official statistics), its paragraph 3 about official statistics (deliveries from producers of official statistics) is misplaced and introduces some additional confusion about the delineation of the NSS.

11. Article 6 presents a long and detailed list of official statistics and related indicators. This list covers most important statistical domains but its exhaustiveness is not easy to assess. For macroeconomic statistics (e.g. national accounts), the list is rather detailed but mentions neither balance sheets nor Gross National Income (GNI). For environment statistics, on the other hand, some indicators, such as air pollution, are

rather vague. At the end of this article, paragraph 2 mentions a list of statistical data to be submitted by other ministries and agencies to the National Statistical Office of Mongolia (NSOM). However, it is not clear if the producers of this additional statistical information are to be considered producers of official statistics or just producers of administrative/statistical data (see also Chapter 2 of this report). In most countries, such a list with the corresponding ministry or agency in charge of the production of each of these indicators is placed in the statistical programme and not in the LS. The programme should also mention for each indicator whether the primary data will be from administrative sources or directly collected by NSOM or any other producer of official statistics (e.g. National Bank, Ministry of Finance, Ministry of Education…).

12. The next article of Chapter 2 (art. 7) provides a list of censuses and surveys to be conducted by NSOM. As for Article 6, in most countries such a list of censuses and surveys are placed in the statistical programme under data sources. According to international principles, in particular *professional independence*, it is the right and the obligation of producers of official statistics, not the legislator, to choose the best data sources and data collection methods for the production of official statistics. Furthermore, the list provided in article 7 mentions neither business surveys conducted by NSOM nor surveys conducted by other producers of official statistics.

13. The provision of Article 7(§3) stating that *required funding for censuses and surveys shall be included in the annual budget of NSOM* is extremely important and guarantees sustainability and predictability in data collection and eventually in the production of official statistics.

14. **Chapter 3** of the LS describes the rights and obligations of statistical respondents (art. 9) and the rights and obligations of users of official statistics (art. 10). Paragraph 1 of the latter secures all users access to official statistics and indicators produced and disseminated according to the list provided in Article 6(§1). However, this article is restricted to statistical information produced by NSOM and does not mention official statistics compiled by other producers. There is no provision in Article 9 about an advanced release calendar of official statistics and equal and simultaneous access for all users. The provision about the obligation for users to provide sources of information when using and further disseminating official statistics (art. 10§2) is important. It secures visibility of official statistics, and circumvents misinterpretation and misuse of the information produced. Paragraph 3 of Article 10 is about the obligation not to require statistics from official producers other than those approved and adopted, which are implicitly understood to be those statistics and indicators listed in Article 6 of the LS. In general, such a provision that prevents producers of official statistics from being requested to compile statistics that are not considered official is placed under rights and obligations of producers of official statistics (NSOM and other producers).

15. Article 9 is essential in granting access to primary data for the producers of official statistics and eventually securing the quality of their deliveries. The article however does not make the difference between providers of administrative data to NSOM and statistical units (respondents) subject to reports, surveys and censuses conducted by NSOM. For example, whether the provision for business entities to obtain registration numbers (9§8) is an obligation for the observation units or for the producers and

holders of administrative data and registers. The same issue concerns paragraph 3 of this article, which deals with confidentiality. Producers of administrative data, if not otherwise stated in their own rules and codes, are not bound to the principle of confidentiality. But it is of course a fundamental principle for official statistics to keep confidential all unit-level information collected directly from respondents (reports, surveys and censuses) as well as for information received from producers of administrative data. It is also considered a golden rule that unit-level data held by producers of official statistics (direct observations or administrative data) must be used exclusively for official statistics purposes and not transmitted to any organisations outside the statistical system. The only exception applies for research purposes; in that case data must be first anonymised.

16. **Chapter 4** of the LS is organised in seven articles (art. 11-15, 15bis-16) and discusses the structure and the mandate of the Statistics Authority of Mongolia (SAM). In this Chapter, the SAM is defined as the National Statistical Office of Mongolia (NSOM) and all other bodies and authorities at provincial (aimag), district (soum) and local community (bag) levels as well as the Capital-City districts and sub-districts (khoroos) engaged in data collection, data processing and/or dissemination of official statistics on behalf of NSOM.

17. The provisions of Chapter 4 of the LS and their implications are discussed in detail in Chapter 2 and 3 of this report but some important elements are described hereunder.

18. The delineation of the SAM does not correspond to the National Statistical System (NSS), since other conceivable producers of official statistics (ministries and agencies) are not part of the SAM. Paragraph 6 of Article 11, however, mentions that ministries, agencies and other government and local administrations shall be responsible for producing relevant statistical data. But it is not clear if these data should be considered official statistics or administrative information. The paragraph continues to state that ministries shall have a unit responsible for sectoral statistics in their respective structure. This is one important prerequisite for safeguarding professional independence but should apply for producers of official statistics and not systematically to the collection of administrative data.

19. Article 11 specifies that officers in charge of statistics at NSOM, aimags, soums, Capital-City and its districts shall be civil servants (11§3), but paragraph 4 of the same article mentions that only activities conducted by NSOM, aimags, Capital-City and its districts shall be financed adequately by the central government budget. Officers of Governor's office at soum level are civil servants but financed out of the local budget. Governors at bags and khoroos are in charge of statistics and financed out of their own respective budget. Further in the LS (art. 15), information is provided on the procedure for the nomination and dismissal of officers in charge of statistics at territorial level.

20. Paragraph 5 of Article 11 stipulates that NSOM reports to the State Great Khural (National Parliament). To some extent, this provision may safeguard the professional independence of NSOM and ultimately the Statistics Authority of Mongolia (SAM), but this paragraph would be better placed elsewhere (e.g. Article 12: NSOM and its mandate).

21. Article 12 describes the mandate, tasks and responsibilities of NSOM and reflects good national practices. One could comment that NSOM is not only responsible for the adoption of methodologies and instructions for the compilation of official statistics in accordance with international guidelines but also for endorsing methodologies used for the collection of administrative data. This ensures that administrative information and registers meet minimum statistical requirements and avoids to some extent duplication and redundancy of data collection.

22. Article 12 also mentions a whole range of provisions safeguarding the implementation of the UN-FPs and the MS-CoP, such as accuracy, transparency and clarity of statistical information, free access to data sources, international cooperation and, last but not least, human resources development and training. Paragraph 23 of Article 12 would be in line with the UN-FPs, if the socio-economic statistics produced one month prior to parliament elections is made available to all users simultaneously.

23. It is not clear why Article 13 (management of NSOM) and 15 (power of the Chairperson of NSOM) were not merged into one article. In any case, Article 13 mentions clearly the procedure for appointment and dismissal of the Chairperson and his/her deputies (senior vice-Chairperson and vice-Chairperson). It is also mentioned that the Chairperson reports directly to the Parliament. It is interesting to note that paragraph 4 of this article stipulates the professional skills and management experience required for the two vice-Chairpersons but nothing is mentioned for the Chairperson.

24. Further to Article 13, the provisions of Article 15 allow the Chairperson of NSOM to communicate directly with members of the Government and Parliament and to participate in sessions of the State Great Khural, standing committee meetings and Cabinet sessions. The Chairperson of NSOM can issue decrees on statistical methodologies and instructions (professional independence). Paragraph 2 of this article specifies that heads of statistical structures at aimags, Capital-City and its district shall be appointed and dismissed by the Chairperson of NSOM. However, it is not clear from the LS, whether the heads of these territorial statistical structures shall, for professional issues, report directly to NSOM or to their respective territorial authorities.

25. The Council of NSOM (the Council) is established under Article 14 of the LS and consists of seven members; three appointed by the Economic Standing Committee of the Parliament and three proposed by the Government. The chair of the Council is the Chairperson of NSOM. The Council is an advisory body to NSOM but its mandate and tasks are not clearly stipulated in the LS. One may recall that such an advisory body mainly represents the users' communities within the overall NSS and therefore should not be involved in methodological issues (professional independence). Further recommendations on the role and composition of the Council are discussed in Chapter 2 of this report.

26. The powers of the General Manager of NSOM are stipulated in Article 15bis. The General Manager is to be considered an executive officer in charge of the management of human and financial resources according to the Mongolian law. It is, however, not stipulated in the law who is appointing and dismissing the general manager and who is his/her first reporting officer. In any case, it is important that the

General Manager follows strictly statistical confidentiality rules applying to all staff members of NSOM.

27. According to Article 16, the Chairperson of NSOM assigns and dismisses the title of statistical inspector to a civil servant in charge of statistical activities in SAM (16§1) and in any ministries and agencies (16§2). A statistical inspector oversees the conduct of statistical operations within his/her organisational structure in full compliance with methodologies, instructions and rules adopted by NSOM; including enforcement measures (16§3). This article neither specifies if the activities of the statistical inspectors are related to official statistics or administrative data collection (or both) nor to whom this person should report to. It is important that statistical inspectors are subject to strict confidentiality rules as stated in the LS and applicable to other staff members of NSOM. Article 16(§6), which deals with reimbursement of costs incurred during duty, could be stipulated elsewhere than in the LS (e.g. administrative regulation or decree).

28. Articles 17 to 21 of **Chapter 5** of the LS (mandates of the state executive institutions on statistical functions) regulate the power of the Government, ministries, Bank of Mongolia and other government institutions, agencies and Governors at all administrative levels with respect to official statistics. This rather complex set of rights and obligations applicable to national and territorial authorities is analysed in depth in Chapter 2 and 3 of this report. The main issue is to identify if the provisions of Chapter 5 apply to the above mentioned authorities as users of official statistics, producers and providers of administrative data, or producers of official statistics.

29. Since NSOM is directly subordinated to the Parliament, it is suitable to have a specific article in the LS (art. 17) on the powers and responsibility of the Government with respect to official statistics. Such powers include taking necessary organisational support measures, including resources, for the conduct of censuses (obligation) and reflecting the need of the Government for statistical information in the statistical programmes (right). It is also welcome in this article to read that the Government shall be involved and support activities and projects conducted by international organisations in the field of statistics (17§3).

30. Articles 18 to 21 deal with the powers of ministries and Bank of Mongolia as well as other government institutions and Governors at all territorial levels. As mentioned earlier, it is not clear if provisions stated in these articles relate to these specific organisations and authorities as producers of official statistics, producers and providers of administrative data, and/or as users of official statistics. Between these three categories the following distinctions shall be made:

    a) **Producers of official statistics** in ministries, agencies and government at all territorial levels, or more specifically their respective organisational units in charge of official statistics, shall collect, process, and transfer data (often based on administrative information collected by other organisational units), as well as, when relevant, disseminate official statistics in full compliance with the provisions of the LS and the MS-CoP. Their activities and deliveries shall be incorporated in the annual statistical programme of work. Unit level data collected for official statistical purposes should not be made available to organisational

units that are not strictly involved in the production of official statistics (outside the NSS).

b) **Administrative data** (data for own management purposes) from ministries, agencies and government at all territorial levels should ideally not be compiled by the organisational unit producing official statistics. For administrative purposes, data collection, processing and storage do not have to follow the provisions of the LS; with the exception of the provisions of the LS on methodology and instructions endorsed by NSOM. The official statistical principles (UN-FPs and MS-CoP) of independence, confidentiality and equal access do not systematically apply since producers of administrative data are not part of the NSS. Data that are collected, processed and stored simultaneously for administrative and official statistics purposes should be labelled as administrative data.

c) Ministries, agencies and government at all administrative levels are important **users of official statistics**. In that respect, it is essential that these authorities, including the Parliament, have the possibility to express their needs in terms of statistical information when the statistical programmes are established or, as is the practice so far, when the list of official statistics and indicators according to Article 6 is discussed. The advisory body representing the users is the Statistical Council (Council of NSOM) and it is therefore important that the Parliament, ministries, agencies and government at all administrative levels are adequately represented in this body.

31. **Chapter 6** (miscellaneous) deals with the illegal use of statistical data and confidentiality of information (art. 22), and liabilities for breaching the law (art. 23). Provisions on confidentiality are provided in paragraphs 3, 6 and 7 of Article 22. There is no provision in this article on where, by whom and how long confidential (non-anonymised) unit-level data shall be stored. Indeed, the risk of breaching the principle of confidentiality can happen at all stages of the production process of official statistics including for data stored. A provision could have been added in this article concerning the obligation to sign a confidentiality commitment for staff members and other officials at all levels, including ministries and agencies, involved in the collection, processing and dissemination of official statistics. To conclude, one could mention that in the statistical laws of many countries confidentiality is treated under a distinct Chapter.

32. Article 22 also tackles the issue of illegal use of statistics, alteration or adjustment of results and the sale of official statistics without prior permission of the producer(s). There is no provision about the right for NSOM and other producers to comment misuse and misinterpretation of official statistics.

33. Paragraph 3 of Article 23 is interesting since it foresees that business entities and institutions that fail to submit a completed questionnaire in due time may be mentioned publicly in the media. This is probably a strong incentive for business entities to comply with the LS. Paragraph 1 of this article about administrative sanctions is rather powerless and therefore difficult to implement. Furthermore it mentions only persons and omits business entities and other institutions.

1.1.3 Professional independence

34. According to the UN-FPs, producers of official statistics should be professionally independent. The production and dissemination of official statistics should be independent of any interference from policy makers and decided solely on the basis of sound methodology and other professional considerations: choice of standards and methods, format, content and timing of statistical releases. Statistical laws should therefore contain sufficient safeguards against such possible interventions. Policy makers, as an important users' community, should be invited to decide on what to produce (which statistics and indicators) but never on how to produce. Professionalism and independence are the fundamental principles for the credibility of a statistical system.

35. The Law on Statistics of Mongolia (LS) does not clearly define the principle of independence. The term *professional* is mentioned several times in the law (art. 12, 13 and 14) but refers to the required professional (statistical) competences and skills of the management and staff members of NSOM and does not refer to the principle of independence of statistical authorities from political and other external interferences in developing, producing and disseminating statistics.

36. The principle of professional independence is well defined in the MS-CoP (Principle 1) but is restricted to the Statistics Authority of Mongolia (SAM) and does not apply to the overall producers of official statistics (e.g. Bank of Mongolia and other producers in ministries and agencies).

37. One important element of the professional independence of official statistics relates to the nature of the appointment/dismissal procedures of the head of the national statistical office. Articles 13 and 15 clarify these procedures in a way that gives the Chairperson of NSOM the required independence from policy makers:

    a) Appointed by the Parliament with a tenure of six years;

    b) Authority for enforcing statistical methodology and instructions to all producers of official statistics and administrative data;

    c) Power to issue decrees (by-laws);

    d) High-level ranking among State officials.

38. As mentioned already, from a legal point of view, the major concern over professional independence does not relate to NSOM but rather to statistical divisions and departments in ministries and agencies as well as Government at territorial level.

1.1.4 Confidentiality

39. Statistical confidentiality is one of the most important principles of official statistics. A national law on statistics shall safeguard the privacy of data providers (persons, households, enterprises and other respondents), the confidentiality of the information they provide and its exclusive use for statistical purposes. This excludes the use of such information for any decisions by a government or public sector authority targeted at an individual unit, with the exception of infringements to provisions of the

statistical law. In many countries, confidentiality is treated in a specific Chapter (more than one article) in the statistical law.

40. As mentioned above, the principle of confidentiality applies at all stages of production processes: collection, processing, storage and dissemination. Formulated differently, in order to safeguard the trust of respondents, data collected for official statistics purposes must not be used in individual form and in a context where decisions about individuals are taken. Therefore, unit-level information held by producers of official statistics, whether collected through reports, surveys, censuses or obtained from administrative sources, shall not be transferred to institutions or organisational units that are not part of the NSS. A possible exception is the use of such data for scientific purposes, but such use should be under very strict and restrictive conditions (anonymised data) regulated by the law and implemented through specific contracts.

41. Last but not least, in general, producers of administrative data and registers are not bound to data confidentiality through the statistical law. If confidentiality provisions apply to them, it is through their own laws and rules. Indeed, ministries and agencies at all territorial levels compile such administrative data for own management purposes or in order to implement administrative rules and procedures directly applicable to individuals and/or business entities.

42. Confidentiality of primary statistical data is the principle that has probably received the least attention in the in the Law on Statistics of Mongolia (LS). Confidentiality is neither mentioned under Article 3 (definitions) nor under Article 4 (principles). The Principle of confidentiality is addressed the first time in Article 9, paragraph 3 and then further in paragraphs 3, 6 and 7 of Article 22. In Article 22(§7), it is mentioned that the *Chairperson of NSOM shall approve a procedure for processing raw data and utilization by users in conformity with the laws on confidentiality*. There is no clear indication on which confidentiality laws but it is assumed that a reference is made to the Law of Mongolia on Personal Privacy. This Law applies to individuals but its scope is rather limited (e.g. confidential health information).

43. Another issue is that provisions of the LS dealing with confidentiality do not explicitly cover other producers of official statistics but seem to be rather limited to NSOM and to some extent to the SAM (see also Chapter 2 and 3 of this report). As mentioned earlier, there is no provision in the LS on where, how and how long confidential (non-anonymised) unit-level data may be stored.

44. Furthermore, the LS does not mention that staff members of NSOM and other officials who have access to confidential data must sign a confidentiality pledge but assessors observed that in practice staff followed internationally agreed principles on confidentiality. Nevertheless, reinforcing the confidentiality provisions in the LS and communicating clearly with respondents, providers of administrative data and users about confidentiality policy and practices could safeguard or even enhance trust in official statistics.

1.1.5 Mandate for data collection and obligation for respondents

45. Statistical laws should provide producers of official statistics with the right to decide the most appropriate way to acquire the necessary basic information for the compilation of their statistics from all data sources. Government organisations should

be obliged to give access to administrative data for statistical purposes and respondents to provide the information needed, which is collected through reports, surveys and censuses. The choice of the most appropriate data sources shall be made based on quality considerations, cost effectiveness and burden on respondents. If principles related to professional independence and confidentiality are mainly about trust, mandate for data collection is mainly about legitimacy.

46. Principle 2 of the Mongolia Statistics Code of Practice (MS-CoP) mentions explicitly the right of the *Statistics Authority* to collect information for statistical purposes from other producers of official statistics, administrative sources and primary data sources (reports, surveys and censuses) and compels respondents to provide accurate statistical data and information in due time. The principle of non-duplication of data collection is also stated under indicator 2.4.

47. In the LS, many articles stipulate the right for NSOM, and to some extent other statistical authorities, to collect information for statistical purposes. This right is not stated in the article about principles of official statistics (art. 2 LS) but mentioned in paragraphs 6 and 14 of Article 12 (NSOM and its mandate) as well as in articles 18§4 (common power of other producers of official statistics), 20§1 (Powers of Mongolian Statistics Authority) and in more general terms in Article 21 (Powers of Governors of bags and khoroos). With a clear delineation of the NSS, one provision in the law stating that *producers of official statistics as defined in the present law and articulated in the statistical programme have the right to collect information for official statistical purposes from all kinds of sources, including administrative sources and registers, and through primary data collection systems (reports, surveys and censuses)* could have added some clarity.

48. Giving the right to producers of official statistics to collect information for statistical purposes is one side of the medal. The other is to compel respondents, including holders of administrative data and records, to provide accurate statistical data and information in due time. These provisions are stipulated in Article 9 of the LS about the rights and obligations of statistical respondents. Paragraph 6 of this article mentions the obligation of providing accurate statistical information in due time and paragraph 9 states that all costs for proving such information are at the own costs of the respondents. It is not clear, however, to which extent these provisions refer to holders of official statistics, administrative data, business entities or private persons. They likely refer to all, but here also some clarity could be added by reformulating these provisions.

49. The LS also provides to producers of official statistics the right to take incentive measures against respondents and holders of administrative records that do not comply with their obligations. Statistical inspectors (art. 16§8), ministries, other government organisations and Governors at all territorial levels (art. 18§2) have the right in case of non-response, or response not complying with instructions, to visit the respondents and complete the questionnaire at their own costs. As mentioned earlier, it is interesting to read in the very last article of LS (art. 23) that business entities and institutions that failed to submit a completed questionnaire in due time may be mentioned publicly in the media. This is probably a very strong incentive for enterprises to strictly comply with the LS and in particular with the obligation to respond. However, no further information is given about the magnitude of

administrative sanctions for the infringement of LS and how these can be implemented by producers of official statistics.

1.1.6 Assessment and recommendations:

50. The Law on Statistics of Mongolia (LS) describes the mandate, role, rights and obligations of the National Statistical Office of Mongolia (NSOM) and to some extent other producers of official statistics. The LS regulates interactions among bodies of the SAM (Statistics Authority of Mongolia) but also between NSOM and major stakeholders such as the Parliament, Government, administrations at all territorial levels, holders of administrative data and users.

51. The present LS was adopted in 1994 and changes stimulated by national and international developments have been made to the LS in a flexible way through successive amendments (1997, 1999, 2004, 2008, 2012 and 2013). However, some of the findings described in this Chapter and proposals for further enhancing the compliance of the LS with international principles, such as the UN-FPs and the ES-CoP will require an in-depth revision of the LS. This revision will not be possible through amendments since it is also recommended to restructure the LS and refine its scope. This would be a good opportunity to improve clarity and to avoid a few overlapping or contradictory provisions that have been identified in the LS.

52. In the process of the full revision of the LS, it is also recommended to make a reference to the *Standards for the Quality Management of the Mongolian official statistics* also known as the *Mongolia Statistics Code of Practice* (MS-CoP). These standards reflect adequately the ES-CoP and the UN-FPs. In that respect and in order to improve the legitimacy and the enforcement of the MS-COP, the latter should be submitted to and endorsed by the legislator (Parliament) as it was done recently at global level for the UN-FPs (A/68/L.36). However, along with the process of the revision of the LS, it is recommended to slightly adapt the terminology of the MS-CoP in order to avoid discrepancies and inconsistencies between these two important legal frameworks. For example, the term *Statistics Authority* is used in the MS-CoP in the way it is defined in the European Statistical System (ESS); but in the LS this concept refers to something different (SAM). Eventually, one could recommend simultaneously submitting the new version of the LS and the slightly adapted MS-CoP to the State Great Khural (Mongolian Parliament).

53. In the present LS the delineation of the NSS is rather blurred and does not make a clear distinction between other producers of official statistics and providers of administrative data. Furthermore, the structure and organisation of the SAM are rather complex, with a three-layer system of territorial bodies in addition to NSOM. If the delineation of the NSS and the configuration of the SAM are discussed in-depth in Chapter 2 and 3, it is important to mention that the present situation could represent a potential threat to the principles of professional independence and confidentiality. It is therefore essential to avoid to the extent possible, involving organisational units, officials and authorities at all territorial levels in the production of official statistics/data and simultaneously in other activities such as the collection of administrative data. This distinction is important, since the MS-CoP and relevant provisions in the LS apply primarily to official statistics and not to the collection and processing of data for administrative purposes.

54. There are however two provisions mentioned in the LS about administrative data that should be kept or even reinforced:

    a) The obligation for producers of administrative data to comply with the methodology and instructions approved by NSOM;

    b) Holders of administrative data to be compelled to allow access or to deliver data for statistical purposes to producers of official statistics.

55. In general, when data are collected simultaneously for statistical and administrative purposes, is it a recommended practice to label this data collection as administrative. In the case of Mongolia, this would clarify the role of Governors of bags and khoroos as producers of administrative information exclusively.

56. The revision of the LS will also allow reviewing the mandate and tasks of the Council of NSOM (the Council). The Council should be an advisory body representing users' communities within but also outside the Government and the Parliament. The media, academia, researchers, the business sector and civil society may also be represented in this important body for the NSS. The mandate of such a Council is primarily to advise and assist NSOM, as coordinator of the NSS, to establish and monitor the implementation of the statistical programmes based on clear priorities. The Council may also consider if the resources (financial and human) made available for official statistics are sufficient and assess if other producers of official statistics are conducting their activities in full compliance with the relevant provisions of the LS and the MS-CoP. But it is not the task of such an advisory body to discuss methodological issues (professional independence). The choice of sound methodology and data sources for the production of official statistics should be the exclusive competence of NSOM. In order to better represent the users' communities, the number of members of the Council should be extended and the name of the body changed to *Statistical Council* in order to reflect accurately its mandate and authority.

57. The present LS mentions a full list of statistics and related indicators to be produced (art 6). In most countries, such a list at a very detailed level for <u>all</u> producers of official statistics is provided in the statistical programme as an output. This allows producers of official statistics to take into account in a more flexible way emerging users' needs at national and international level and the Statistical Council to review and assess annually the deliveries of the NSS. This assessment can also be extended to Article 7 of the LS, which shows an exhaustive list of surveys and censuses to be conducted by NSOM (obviously omitting surveys and reports conducted among business entities or by other producers of official statistics). It is recommended, with the exception of the population and housing census, to mention this list of censuses and surveys in the annual statistical programme. After all, according to the principle of professional independence, it is for NSOM and other producers of official statistics to decide which data sources are the most appropriate for the compilation of statistics. This role should not be given to the legislator.

58. To conclude, statistical programmes (multi-year and annual) are essential coordination tools for the NSS and should encompass all official statistical information and indicators to be produced. The annual programme of work shall mention, for each statistic or indicator to be produced, what are the data sources deadlines and which organisation(s) is/are in charge of the data collection, processing

and dissemination. Allocation of resources from the central budget to NSOM and, when relevant, other producers of official statistics should be done based on the programmes.

59. However, the statistical programme is stated only once in the LS (art. 3). This important coordination tool, which also secures professional independence, objectivity and impartiality of official statistics, would definitely deserve at least one article in the LS defining its scope, structure and adoption procedures.

60. Further to these recommendations of a more institutional nature (see also Chapter 2), the following essential elements should be taken into account when redrafting the LS:

a) In line with the MS-CoP and UN-FPs, the principle of professional independence shall be clearly articulated. In the present LS, this principle is mentioned in Article 4 but not further explained. It is acknowledged, nevertheless, that the provision in Article 11(§6) of the LS, stating that *ministries shall have a specific unit responsible for sectoral (official) statistics in their respective organisational structures*, is an appropriate response to this principle. Therefore this provision should remain but the principle of professional independence should be further developed.

b) The principle of *confidentiality* is mentioned in the article about rights and obligations of statistical respondents (art. 9) and under illegal use of statistical data and confidentiality of information (art. 22). There is no definition or other specific provisions about confidentiality in the law. The revised LS should better define and enforce this principle to all producers of official statistics.

c) Further to the principle of confidentiality, the LS should foresee the obligation for civil servants and other officials at all levels, including ministries and agencies, who/which have access to confidential data to sign a confidentiality pledge.

d) Confidentiality is not only a principle to comply with in the production process of statistical information (data collection, data processing and dissemination). Unit-level data stored (e.g. completed questionnaires and reports) are also subject to confidentiality. The LS should stipulate clearly where, by whom and how long confidential unit-level data shall be stored. A specific provision in the new LS on storage of and access to anonymised unit-level data for scientific purposes is also recommended.

e) The LS should better articulate the mandate for data collection (principle 2 of the MS-CoP). It is recommended to add a provision stipulating not only the right for collecting data from all sources as mentioned in the present LS but also that administrations, enterprises of all legal forms, households and private persons are compelled to allow access or to deliver data for statistical purposes.

f) Penalties and other administrative sanctions for enterprises and private persons not complying with the LS, in particular with the obligation to report, are stated in Article 23. However, they are stated in a rather *soft* way and therefore difficult to implement.

g) The principle of impartiality and objectivity as stipulated in the MS-CoP (principle 6) is rather weakly treated in the LS. It is therefore recommended that three additional provisions are incorporated into the new version of the Law (dissemination):

- Statistical release dates and times are pre-announced; release calendar to be placed ideally on the web;
- Advance notice is given on major revisions or changes in methodologies;
- All users have equal access to statistical releases at the same time. Any privileged pre-release access to any outside user is limited, controlled and publicised.

Further recommendations on dissemination and communication of official statistics are discussed in Chapter 3 of this report.

61. Assessors were informed during their second mission about the intention of NSOM to fully revise the LS in the near future. This will be an excellent opportunity to take into consideration findings and recommendations formulated in this report and in particular in this Chapter about the legal framework of the Mongolian NSS.

62. To conclude, confidentiality, professional independence and impartiality are the key principles for the integrity of NSOM and the whole statistical system from the point of view of users and respondents. But it is not sufficient that these principles are mentioned in the LS. For building and maintaining trust in the NSS and its deliveries, it is essential that these principles are explained, respected and implemented in everyday practice.

1.2 Census-related legislation

63. Population and Household Censuses (PHCs) are complex operations that intend to collect information on each person and household in a country. The final objective of PHCs is not to communicate facts about each individual but to provide information about the population and related social and economic living conditions within a country, its territorial subdivisions and communities. The public at large, which in the case of a census refers to the respondents, has the right to expect organisations, officials and other persons involved in census operations to follow strictly professional standards and fundamental principles. These professional standards and fundamental principles shall be clearly articulated in the legal system of a country and fully implemented by all stakeholders.

64. PHCs are among the most publicly visible activities of national official statistics, and therefore adherence to these standards and principles is of particular importance. The objective of a Law on Population and Housing Census (LPHC) is not only to put in place important organisational and operational measures for the conduct of censuses but also to set the standards of quality, integrity, professionalism and confidentiality that should apply to all: producers as well as respondents. It is therefore internationally recommended that any specific legislation on the population census in a country makes explicit reference to the Law on Statistics (LS) and acknowledges the applicability of the highest standards of quality, confidentiality, professional independence and integrity.

65. The task of a National Statistical Office (NSO) is to make sure that these standards are observed by its regular staff, its temporary staff recruited for the census and staff of any other (public or private) organisations to which certain parts of the operations may be assigned or subcontracted. In doing so, the NSO will safeguard the reputation and credibility of the entire National Statistical System (NSS).

66. In Mongolia, the first and present Law on Population and Housing Census (LPHC) was approved by the Legislator in 2008. The LPHC is not restricted to a specific year but intends to regulate all forthcoming census rounds (with a periodicity of every 10 years) and inter-census surveys. The first inter-census survey should take place in 2015 and the next PHC in 2020.

67. The LPHS has the following structure:

a) General provisions (Chapter 1) dealing with definitions, census approaches and general principles;

b) Financial provisions related to the census operations (Chapter 2) at national and all territorial levels;

c) Definition of census and inter-census surveys, frequencies, scope, enumeration units and census data (Chapter 3);

d) Chapter 4 sets the organisational structure and tasks of different bodies involved in the census operations. The LPHC establishes a State Census Committee that creates Census Boards in charge of the management of census operations at territorial level;

e) Rights and obligations of central administrations, local governments and respondents are stated in Chapter 5;

f) Chapter 6 is about confidentiality, storage and protection of data as well as sanctions for breaching the law.

68. The scope and structure of the LPHC is satisfactory, with a minor exception. Indeed, Chapter 2 about financial provisions related to the census operations would have been better placed after the present Chapter 4. One could also comment that the definition of resident population in the LPHC (6 months) does not comply with international recommendations (12 months). But this will be discussed further in section 4.2.1 of this report.

69. From an organisational and logistical point of view, the LPHC seems to be operational, since the last PHC was conducted successfully by the 363 staff employed by the Census Commission, 2,176 staff at the Census Boards, 3,500 supervisors and 11,600 enumerators.

70. However, provisions about the enforcement of the fundamental principles in the LPHC are rather vague or even absent for some principles and therefore need some additional consideration. Article 2 of the LPHC makes an explicit reference to the Constitution of Mongolia, the LS, the Archive Code, the Law on Confidentiality of institutional information and the Law on Confidentiality of individual information. However no link is provided to the Mongolia Statistics Code of Practice (MS-CoP)

which accurately reflects the European Statistics Code of Practice (ES-CoP) and the UN-Fundamental Principles of Official Statistics (UN-FPs).

71. In Mongolia, the specific organisational structure established for the PHC operations consists of various bodies at central and territorial level: Government, ministries and local administrations. Most of these bodies are not considered part of the NSS and this may have implications on the observance of some fundamental principles such as confidentiality, professional independence and impartiality. Indeed, such bodies may have responsibilities other than official statistics that have the potential to create conflicts of interest. It is therefore important to stipulate in the LPHC that in the context of the census, all institutions and persons involved are fully subject to these principles from data collection to dissemination. These principles are also to be followed by producers of official statistics, in particular by NSOM, but these organisations or organisational structures are already bound by the relevant provisions of the LS.

72. In the context of a PHC, an important principle for the population as the provider of information (respondents) is the confidentiality of the individual information collected and that this information is strictly used for statistical purposes. The term *statistical purpose*, in this context excludes the use of such information for any decisions by a government or public sector authority targeted at an individual unit. Thus, it eliminates the possible perception of respondents that the individual information they provide in good faith about themselves could be used against them. Therefore, the principle of confidentiality should be enshrined in the LPHC and be applicable to all institutions and organisations involved in census operations. The LPHC may also foresee that any persons who have access (or potential access) to confidential information at all stages of the census operations should sign a confidentiality agreement mentioning clearly the sanctions in case of violation of the relevant provisions of the national legal framework.

73. It is NSOM's responsibility to enforce confidentiality provisions as stated in the LS and the LPHC, not only during the census operations but also after. Therefore the storage of unit-level (micro) data should be closely monitored by NSOM in order to prevent by all reasonable means access to confidential information to non-authorized people. In many countries, filled-in census forms are destroyed at the end of the process. Anonymised files for researchers or analytical purposes can be kept indefinitely. But this procedure, as well as the strict conditions under which these data may be accessed, shall be regulated by the LS and the LPHC, and cautiously implemented by NSOM.

74. To retain trust, producers of official statistics need to operate according to strictly professional and impartial considerations including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data. In the context of the PHCs, where the NSOM is strongly dependent financially but also logistically on the Government, ministries and local administrations, the enforcement and implementation of these principles are essential.

75. Policy makers and other users, with the support of the Statistical Council, may participate in the discussions on what statistical information is to be produced but

never on how to produce it. In the framework of a PHC, there is a potential risk of non-statistical organisations and institutions getting involved in decisions concerning methodology, concepts, definitions and professional instructions. Provisions of the LPHC of Mongolia are to some extent confusing about which bodies (e.g. Census Committee vs. NSOM) are ultimately taking such decisions. If Article 13(§6) of the LPHC is clear about NSOM professional authority, Article 13(§5) mentions that the State Census Committee selects census methodology. It is therefore essential that the LPHC clearly enforces professional independence of NSOM and avoids defining concepts such as resident population (art. 10 LPHC) that should be of the exclusive competence of NSOM in accordance with international recommendations.

76. Concerning dissemination, the principle of impartiality foresees that official results of PHCs have to be publicly accessible, and the dissemination of these results has to be simultaneous for all users, including government users, if possible at dates communicated in advance (release calendar). The advance release calendar may be a rolling one, where the release dates become gradually more precise over time. Results may be released as provisional in order to be timely, but the principle of impartiality in dissemination must be respected. It is essential that there is no official or unofficial clearance process involving government bodies outside NSOM prior to the official release of the census results.

77. In some cases, advance information about PHCs can be given under embargo to certain government organisations. But this practice should be strictly granted by the law (LS or/and LPHC) and the public informed about government institutions and agencies getting pre-release information (e.g. Website of NSOM). The purpose of this advance information is that key users in the government can prepare themselves for confronting questions of the media with respect to policy implications of the results. But, as mentioned above, this practice must be clearly stated in the law.

Assessment:

78. The population and housing census (PHC) is a specific and important official statistical activity that requires the deployment of significant human and financial resources and the implication of numerous governmental institutions both, from inside and outside of the National Statistical system (NSS).

79. In Mongolia, the LPHC is a recent legislation (2008), which from an organisational and operational point of view is fit for purpose. Nevertheless, in order to take all necessary measures to safeguard the credibility and trust in the PHC results and also in the NSS, some of the fundamental principles deserve better treatment in the LPHC. The National Statistical Office of Mongolia (NSOM), as the leading organisation of the NSS, should be the custodian of these principles and empowered through the law to monitor their implementation.

80. There is no need for an immediate revision of the LPHC, but it is recommended, after the adoption by the Legislator of the new LS and the endorsement of the Mongolia Statistics Code of Practice (MS-CoP), to align the LPHC with these two legal frameworks. Ideally, the new LPHC could be endorsed by the Parliament along with the announcement of the next PHC, in 2018 for the 2020 PHC round.

81. In the framework of the revision of the LPHC, it is recommended to consider the following:

a) Further to the reference to the LS, the new version of the LPHC should explicitly mention the Standards for the Quality Management of the Mongolian official statistics, also known as the Mongolia Statistics Code of Practice (MS-CoP).

b) The LPHC should to the maximum extent avoid any references to methodology, standards and definitions, in particular when those are not compliant with international recommendations (e.g. resident population).

c) It is questionable if the LPHC should mention the variables to be collected. Indeed, for each additional variable and indicator that users, including the Government and other policy makers, would like to get, the LPHC must be amended and eventually endorsed by the Parliament. This list could be better placed in the PHC programme.

d) The LPHC should better articulate the PHC programme and fix its adoption procedure. The Statistical Council (Council of NSOM), as the advisory body of the NSS representing the users' community, should be involved.

e) To explicitly articulate the principles of professional independence of NSOM, confidentiality, and equal and simultaneous access to official releases to all users. If for objective reasons some government organisations need to access data prior to their official dissemination, this exception must be stated in the LPHC and the list of the organisations that have requested this derogation published (e.g. on the NSOM website).

f) A clear provision should be added in the LPHC concerning storage of confidential unit-level data collected in the framework of the PHC. The LPHC should stipulate clearly where, by whom and how long confidential (non-anonymised) unit-level data shall be stored. A specific provision in the LPHC on storage and access to anonymised unit-level data for scientific purposes is also recommended.

g) The LPHC should foresee that all members of the census organisation and outside agents providing services in connection with the census should be given strict instructions, and be required to sign legal undertakings, about confidentiality. As mentioned already in the LPHC, they should be liable to prosecution for any breaches of the law.

82. During the second assessment mission, experts discussed with NSOM management the option of incorporating the LPHC directly into the LS, as it is done in some countries. It seems nevertheless that for objective reasons these two laws will have to remain distinct in Mongolia. The advantage of including the LPHC in the LS is that numerous provisions, in particular on the principles of independence, impartiality and confidentiality, would not need to be repeated.

1.3 Other legislation affecting statistics

83. As commonly found in other countries, a number of laws in addition to the Law on Statistics (LS) affect statistics in Mongolia. According to information provided by NSOM prior to the first assessment mission the following laws affect in particular official statistics:

a) Constitution of Mongolia;

b) Law on Mongolian administrative and territorial units and its management;

c) Law on State registration of legal entities;

d) Law on Archives;

e) Law on data security;

f) Administrative Penalty Law;

g) Law on Civil registration;

h) Law on Confidentiality of institutional information;

i) Law on Confidentiality of individual information;

j) Law on determining minimum subsistence level;

k) Law on Public service;

l) Labour Law.

84. In addition, the Customs Law of Mongolia and the Law of Mongolia on the Central Bank (LMCB) provide specific provisions on statistics. As these two organisations were assumed to be important producers of official statistics, their respective law will receive some specific considerations in this Chapter.

Law of Mongolia on the Central Bank

85. In the LMCB, both articles 31 and 34 deal with statistics. Provisions of Article 31 concern the relations of the Central Bank of Mongolia (Bank of Mongolia or the Bank) with the Government and states that *the Bank of Mongolia shall submit information on monetary statistics in its annual report to the Government*. Article 34 (Statements of the Bank of Mongolia), articulates the obligation for the Bank to produce statistics but also the right to require the necessary information from data providers. Article 34(§4) states that the Bank of Mongolia may publish statistical information and reports in compliance with the laws.

86. As mentioned above, the Bank of Mongolia is to be considered a producer of official statistics: Balance of Payments statistics (BoP) and monetary statistics. Both BoP and monetary statistics are listed in Article 6 of the LS as indicators of official statistics. It is important to emphasise that Article 18 of the LS refers explicitly to the Bank. This article describes the rights of the Bank of Mongolia with respect to official statistical activities. These rights concern the monitoring of accuracy and objectivity of official statistics, the measures to be taken in case of non-response and the dissemination of results. It is also stated that questionnaires for data collection should be approved by

NSOM. One could observe, nevertheless, that the title of Article 18 stipulates explicitly the Bank of Mongolia, but in the provisions of this article the Bank is never mentioned.

87. The compilation methodology of the BoP is established through a joint decree (13 March 2012) from the President of the Bank of Mongolia (1/28) and the Chairperson of NSOM.

Assessment:

88. Article 34 on statistics in the LMCB is not very precise about the statistical tasks of the Bank. The LMCB refers neither explicitly to the LS nor to the international principles for statistics (e.g. UN-FPs). For the NSS, it would be beneficial to bring more coherence and clarification between the LMCB and the LS.

Customs Law of Mongolia

89. One of the functions of the Customs General Administration (CGA) of Mongolia is to compile customs statistical data on foreign trade based on custom declarations. The legal base for this statistical activity is the Customs Law of Mongolia (CLM). This law has a dedicated Chapter on customs statistics where it is stated that customs statistics shall be compiled according to the Harmonized Commodity Description and Coding System.

90. Chapter 4 of the law states that *the Customs shall compile foreign trade statistics by goods and administrative statistical data*. Moreover, the law makes a direct reference to methodology stating that the foreign trade statistics shall be compiled in accordance with the national methodology based on the internationally approved methodology. The CLM also articulates that the methodology shall be jointly approved by the Customs General Administration and NSOM (the Central Statistics Authority in the CLM) in accordance with Article 19(§4) of the LS.

Assessment:

91. The CLM seems to be a sound basis for the compilation of customs statistics. The CLM refers to internationally adopted methodology, the Central Statistics Authority (understood as NSOM) and the LS. However, it is not clear whether the specific organisational unit in the CGA compiling the external trade statistics (ETS) is to be considered a producer of official statistics since the ETS is not specifically mentioned in Article 6 of the LS (indicators of official statistics).

2. NATIONAL STATISTICAL SYSTEM (NSS)

2.1 Definition and delineation of the National Statistical System

92. A National System of Official Statistics (or National Statistical System / NSS) can be defined as the set of government organisations and units within a country that collects, processes and disseminates statistics in full compliance with the provisions of a national law on official statistics as well as with the UN Fundamental Principles of Official Statistics (UN-FPs). Advisory bodies, such as a Statistical Council, are also part of the NSS. The purpose of official statistics is to produce and disseminate authoritative results designed to reliably reflect relevant economic, social and environmental phenomena in a given country following internationally agreed nomenclatures, concepts and methodology. Results of official statistics shall be made available to all users simultaneously.

93. In contrast to producers of official statistics (NSS), providers of administrative data (administrative statistics) collect and process statistical information first of all for their own needs and according to their own legislation, mainly for managing their administrative processes and reporting on their operations to higher authorities that monitor and control their activities (e.g. the Government, the President and the Parliament). Therefore, structural units of these organisations collecting and producing administrative data are not part of the NSS and in general not requested to comply with the provisions of the national law on official statistics (LS) and the UN-FPs. It is nevertheless a good practice for producers of official statistics to use as much as possible administrative data as secondary information sources beside other traditional data sources (e.g. censuses and surveys) for the production of official statistics. This significantly reduces the burden on respondents and, to some extent, improves timeliness and exhaustiveness of the results of official statistics.

94. The Mongolian LS in the first paragraph of its Article 5 states that *statistical information shall be of official and [or] administrative types*. Article 3 further defines official statistical information *as statistical data/information on [the] economy, [the] population, [the] society, and [the] environment [as] specified [in] Article 6 of this Law which are produced by means of methodologies and indicators adopted and approved by the National Statistical Office of Mongolia and data/information which are articulated in the Statistical Action Programme.*

95. Article 6 of the LS lists official statistical information and related 48 basic indicators. However, it is not possible from that list to identify for each of the 48 basic indicators who, from the National Statistical Office of Mongolia (NSOM) or any other producers of official statistics, is responsible for its compilation and dissemination. In many countries, for the sake of flexibility, this list would be available in the annual statistical programme of work (statistical work or action programme) and not in the LS. One also notices that the statistical programme stated in Article 3 of the LS is not mentioned anywhere else in the LS.

96. Paragraph 2 of Article 6 of the LS further insists on the responsibility of ministries and agencies to collect and process their own administrative statistical data and to submit these data to NSOM. This provision, as well as Articles 18 and 19 of the LS, intend to make a clear distinction between data collected for official statistics purposes and administrative data. Though, it is not clear from the LS if organisational

units outside NSOM can be in charge of both, the collection of official statistics data and administrative data. It is important to stress that in order to safeguard the principles of confidentiality and professional independence specific organisational units producing official statistics, including data collection for official statistics purposes, should be separate from other organisational units collecting and processing data for administrative purposes. This rule should also apply to territorial administrations.

97. These comments, based on the relevant provisions of the LS, are to some extent confirmed by the list of producers of official statistics and providers of administrative data submitted by NSOM to the assessors (see annex 3). In this list, with the exception of NSOM and territorial departments and divisions whose activities are exclusively for official statistics purposes (Statistics Authority of Mongolia), most other institutions and agencies are involved in the collection and processing of administrative data as well as the compilation of official statistics. As such, this is not an issue but the same organisational unit within an institution or agency should not be at the same time a producer of official statistics and involved in the collection of administrative data (see figure 1 on next page).

98. As mentioned earlier in Chapter 1, **producers of official statistics** in ministries, agencies and government at all territorial levels, or more specifically their respective organisational units in charge of official statistics, shall collect, process, and transfer data, as well as when relevant disseminate official statistics in full compliance with the provisions of the LS and the *Standards for the Quality Management of the Mongolian official statistics* also known as the Mongolia Statistics Code of Practice (MS-CoP). Unit level data collected for official statistical purposes should not be made available to organisational units that are not involved exclusively in the production of official statistics. Data collected, processed and stored simultaneously for administrative and official statistics purposes should be labelled as **administrative data**.

2.2 National statistical programming and coordination mechanism

2.2.1 Coordination mechanisms

99. For the sake of efficiency (costs), effectiveness, quality of the deliveries, and reduction of burden on respondents, national systems of official statistics need to be well coordinated. The national statistical office in a country should be given de-jure and de-facto a leading role as coordinator of the system. In Mongolia, other producers of official statistics shall use the standards approved by NSOM, in particular regarding classifications, methodology and instructions. Ideally, all statistical activities and outputs from other producers of official statistics should be incorporated in the statistical programmes in order to avoid any duplication or uncertainty. NSOM, on the other hand, is expected to support the work of other producers of official statistics and to some extent of producers of administrative data by providing technical and methodological assistance.

100. In that respect, the LS provides all necessary provisions to empower NSOM in its role as coordinator of the system. Articles 3 and 19 stress that NSOM shall approve questionnaires, instructions and methodology implemented by other producers of official statistics for the compilation of statistical indicators. It is also interesting that

Article 4(§6) of the LS states that *indicators and methodologies on statistical information shall be in conformity with international standards statistical methodologies* and in the next paragraph that collection of statistical information shall be conducted at minimum cost and with less burden on respondents. These are essential principles for a statistical system that have to be enforced and monitored by NSOM. Important tools for monitoring these principles are the strategic (multi-year) and working (annual) statistical programmes (see below).

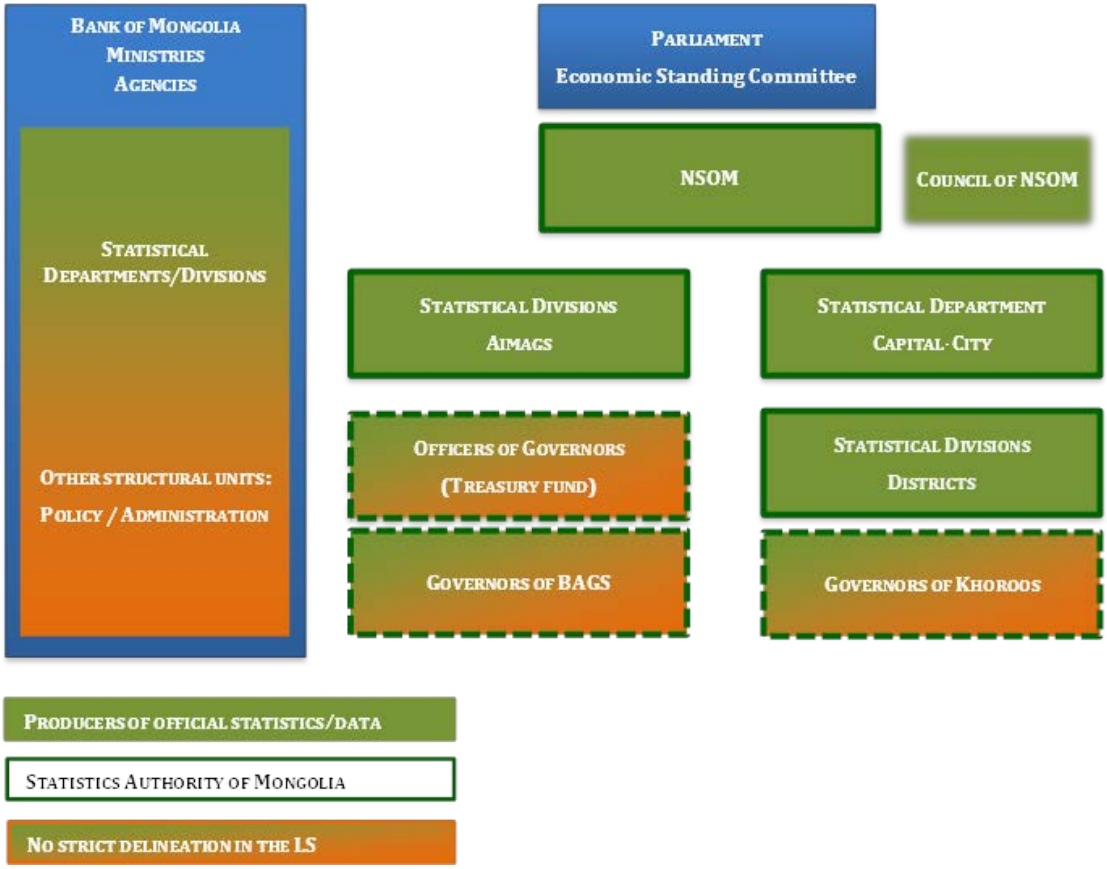

Fig. 1: ***Schematic view of the Mongolian system of administrative and official statistics*** *according to the present LS: in green producers of official data/statistics and in orange producers of administrative data/statistics*

101. It is the responsibility of the Chairperson of NSOM (art. 15 LS) to issue decrees approving and adopting decisions related to official statistical management, organisation, indicators, methodologies and instructions. In order to enforce the coordination role of NSOM, its Chairperson appoints statistical inspectors with the tasks to follow-up and monitor the implementation of decrees, decisions and recommendations provided by NSOM about standards and methodology to be applied by other producers for the compilation of official statistics (art. 16 LS).

102. The coordination and monitoring rights of the NSO are not only limited to other producers of official statistics but also to producers of administrative information. Article 12(§4) stipulates that NSOM has the right to approve methodologies and

instructions for the compilation of administrative statistics, to evaluate their coverage and accuracy (quality) and to avoid duplication of data collection.

103. NSOM has also signed Memorandum of Understandings (MoUs) and other agreements with producers of administrative data in order to enhance the collaboration and cooperation and ultimately to improve the quality of administrative data used for the compilation of official statistics.

104. A proper delineation of the NSS is more than a formality, since according to the UN-FPs, producers of official statistics have not only specific rights but also obligations, such as the principle of statistical confidentiality. This principle implies that unit-level data collected by all producers of official statistics, including territorial offices, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes. This principle is fundamental to safeguarding trust in official statistics, enhancing response rate and ultimately improving quality. Administrative data do not need to systematically follow this principle since they are collected and processed for own management purposes and according to other rules and procedures. This means that producers of official statistics can have access to administrative unit-level information but that confidential data held by producers of official statistics should not be made available to administrative data providers (single flow principle). Some exceptions to this principle are possible but should be clearly communicated and mentioned in the LS.

105. As stated in the LS, one important task of NSOM, with the support of the Statistical Council (Council of NSOM), is to coordinate and monitor the activities and deliveries of all producers of official statistics (NSS). However, as mentioned earlier in this report, the LS is rather ambiguous about the delineation of the NSS and therefore does not allow NSOM to fully implement its coordination functions. It is therefore fundamental that the LS gives more guidance on how to identify who is in the NSS (the organisational unit producing official statistics) and who is out (producers of administrative data and final users of official statistics).

2.2.2 The multi-year and annual statistical programmes

106. As mentioned earlier in this Chapter, the multi-year (strategic) and annual (operational) programmes are the main tools for a national statistical office to carry out its coordination function. Both programmes, approved by the relevant national authorities are a very good basis for the planning of statistical activities, ensuring that deliveries from all producers of official statistics are consistent and meet users' requirements (quality) in an efficient and effective way, avoiding duplication of data collection and thus keeping the response burden to reasonable level.

107. In order to allow enough flexibility, with the exception of the main producer of official statistics in the country (National Statistical Office), it is a common practice not to mention explicitly in the statistical law the other producers of official statistics. Other bodies that comply with the LS, including their respective deliveries, projects and tasks as producers of official statistics, are better listed in the programmes as an **output**. Censuses and surveys conducted by any producer of official statistics, as well as deliveries from producers of administrative data used for the compilation of official statistics shall be mentioned as an **input** in the programmes. In that respect, it is also a good practice for a National Statistical Office and other producers of official statistics

to regularly assess whether data sources (administrative data or primary data collection) used for the production of official statistics are fit for their purpose.

108. It is important to stress that some statistical products can be mentioned twice in the statistical programmes: as input and output. In most countries, for example, the Balance of Payments Statistics (BoP) is an output of the National (Central) Bank but also an input for the National Accounts compiled by the NSO. This is also the case in Mongolia and therefore the BoP statistics is to be shown in the programme of work (annual programme) as an output of the National Bank of Mongolia (official statistics) and an input for NSOM. The same applies to the Ministry of Finance with the Government Finance Statistics (GFS).

109. In Mongolia, NSOM is in charge of designing, implementing and monitoring the National Programme for Development of Statistics (NPDS) and the annual work plans. The first phase of the NPDS covered the years 2006 to 2010. The second NPDS was developed with the technical assistance of the Monstat project in 2011 and is expected to be concluded in 2015 (Parliament resolution n°59, 2011). The Council of NSOM is consulted and provides support to NSOM in the development and implementation of the NPDS and annual work plan. This is a good practice, however, the role of the Council of NSOM in the elaboration and monitoring of the programmes is not mentioned in the LS.

110. In practice, the entire process for the preparation, adoption, implementation and monitoring of the NPDS is the following:

a) Collection of background information and documents and preparation of a concept note;

b) Setup of a working group in charge of the development of the draft programme and preliminary estimations of the costs (budget) for implementing the draft of the programme;

c) Submission of the draft programme and cost evaluation to NSOM management board and to the Council of NSOM (Statistical Council);

d) Consultation of all relevant ministries and agencies;

e) Comments and suggestions from the relevant ministries and agencies are incorporated into the NPDS;

f) The NPDS is submitted to the Government and eventually an authorization to submit the NPDS to the Parliament is granted;

g) Discussion in Parliament and adoption of a resolution by the Parliament;

h) Development of an action plan (implementation plan) to the NPDS and submission to the Council of NSOM;

i) Inclusion of the measures of the action plan into the annual work plan (operational programme) of NSOM;

j) Implementation of the annual work plan, including action plan;

k) Semi-annual and annual monitoring reports are submitted to the management board of NSOM;

l) Once a year NSOM submits an implementation activity report to the Economic Standing Committee of the Parliament.

111. The Policy Implementation and Coordination Department of NSOM is responsible for the design, submission and monitoring of the NPDS. The annual work plan is prepared on the basis of the NPDS by all departments and division of NSOM for their respective areas of responsibility. The Policy Implementation and Coordination Department merges them into an integrated NSOM annual work plan. The latter is then submitted to and approved by the Chairperson of NSOM.

112. In the Parliament, it is the Economic Standing Committee that is in charge of supervising the activities of NSOM. This Committee is well aware of the role of official statistics in a modern society and therefore supportive to any further development of statistical capacity in Mongolia. A meeting with representatives of the Economic Standing Committee during the first global assessment mission confirmed this statement.

113. NSOM has adopted an excellent practice of including activities financed by other sources than the regular state budget in the programmes, for example contributions from international and bilateral partners to statistical capacity building activities. Other important activities for the sustainable development of statistics such as training, information technology and other statistical infrastructures are also mentioned in the programmes. It is also remarkable that the NPDS incorporates information about resources needed for its implementation.

114. On the other hand, with the exception of Article 3 of the LS which mentions that official statistical information should be articulated in the statistical programme, the LS does not include any articles or provisions on these programmes. The coverage of the programmes, the adoption procedures, and their implementation and monitoring are absent from the statistical legislation. The role of the Council of NSOM in the preparation and follow-up of the statistical programmes is also not explicitly mentioned in Article 14.

115. It seems also that the programmes are more input oriented and thus could be considered management instruments to NSOM rather than coordination tools for the overall NSS. The programmes should reflect the needs of the users and this is the reason they are submitted for consultation to the Council of NSOM (Statistical Council).

2.2.3 The Council of NSOM

116. The existence of a Statistical Council (the Council), which represents a wide range of users and allows them to interact is a prerequisite for the production of statistical information that meet users' requirements. Particularly relevant is that the main tasks of such a Council should be more oriented towards statistical outputs and therefore focus on the relevance, timeliness and punctuality, comparability and accessibility of statistical information. The composition of the Council should cover a wide range of

users also outside the sphere of the policy makers (outside the government, ministries and agencies).

117. The Council is not a methodological committee and therefore other producers of statistics (specific organisational units of ministries and agencies producing official statistics) should not be members of this advisory body, though they should be invited to participate when necessary. In some cases, an institution can be a member of both (Statistical Council and methodological committee) but not with the same functions and the same people. For example, the top management of the National (Central) Bank can be a member of the Statistical Council as user of official statistics and the Director of the specific organisational unit from the National Bank producing official statistics (e.g. Balance of Payments Statistics) can be a member of the Methodological Committee.

118. Alongside the central function of the Statistical Council in supporting NSOM in the preparation and submission of the statistical programmes, this advisory body may also have the mandate to assess the level of coordination of the entire NSS, to review the efficiency and effectiveness of the system and to appraise statistical burden on respondents. It is considered a good practice to have the Chairperson of NSOM to chair the Statistical Council.

119. In Mongolia, the LS, in its Article 14, foresees the establishment of a Council of the National Statistical Office (Council of NSOM) chaired by the Chairperson of NSOM. The Council is further composed of 3 members proposed by the Economic Standing Committee and three others by the Government. All members are eventually appointed by the Parliament.

120. The Council is a rather active body, which meets a few times in the year, makes recommendations and support official statistical activities. However, according to paragraph 1 of Article 14, the Council of NSOM also provides advice and recommendations on methodological issues. It seems also that the mandate of the Council does not cover the entire statistical system but rather the activities of NSOM. Its name (Council of NSOM) gives us some indication of its sphere of competence and responsibility. One would also claim that with 6+1 members, the Council is probably not representative of the large diversity of users; e.g. university and academia, researchers, the media, the business community and civil society.

2.2.4 Assessment and recommendations

121. In Mongolia the production of official statistics is, from a functional point of view, rather centralised within the Statistics Authority (NSOM and territorial statistical bodies). NSOM is not only the main producer of official statistics in the country but has also de-jure (LS) and de-facto a strong coordination role over all other producers of statistical information, including producers of administrative data.

122. A Statistical Council (Council of NSOM) is foreseen in the LS and has been established. The Council advises and supports NSOM in its activities and is involved in the establishment and monitoring of the NPDS (statistical programmes).

123. However, the boundary of the national system of official statistics is not clearly defined in the LS. The LS does not specify under which conditions and procedures

statistical information produced by state agencies other than NSOM can be identified as official statistics. This blurred delineation of the NSS restricts the scope of the mandate of NSOM to activities and deliveries of the Statistics Authority of Mongolia (SAM); excluding de-facto most other producers of official statistics. This ambiguity in the delineation of the NSS also impacts coordination tools such as the statistical programmes and the main advisory body (Council of NSOM).

124. In the framework of the current NPDS, measures have been taken to improve the legal, institutional and organisational framework of the NSS. This report welcomes and strongly supports this objective, but also proposes the following additional flanking measures:

a) The LS should make a clear distinction between producers of official statistics and producers of administrative data. This distinction should be made from an institutional point of view.

b) It is for NSOM, with the support of the Council, to assess if a producer of statistics is to be considered a producer of official statistics. This has to be done based on the provisions of the LS and relevant international principles (UN-FPs).

c) The provisions of the LS should focus on producers of official statistics since producers of administrative data collect and process the information mainly for their own needs and according to their own legislation. At present many provisions of the LS deal with the production of administrative data.

d) All activities and deliveries of producers of official statistics (NSOM and other producers of official statistics) should be mentioned in the statistical programmes (output). Administrative data used for the compilation of official statistics should be mentioned as an input in the programmes.

e) A specific article dealing with the statistical programmes should be added in the LS. Provisions of this article may articulate the coverage of the programmes, the adoption procedures as well as the monitoring and reporting of the action plan.

f) The Council of NSOM, as the advisory body representing the various users' communities and interests, should have the clear mandate to support NSOM in the design and adoption process of the statistical programmes and to some extent to assess the efficiency and effectiveness of the NSS. The role of the Council is not to be involved in methodological issues. Article 14 of the LS should be revised accordingly. In that respect, the Council of NSOM could be renamed *Statistical Council.*

g) It is recommended to enlarge the participation in the Council of NSOM to other users' communities (e.g. academia, researchers, business community, civil society, media…).

125. Figure 2 below shows what could be ideally the delineation of the NSS in Mongolia. The solution proposed has the advantage of strictly delineating the NSS while maintaining the territorial organisation of the Statistics Authority of Mongolia (SAM). The SAM will be further discussed in Chapter 3 of this report.

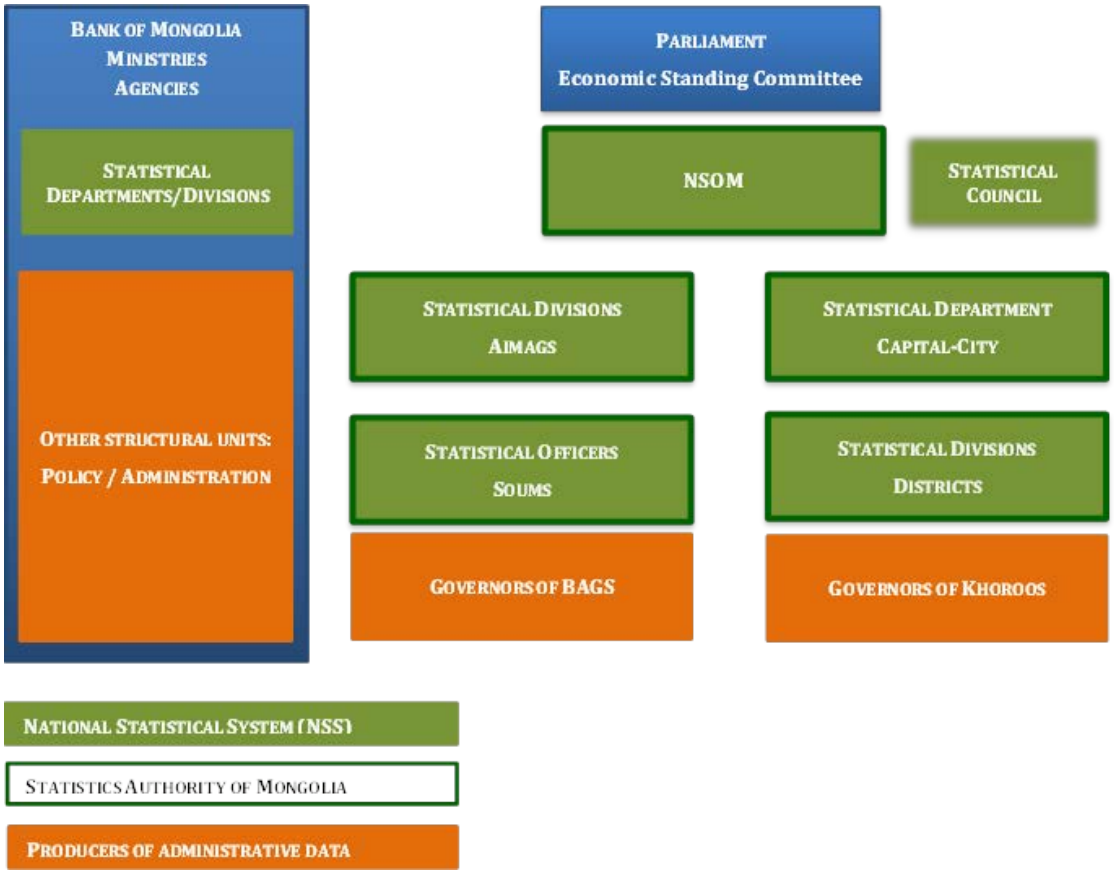

Fig. 2: Schematic view of a possible delineation and organisation of the NSS and the SAM

3. STATISTICS AUTHORITY OF MONGOLIA (SAM)

3.1 Structure and organisation of the Statistics Authority of Mongolia

3.1.1 Overview

126. First of all, it is important to mention that it is a challenge to produce official statistics in a country like Mongolia with a vast territory (1.6 million km^2) inhabited by less than 3 million inhabitants. Outside the Capital-City (Ulaanbaatar) and other urban centres most of the economic activity is concentrated in mining and livestock (agriculture).

127. In order to be as close as possible to the respondents (observation units) and local governments, the Statistics Authority of Mongolia (SAM) which consists of NSOM as well as Statistics Department and divisions at territorial level reflects the administrative structure of the country. The importance of territorial statistical bodies can be illustrated by the fact that in 2013 about 60% of total staff working for SAM were employed at aimags, Capital-City and its districts. And this does not include people involved in statistical activities at soums, bags and khoroos.

128. Mongolia is administratively divided into 21 *aimags* (provinces) plus a distinct administrative entity for the Capital-City (Ulaanbaatar). The 21 aimags are subdivided in 330 *soums* (districts) and soums further split into 1588 *bags* (local communities). The Capital-City is split into 9 districts and these districts further subdivided into 152 *khoroos* (sub-districts).

129. Article 11 of the Law on Statistics (LS) defines the mandate and the structure of the so-called Statistics Authority of Mongolia (SAM). Paragraph 2 stipulates that *the Statistics Authority of Mongolia shall consist of the National Statistical Office (NSOM), which is in-charge of the co-ordination of all official statistical activities and functions in Mongolia independently, and its Statistics Department and divisions at the Governors of the Capital-City, aimags, and districts*. Further, it says that … *officers of Governor's office of soums and … the Governors of bags and khoroos are responsible for statistical activities.* It is not clear from this article whether these officers at soums and Governors at bags and khoroos have to be considered part of the Statistics Authority. Paragraph 6 of the same article further blurs this delineation, adding a provision about ministries, agencies, other government and local administration organisations without specifying whether they are part of the SAM. This will have to be clarified in the next revision of the LS.

130. Article 13 of the LS states that the Chairperson of NSOM shall be appointed by the Parliament for a mandate of six years, renewable. The Chairperson of NSOM reports directly to the Parliament. This provision of the LS is fundamental to ensuring the professional independence and impartiality of NSOM as main provider of official statistics.

131. According to Articles 20 and 21, territorial bodies are responsible for collecting data from statistical respondents in their territory and processing, analysing, and transmitting aggregated information to higher level units according to the approved time schedule with NSOM. These agreements are based on the annual programme of work and schedule of data submission. Territorial bodies are also in charge of

conducting censuses and sample surveys in accordance with the rules and guidance given by NSOM. Furthermore they are responsible for maintaining local databases for administrative purposes and to disseminate statistical information.

132. There are some important differences between the Statistics Department of Ulaanbaatar, (Capital-City) and the statistical divisions of aimags and districts on one hand and, on the other hand, statistical offices of soums and Governors of bags and khoroos. Activities of the first set of statistical bodies as for NSOM (in green in fig. 1, above) shall be financed from the central government budget (art. 11§4) and heads of these bodies are appointed by the Chairperson of NSOM. For the soums, officers of the respective Governor's office are in charge of statistical activities and for bags and khoroos, the Governors themselves are in charge. Statistical activities conducted by these bodies are financed by the respective local budgets.

133. At this stage, one could claim that for statistical activities conducted at soums, bags and khoroos there is a risk that the fundamental principles of equal and simultaneous access to statistical information, confidentiality, independence and impartiality are not fully respected. Indeed statistical activities at these territorial levels are financed by local budgets and conducted by non-statisticians that simultaneously are engaged in administrative activities, reporting directly to the respective higher-level Governors or even directly to the Governors of soums. This issue will be discussed further under the sections dedicated to territorial statistical bodies.

3.1.2 Central Statistics Authority: National Statistical Office of Mongolia

134. The National Statistical Office of Mongolia (NSOM) is the central statistics authority and the coordinator of the SAM[1].

135. The mission statement of NSOM is mentioned in the LS (art. 11) as the state institution which provides state, citizens and enterprises on equal basis with statistical data on the economy, social issues and the environment at national, regional, aimag and the Capital-City levels. The five Mongolian regions are not as such considered administrative areas but statistical information is also compiled at this geographical subdivision. Another mission statement that can be found in many official documents such as the 2011-2015 National Programme for Development of Statistics (NPDS), as approved by the Parliament, states that NSOM serves the state, citizens and enterprises on an equal basis, free from any political influences with reliable and accurate economic, social and population information based on scientifically feasible and acceptable approaches.

136. In general these mandates are in line with most of the international principles. If something is missing, it could be a reference to internationally agreed standards and methodology. However, from the mission statements and the relevant provisions of

[1] In order to avoid any confusion, it is important to mention that in most EECCA (Eastern Europe, Caucasus and Central Asia) countries, the notion of *national statistical office or committee* covers the central statistical office and all subordinated territorial bodies. In that sense, in EECCA countries, NSOM would correspond to what is commonly defined as the Central Statistical Office or Central Statistics Authority.

the LS (see also Chapter 1 of this report), it can be said that NSOM is an independent and professional organisation. Aside from its role as main producer of official statistics, NSOM manages and coordinates the overall SAM. It develops and provides instructions on data collection and data processing as well as methodologies, classifications and standards to be implemented (art. 12 LS).

137. The Chairperson of NSOM is appointed by the Parliament for tenure of six years, renewable and is assisted by two vice-Chairpersons, of which one is the first vice-Chairperson. The vice-Chairpersons are appointed directly by the Chairperson of NSOM taking into account their work experience as well as their scientific, professional and managerial skills.

138. The Chairperson is invited to attend, as an advisor, the plenary sessions and standing committees' meetings of the Parliament and sessions of the Cabinet. Last but not least, the Chairperson is ranked as the 5th position in the list of Government top officials.

139. The Chairperson is assisted in his tasks by a management board (Board of the Chairperson) and the Methodological Standing Committee.

140. The Methodological Standing Committee provides professional recommendations on methodological issues as well as on data collection methods, data processing and compilation of statistical information. The Committee is composed by 9-11 members from NSOM and the academia appointed and dismissed by the Chairperson of NSOM. The Committee meets at least twice a month and its recommendations approved by a majority of at least 2/3 of its members are then submitted to the Board of the Chairperson.

141. The Board of the Chairperson provides legal, managerial and methodological assistance and advises the Chairperson of NSOM. The Board consist of 11 members, mainly but not only, from the management of NSOM appointed and dismissed by the Chairperson. Here again the Board meets twice a month with a quorum of 2/3 of its members. Eventually, important decisions on methodology, data collection and processing, quality, dissemination and management of territorial bodies subordinated to NSOM are taken by decree of the Chairperson (art. 15 LS).

142. The Chairperson is also assisted by a General Manager (art. 15bis LS). The Manager set vacancies, recruits, dismisses and promotes NSOM staff members and, if necessary, decides on disciplinary measures. The Manager also allocates budgetary funds according to their original purposes.

143. In accordance with functions and mandates approved by the Order of its Chairperson, NSOM is structured into six departments:

a) Department of Public Administration and Management;

b) Department of Policy Implementation and Coordination;

c) Department of Macro-Economic Statistics (MESD);

d) Department of Population and Social Statistics (PSSD);

e) Department of Data Processing and Technology;

f) Department of Foreign Relations and Cooperation;

And three units:

g) Centre for Information, Training and Advocacy;

h) Division of Economic Statistics;

i) Bureau of Population and Housing Census.

144. The data Processing and Technology Department of NSOM plays an essential role in the transmission, production and dissemination of official statistics. It is also responsible for the development and maintenance of hardware and software infrastructure. The Policy Implementation and Coordination Department is in charge of the preparation and follow-up of the implementation of the statistical programmes. This department is also in charge of quality management.

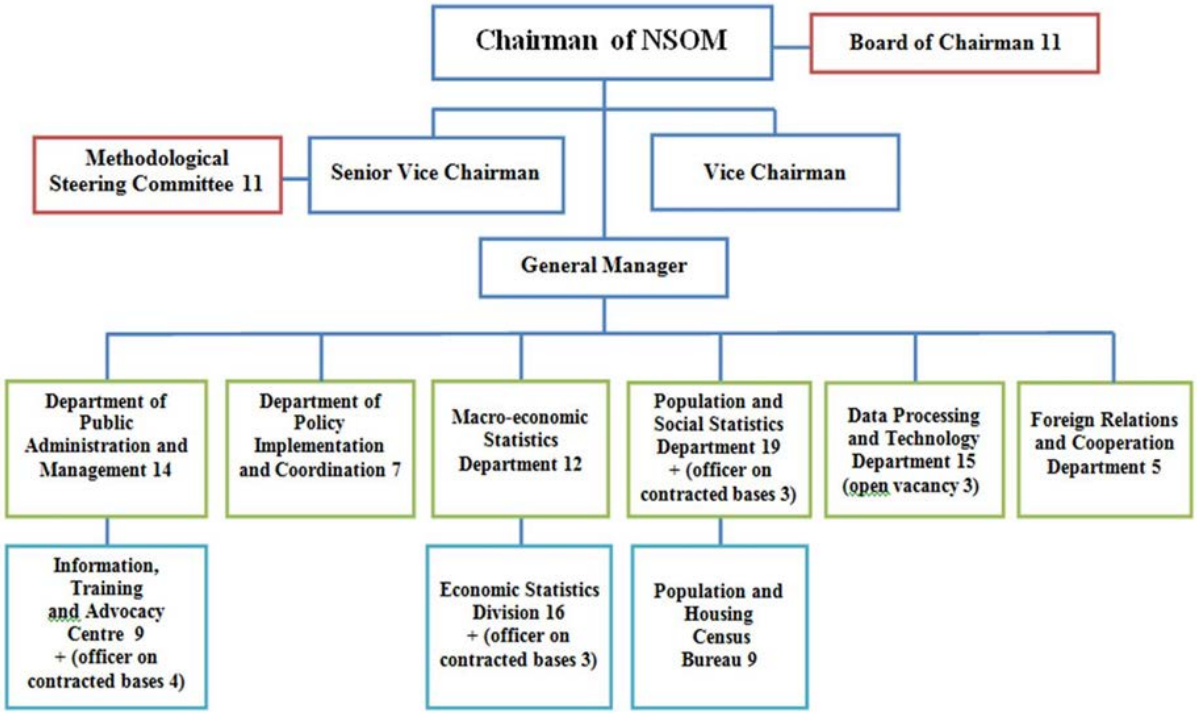

Fig. 3: ***Organisational structure of NSOM:*** *the numbers in the boxes indicate staff counts, with the exception of the boxes for the Board of Chairperson and the Methodological Steering Committee (member counts).*

145. NSOM is located in one building in the Capital-City (Ulaanbaatar) and consists of 124 staff members, out of which 21 are employed on a contractual basis and the remainder are civil servants (1 January 2014). For more information see Chapter 3.2.3 on human resources.

3.1.3 Territorial Statistics Authority

146. As mentioned previously in this report, and as stated in paragraph 2 of Article 11 of the LS, the structure of territorial statistical bodies reflects the administrative structure of the country:

a) The Statistics Department of the Capital-City (Ulaanbaatar) and its 9 district statistical divisions;

b) 21 statistical divisions at aimags (provinces);

c) 330 officers (representatives of Treasury fund) at soums;

d) 1,588 Governors of bags (local communities);

e) 152 Governors of khoroos (sub-districts of the Capital-City).

147. However, an important distinction has to be made between these territorial statistical units/activities. The Statistics Department of the Capital-City, the 21 statistical divisions of aimags and the 9 statistical divisions of districts are directly subordinated to NSOM. This means that these territorial statistical bodies are fully independent structural units from local government authorities. Their activities are financed through the central budget. As already mentioned earlier, appointment and dismissal of heads of these territorial statistical bodies are the responsibility of the Chairperson of NSOM.

148. On the other hand, statistical activities in the 330 soums are conducted by local treasury fund officers and at the 1588 bags and 152 khoroos by the respective Governors themselves. These territorial statistical subdivisions are not directly subordinated to NSOM and statistical activities for all these territorial bodies are financed from the respective local budgets. Their activities are regulated though agreements signed between the Chairperson of NSOM and the respective Governors, based on the annual statistical plan of work. As for the Statistics Department of the Capital-City and divisions of aimags and districts, statistical activities conducted in these territorial bodies are under the control and supervision of NSOM inspectors.

149. Territorial statistical bodies are responsible for the primary data collection, routine quality checking and aggregation of the data in electronic spread sheets. In bags and khoroos this is sometimes still done manually on paper. The aggregated information is then sent to the next higher level up to NSOM. In some cases, NSOM receives also the microdata, for example for household and economic sample surveys. It is therefore a major task of territorial statistical bodies, mainly at soum and khoroo levels, to store microdata and to prevent any unauthorized access to, or losses of, confidential information. Last but not least, territorial statistical bodies have the right to disseminate statistical information and to maintain local databases for administrative purposes. One would carefully consider if data collected and disseminated by territorial bodies, not directly subordinated to NSOM, are still to be considered activities of official statistics and if the databases maintained at that level should not be classified under administrative databases.

150. There are 205 staff members working for territorial statistical bodies under direct supervision of NSOM: 144 in the 21 statistical divisions of aimags, 11 in the Statistics

Department of the Capital-City and 50 in the 9 districts' statistical divisions of the municipality.

151. As mentioned previously, at soum level there are no units responsible for statistics but a state administration officer works part-time for statistics in accordance with Article 11 LS. For the 330 soums there are, on average, roughly 4,600 inhabitants per local treasury officer; for the bags one Governor for 945 inhabitants and 8,600 for khoroos.

3.1.4 Assessment and recommendations

152. NSOM is de-jure and de-facto responsible for the coordination of the SAM (Statistics Authority of Mongolia) and the guardian of the harmonisation of statistical methodology and standards for all producers of statistics in the country. But as mentioned earlier, the SAM is not clearly defined in the LS and thus should be revisited in the framework of the next revision of the LS, duly taking into consideration the UN Fundamental Principles (UN-FPs) and the Mongolia Statistics Code of Practice (MS-CoP). The principles of professional independence, objectivity and confidentiality should fully apply to the SAM. The SAM should be under direct subordination of NSOM, not only professionally (professional independence) but ideally also from an administrative point of view (financial and human resources).

153. Other producers of official statistics/data should also be organised in specific structural units, professionally independent from their respective ministries and agencies, but not from an administrative perspective. As such these structural units (other producers of official statistics) in agencies and ministries would be part of the NSS but not of the SAM.

154. In that respect, this report supports the initiative from NSOM to have at soum level one professional statistician financed by the central budget and whose activities would be under exclusive subordination of NSOM. For the moment there is indeed a potential conflict of interest between the functions of officer in charge of statistical activities and those of local treasury fund officer. For this reason, it is not straightforward to classify statistical activities at soum level under official statistics or even as part of the SAM. On the other hand, it seems that treasury fund officers are only working part-time for statistics (30%) and the question is, beside its impact on NSOM budget, if there are enough activities to keep an officer at soum level busy dealing exclusively with official statistics.

155. Data collection at the level of bags is conducted by the respective Governors. These operations and maintenance of related databases on population, households and livestock should be considered collection of administrative data and processing of administrative registers. In case Governors are directly involved in the collection of data related to official statistical surveys requested by NSOM, it is necessary to ask them to comply strictly with the provisions of LS, laws on privacy and the MS-CoP and make them sign a NSOM confidentiality commitment. But this is only if there is no other way, in better compliance with the LS and the MS-CoP, to collect official data.

156. For khoroos, the issue is rather similar. Thus the question is if it is necessary in terms of efficiency and effectiveness to involve Governors of 152 khoroos, for a city with a population of 1.3 million inhabitants in the collection of official data or whether this

task could be performed by the 50 staff members and interviewers of the 9 statistical divisions of Ulaanbaatar districts.

157. As mentioned in Chapter 1 of this report, when data are collected simultaneously for statistical and administrative purposes, is it a recommended practice to label this data collection as administrative. In the case of Mongolia, this would clarify the role of Governors of bags and khoroos as producers of administrative information exclusively.

158. In any case, the implementation of new data collection methods (electronic access to administrative data, e-surveys and sample surveys), the development of integrated and comprehensive electronic statistical registers and the improvement of IT infrastructure at central and territorial level could present an opportunity to re-think the structure and organisation of Statistics Mongolia and in particular the allocation of resources between the Central Statistics Authority (NSOM) and the Territorial Statistics Authority. The main objective is not only to comply with UN-FPs and the MS-CoP but also to face the increasing demand for high quality, timely and internationally comparable statistics in the country by improving the efficiency and effectiveness of Statistics Mongolia. In that respect, it is important that all microdata collected at territorial level are eventually sent to NSOM. The first obvious reason is to prevent any unauthorized access to, or, losses of confidential information. But this would also allow NSOM to automate data processing and quality checks at central level and to respond to the increasing need of the research community to have access to centralised and anonymised unit-level data (open data initiative).

3.2 Resources and infrastructure

3.2.1 Finance

159. According to the information provided by NSOM, the total annual budgets for the central statistical office, territorial offices and other subordinated bodies to NSOM are shown in table 1 on next page. The substantial increase in the 2012 budget is to a large extent explained by the agricultural census carried out in that year. In addition, the currently rather high rate of inflation significantly impacts the budget in real terms.

160. As shown in the table 2 on next page, the large difference in the planned budget for year 2013 totalling 8.9 billion MNT compared to later estimations of the actual costs of 7.1 billion MNT was due to the fact that three surveys were merged as well as investments in tablets as survey tools, which made large efficiency gains possible. It was also reported that the budgetary system works such that in case of savings in the budget, up to 80 % of these savings can be kept within the budgetary unit.

161. In Mongolia, statistical activities take place at the various territorial levels. The financing of NSOM, the statistical divisions of aimags and the statistical office of the capital and its districts is done through the central government budget. The financing of the statistical activities at lower territorial levels, i.e. soums, bags and khoroos, is done through their respective local budgets. Officers in charge of statistics at soums, bags and khoroos are not included in the statistical job/staff vacancies. In the preparation of the budget, NSOM prepares a budget estimate based on proposals by aimags and the Capital-City (districts) and presents it for the Ministry of Finance

(MoF), which reviews and approves the budget. When the budget has been approved, a monthly financing schedule is prepared and the budget is allocated to local offices. The disbursements follow this schedule.

Table 1: Total annual budget for NSOM (central statistical office) and Territorial Statistics Authority (SAM)

	2010	2011	2012
Total of statistical sector in bln MNT	6.9	6.3	9.2
Total of statistical sector in mln EURO	5.8	5.3	7.7
Of which:			
NSOM in bln MNT	1.7	2.3	2.2
In per cent of total	25%	37%	24%
Incomes equivalent to wage of statistical sector employees	1.4	2.0	2.5

Table 2: Budget of NSS for 2013, bln MNT

	Planned	Actual
Total budget for NSS	8.9	7.1
NSOM, Population and Housing Census	6.1	4.3
Costs for R&D (research and development)	4.2	2.5
Investment, projects and programmes/Monstat/	0.6	0.6
Regional	2.2	2.2
Share of total budget of NSOM budget	22%	25%

162. In Mongolia, statistical activities take place at the various territorial levels. The financing of NSOM, the statistical divisions of aimags and the statistical office of the capital and its districts is done through the central government budget. The financing of the statistical activities at lower territorial levels, i.e. soums, bags and khoroos, is done through their respective local budgets. Officers in charge of statistics at soums, bags and khoroos are not included in the statistical job/staff vacancies. In the preparation of the budget, NSOM prepares a budget estimate based on proposals by aimags and the Capital-City (districts) and presents it for the Ministry of Finance (MoF), which reviews and approves the budget. When the budget has been approved, a monthly financing schedule is prepared and the budget is allocated to local offices. The disbursements follow this schedule.

163. According to the budget information provided by NSOM for the years 2010-2012, salaries counted for 20.1%, 34.2% and 29.8% respectively. The variation of salaries as a per cent of the budget can be explained by both variation in the total budget (e.g. due to censuses) and changes in the number of staff members. A table showing salaries for different types of staff members was also provided. According to NSOM, the level of salaries at NSOM is significantly lower than what is offered in the private sector, similar to the situation in many countries.

164. NSOM reported that investment in fixed assets totalled in 2013 to 3405.2 mln MNT, out of which investments in equipment accounted for 67% and software about 6%. Depreciation for year 2013 had been estimated as 1907.3 mln MNT, or 56% of the gross investments in fixed assets. The periods over which assets are depreciated are 5 years for equipment and 10 years for furniture, and straight line method is applied for depreciation estimates. Equipment that has technically fully depreciated but still in a satisfactory usable condition continue to be used. It is noted that annual state financing is not sufficient for investment in fixed assets.

Assessment:

165. There is a strong link between the five year statistical programmes that are ratified by the Parliament and the annual budgets. A monthly disbursement schedule is followed adjusting the use of the budget to match as close as possible the annual work programme.

166. That the budgetary system allows the budgetary unit to keep in case of savings in the budget up to 80 % of the savings gives separate budgetary units in Mongolia incentives to increase their efficiency.

167. The investment and use of tablets for conducting surveys made large efficiency gains possible. For fixed assets, one concern is that the rate of deprecation is very high compared to the annual investments. In order to further improve efficiency, the investments in fixed assets should be looked into in order to clarify if the investments are adequate given the ambitions of NSOM to develop into a national statistical institute that meets international quality standards.

168. NSOM has many challenges ahead to strengthen the statistical system of Mongolia, e.g. improving its national accounts by implementing the 2008 SNA and other international guidelines and standards, further methodological development as well as introducing more advanced technology of communication and information. In order to succeed in this it needs to further expand foreign relations and cooperation, building human resources capacity quality systems – in a way digestible for the organisation. It seems inevitable that financial resources need to be strengthened to achieve the ambitions of NSOM.

169. Other issues that would need additional financing are linked to goals of NSOM to improve data quality, improve dissemination and enhance statistical literacy of citizens.

3.2.2 Information and communication technologies

170. The Data Processing and Technology Department (DPTD-14 staff) is responsible for network security and operations, data processing for dissemination, software development and application, IT equipment and maintenance and provision of advice and training on IT to staff. The scope of the work of the Department includes central and territorial offices. The collaboration between DPTD and substantive departments in NSOM works through consultations and development by the substantive departments of Terms of References (ToRs) for the DPTD.

171. In terms of connectivity within NSOM, the regular flow of data goes from bags to soums, to aimags and then to NSOM servers and databases or directly to NSOM dissemination portals. For the Capital-City, the flow similarly goes from khoroos to districts, the Capital-City Statistics Department and then to NSOM. Data editing is carried out by aimags and districts, with advice provided by NSOM. Depending on the type of data, some further processing and aggregation may be carried out at any level. The system relies on phone and paper (bags, soums), the internet, email and file transfer protocol (ftp) for data transfers. A number of ministries and agencies also transfer data to NSOM via the internet using emails and ftp.

172. For data collection, paper questionnaires are the norm for censuses and surveys, with the completed paper questionnaires being kept at soum or district level. However, a number of initiatives are being undertaken by the DPTD to increase the application of ICT for enhanced connectivity, including efficiency in data collection, transmission, and processing.

173. In 2013, through funding from the Monstat project and collaboration with Statistics Korea (KOSTAT), 31 territorial units, i.e. the 21 aimags, the Capital-City and the 9 Capital-City districts are being connected online to NSOM through a security guaranteed Internet-based network. The system will also enable soums to transfer data online directly to NSOM.

174. For the 2012 and 2013 livestock censuses, NSOM organized network infrastructure and a software programme to enable online data entry at the bag level by using the Internet and the State Treasury Fund network, with automated checks made at the time of data entry. For the Social Indicators Survey 2013, NSOM enabled the use of tablets and mobile devices for data collection and developed a data collection and processing programme, allowing the immediate transfer of data to the server for processing and analysis. According to NSOM, this resulted in substantial time and cost savings.

Assessment:

175. The DPTD is commended for its professionalism, hard work and dedication to improving efficiency and enabling improved adherence to confidentiality principles that relate to primary data provided by individuals and legal entities. The application of GSBPM (Generic Statistical Business Process Model) to carve out a long-term vision for ICT development deserves particular praise.

176. Challenges related to continued improvement of ICT for statistics production include related expenses and recruitment of qualified personnel to the DPTD. At the time of

the first assessment mission three positions in the department were vacant due to inability to attract qualified staff. The latest three recruits were fresh graduates, reflecting the non-competitive salaries offered by NSOM and the employment opportunities for computer science graduates in the private sector.

177. Meanwhile, ICT development is a stated priority of the government, and it may be possible to successfully advocate for an increase in the related budget to sustain the current ICT infrastructure and the on-going development efforts.

178. The Parliamentary Working Group pointed out IT-efficiency as a tool to move some tasks from territorial to central level. The newly established electronic network between NSOM and territorial offices enables direct transmission of non-processed data from aimags and Capital-City districts to NSOM. This holds the potential for increasing the role of NSOM in data processing and overall quality assurance.

179. It is recommended that funding for maintenance of hard-ware and software procured or developed through external assistance (such as the Monstat project) is secured from the regular budget of the Government of Mongolia to ensure sustainability of the investments.

180. In relation to implementing the longer term vision for ICT, it is recommended that experiences from other national statistical systems are studied with a view to identifying best possible solutions, which may include application of software developed elsewhere.

181. Considering the recruitment issues pertaining to IT personnel and the workload of existing staff, options for outsourcing regular maintenance work and development of new applications should be explored.

182. The potential for transmission of non-processed data directly to NSOM in consideration of the long-term structure and division of responsibilities among entities of the Statistics Authority (NSOM vs. Territorial Authority) should be taken into account. It is also recommended to distinguish data collection for exclusive statistical purposes from administrative data collection, in line with the UN-FPs and MS-CoP.

3.2.3 Staff, recruitment and training

183. The Department of Public Administration and Management of NSOM is responsible for human resource management and has 23 staff. The Centre for Information, Training and Advocacy, responsible for staff training, is placed within the same Department (9 staff) and was in the process of establishment at the time of the first mission of the assessment.

Current staffing

184. An overview of current staffing at local and central levels is provided in table 3 on next page. Employees at khoroos, soums and bags do not report to the Chairperson of NSOM and are thus indicated in italics and not included in the total figures. Also, staff working in statistical units of other line ministries is not included.

185. The personnel of NSOM is characterized by a large number of relatively inexperienced staff: 38% have 1-5 years of service. A particular challenge pertains to young staff going abroad to pursue graduate studies and upon their return finding employment in the private sector. The majority of employees (84%) have a bachelor degree, 11% have a master's degree, 3% a PhD and 1% a secondary school diploma.

Table 3: Permanent and contract staff in NSOM and territorial offices as of January 2014

Organisational Units (number of units)	**Number of staff per unit** (January 2014)	**Total number of staff** (January 2014)
NSOM (Central Statistics Authority)	124 staff, of which 81 statisticians in substantive sections	**124** of which 21 are contractual staff
Capital-City Statistics Department	11 civil servants	11 civil servants
Capital-City Districts Statistical Divisions (9)	• In six central districts' statistical divisions 6 staff each • In two suburban districts' statistical divisions 3 staff each • Bagakhangai district's statistical division with 1 staff	In total there are 43 civil servants employed in Capital-City districts' statistical divisions Total for the Capital-City, departments and divisions, is 61, of which 54 are civil servants and 7 are contractual staff
Khoroos (152)	The Governor	152
Aimags Statistical Divisions (21)	• 20 aimags have 5 civil servants each • Govisumber aimag has 3 civil servants	144 of which 103 are civil servants and 41 are contractual staff.
Soums (330)	Treasury representatives with 25% of assignments dedicated to statistics	330
Bags (1588)	The Governor, collecting information on population, agriculture and livestock	1588
TOTAL		**329** total staff in the Statistics Authority of Mongolia, of which 260 are civil servants

HR development initiatives

186. The Human Resources Development Policy of NSOM focuses on outreach, training and retention of staff.

187. An estimated 90-100 students with majors in statistics, economics or demography graduate every year from three universities. A database of qualified individuals has been created to support outreach efforts when vacancies arise. Outreach efforts also include making available internships for statistics majors; however the mission was not informed of the status of this programme.

188. NSOM developed a training programme for staff members working at central and territorial statistical offices (Chairperson's Order 1/82 of 4 July 2012). The programme includes modules for statistical officers at NSO at various levels: basic statistics training, intermediate and upper intermediate level training and advanced level training. Basic and intermediate level trainings are also offered to officers at local levels, whereas advanced level is offered to capital and district statistical officers. The modules of the training programme are in different stages of implementation. Furthermore, it has to be mentioned that through the Monstat project, NSOM has provided extensive opportunities for overseas study visits, workshops and trainings. Thereby, 175 employees from central and territorial statistical offices recently had the opportunity to participate in study visits to the Federal Statistical Office of Germany (DESTATIS).

189. In addition, National statistics fora were organised in 2010 and 2012 with the support of Monstat, bringing for each of these events over 300 medium to high level staff. Management seminars for NSOM senior officials are also organised every year and training for officers in charge of statistics at soum and bag levels are conducted on a regular basis.

190. In 2013, some training was offered to external organizations such as the Customs Administration, Department of Taxation and the Police Department. Training has also been organized for media representatives, school children, bags and khoroos Governors and soums Treasury fund officers.

191. Although there is no separate training centre, the recently established Centre for Information, Training and Advocacy has a specialist responsible for training and development. NSOM collaborates with the School of Economic Statistics of the National University of Mongolia, the Mongolian State Agricultural University and the Mongolian State Education University, which educate specialists in statistics, on the design and delivery of training.

192. In order to encourage professional development among staff, an innovative evaluation system was introduced with assistance from the National University of Mongolia. All staff members took theoretical and practical knowledge tests in 2010. The results were kept confidential and not utilized for formal performance assessments. Again in 2011 a test was conducted and this time the results were shared internally in NSOM. In 2012, NSOM used the following grades and points: A grade or 90-100 for high distinction; B grade or 80-89 points for distinction; C grade or 70-79 points for satisfactory; D grade or 60-69 points for poor; and F grade or 50-59 points for failure. Staff who scored less than 60, or F, did not receive bonuses in the particular year and were given time to improve their skills during working hours.

193. A programme also exists on improving the work environment, which includes improvement of offices, allocation of more offices/space, provision of water filters and air conditioner and renewal of office furniture and equipment. Furthermore, NSOM takes care of staff health, provides the possibility to get health care service from special hospitals and attend fitness centres and provides local staff with a medical diagnostic service.

Recruitment

194. According to Mongolia's Law on Statistics, the Chairperson of NSOM is appointed by the Parliament on the basis of nomination by the Speaker of Parliament. The Chairperson in turn appoints the heads of statistics at aimag, district and municipality (Capital-City) levels. The Treasury Officer who comprises the statistics capacity at soum level is appointed by the sitting government, as are the Governors at bag and khoroo levels.

195. According to Mongolia's LS, Article 15, the Chairperson of NSOM has the right to appoint the heads of the Statistics Department and divisions of the Capital-City and districts, and the aimags. Furthermore (Article 15^{bis}, paragraph 1), the General Manager of NSOM has the right to recruit, promote and dismiss staff.

196. However, in practice, recruitment in NSOM is managed according to Mongolia's Law on Civil Service, which stipulates that the Civil Service Central Authority manages recruitment of all civil servants, thus including staff of NSOM.

197. Accordingly, candidates that meet the requirements of each job position at NSOM are sourced from a *labour pool* by the Civil Service Committee and recommended for the position. The pool comprises candidates who have passed a general civil service exam. Although vacancies can include requirements specific to the functions at NSOM, the Civil Service Committee decides whether any of the pooled candidates meet the requirements. If no qualified candidates are found, the post is advertised and applicants must pass the standard civil servant exam to be considered for the post. The final selection decision is made by the Civil Service Committee and the decision is sent to NSOM.

198. Recruitments at the territorial level are managed by a sub-committee of the Civil Service Committee. Like the Civil Service Committee itself, this sub-committee does not have a particular mandate related to statistics posts, but oversees recruitments in all professions at the territorial offices.

199. For dismissals, the assessors were informed that, again in accordance with the Law on Civil Service, the Chairperson of NSOM makes such decisions.

Assessment:

200. The current **recruitment** process is managed by the Civil Service Committee (and its sub-committee for recruitments at territorial offices), which does not have dedicated expertise in statistics. This arrangement should be improved to better support the attraction of suitable candidates and screening of candidates' skills and competencies in accordance to the needs of NSOM. This, combined with the observed inconsistencies between the Law on Statistics and the Law on Civil Service regarding recruitment responsibilities, results in the following recommendations:

201. The provisions in the Law on Statistics (LS) that relate to recruitment are inconsistent with the Law on Civil Service. It is recommended that the LS is changed to bring it into line with the Law on Civil Service.

202. A sub-committee of the Civil Service Committee dedicated to overseeing recruitments in NSOM, as is already the case for a number of line ministries of the Government of Mongolia, should be established. During the process of conducting the assessment, the Parliament has amended the Order of the Parliament, and a Sub-Committee of the Civil Service Committee should be established at NSOM. This will enable the recruitment of qualified professionals and authorize NSOM to promote, select and appoint qualified and experienced staff at local levels. This report welcomes this amendment of the Order of the parliament, and assessors will follow-up on its implementations.

203. NSOM should address the particular challenges observed related to recruitment and retention of ICT professionals (notwithstanding issues related to other fields of expertise, such as qualified professional statistical analysts). This would require added attention to workload, training and staff satisfaction in the DPTD and to outreach efforts related to attraction of ICT professionals in the implementation of the Human Resources Development Policy.

204. The **number of staff** at NSOM is assessed to be insufficient for implementing the statistics programme set out in the LS and the programme of work with acceptable quality. Within NSOM, in many cases a single staff member is responsible for more than one area of statistics, which poses a challenge to processing data with due diligence and ensuring that expertise is built and maintained on all subject matters. Gaps were observed in knowledge among staff in key areas of statistics such as national accounts. More expertise is also needed to support the expanding programme of surveys. In reviewing the statistical products disseminated, more capacity is needed to analyse and interpret statistics with the end users' needs and priorities in mind.

205. In discussions with the Parliamentary Working Group that is conducting a review of NSOM, the increased demand for quality statistical analysis to support economic policy decisions such as those related to the green economy and the natural resources economy was pointed out. Also among international organisations this gap was highlighted. Within current staff size, NSOM will find it challenging to meet the emerging and growing policy demands for data.

206. With the current responsibilities at the territorial levels, it is important that a certain level of statistics expertise is ensured in aimags, soums, the municipality and districts. The arrangement in soums, where statistics responsibilities are assigned to a Treasury representative is a particular challenge in this respect. Should the current level responsibilities and related work load at soum level remain, NSOM should explore options for adding a full-time statistician in each soum.

207. Bearing the above in mind, NSOM should explore options for increasing the number of staff at NSOM, in particular to assure quality and enable statistical analysis. Further, NSOM should consider establishing a dedicated Survey, Quality and Methodology Unit within NSOM to ensure that expertise is built and sustained and that consistency and quality are ensured across surveys administered at national and territorial levels through added provision of methodological guidance by NSOM.

208. Beyond the Ministry of Health, the Customs Department and the Central Bank, a number of line ministries have yet to establish statistics units, as is promulgated by the LS. This is essential to ensure a fully functional national statistical system in

Mongolia. However, the assessment team finds that this is best addressed after adjustments are made to strengthen the role of the Chairperson as the coordinator of the NSS.

209. NSOM should be commended for its efforts to improve the availability of **training** for staff and use a mix of positive and negative incentives for encouraging staff development. The efforts to gauge training needs would be well-complemented by a skills needs assessment for NSOM to ensure that recruitment and staff development are targeted and aligned, to the extent possible, with the long-term needs for skilled staff at NSOM, including those indicated above. Such a skills assessment would also provide additional insights into what would be a more ideal NSOM in terms of staff numbers.

210. It is recommended that NSOM develop and apply a tool for regular and systematic skills needs assessment. Tools exist at the international level (e.g. at ESCAP-SIAP) that could be adapted to the specific needs of NSOM.

3.3 Dissemination policy of NSOM

3.3.1 Legal framework, policies and principles governing dissemination of official statistics

211. The Law on Statistics (LS), the Mongolia Statistics Code of Practice (MS-CoP) and the Policy on and Basic Guidelines for Statistical Data Dissemination (approved by the Chairperson in June 2010) provide the framework for the dissemination of official statistics in Mongolia.

212. The LS stipulates the principles defining the conduct of statistical activities in Article 4(§4) as *the provision of timely statistical data* and in Article 4(§5) as *statistical information must be widely disseminated and made public in the legal frame*. The substantive framework of the statistical information is determined by the list of indicators that comprise official statistical information, as given in Article 6 of the Law on Statistics. According to Article 12, the National Statistical Office of Mongolia (NSOM) is responsible for providing the government and other *state* organisations with official statistical information considering their needs and according to the schedule agreed with the government and free of charge; *preparing* and *providing* the government and other *state* organisations with special official statistical information which are necessary for specific policy formulation, planning, management and monitoring; and *disseminating* results of official statistical information and surveys to users, *providing* publicity of statistical information. As part of dissemination services, NSOM is responsible for correcting when official statistics are misinterpreted and explaining the correction to the public at large.

213. Article 18, Powers of ministries, Bank of Mongolia and other government institutions, and Governors of all administrative levels with respect to official statistical activities, indicates that these providers have the right to disseminate results of statistical reports, censuses and surveys through mass media.

214. According to the MS-CoP, which is to be considered the policy and management framework for quality of Mongolian official statistics, Principle 13 is *timeliness and punctuality* and Principle 15 is *accessibility and clarity*. *Timeliness and punctuality*

refers to the availability of an advance release calendar. Any divergences from this calendar should be announced, explained and the revised dates provided. Periodicity and timeliness of statistics are based on user requirements.

215. *Accessibility and clarity*, on the other hand, covers the provision of standardized metadata along with data dissemination, use of modern information and communication technology, provision of census/survey microdata for research purposes (in line with an *Ad-hoc Procedure for the Use of Micro Data of Censuses and Sample Surveys by Users)* as well as the information of users of statistical methodology and of the quality of statistical outputs and services.

216. The Policy on and Basic Guidelines for Statistical Data Dissemination, on the other hand, gives the following as the main principles for implementing the data dissemination policy:

a) Provision of equal access to data to all users;

b) Dissemination of data in an easier and more understandable manner;

c) Regular improvement in quality of statistical products and services to meet user needs;

d) To create resource base, integrated database and human resource that fits the need of statistical users, and their technical level that needs;

e) To develop standard indicators set that reflect country specifics, in accordance with data dissemination method in international level;

f) To update statistical database, regularly.

217. According to the dissemination policy document, only the state and government agencies, mass media, embassies, international organisations and donor agencies can access printed publications of official statistics free of charge. Other national or international institutions, enterprises and citizens of Mongolia are subject to charges. The charge covers mainly publication cost. There is, however, free access to electronic publications of data and the www.1212.mn website of the National Statistical Office.

218. The Law on Statistics, on the other hand, does not provide any information on costing of statistical information and how the prices of publications are determined. The corporate policy is to focus on electronic devices (CD-ROMs, flash disks) and online dissemination (webpage, email) of official statistics while other means of dissemination, such as mass media, publications, response to user requests on the phone or with printed materials and library services, are also available.

3.3.2 Official statistics dissemination tools and procedures

219. The Procedure for Data Dissemination Activities document (approved by the Chairperson in February 2010) focuses on the role of the Centre for Information, Training and Advocacy, formerly known as the Information Service Centre, as the dissemination hub for NSOM. According to this document, the Centre for Information, Training and Advocacy:

a) Increases and promotes access to the public data dissemination services;

b) Provides users and international organisations with statistical data and information and survey results based on the principles of transparency, accessibility and equality;

c) Provides the public organisations and media with statistical data;

d) Improves statistical marketing and maintains online services;

e) Publishes the statistical publications.

220. For microdata dissemination, there is a reference to an *Ad-hoc Procedure for Use of Micro Data of Censuses and Sample Surveys by Users* (approved by the Chairperson in 2005) but this is only available in Mongolian on the website.

221. The role of the Centre for Information, Training and Advocacy also covers provision of the requested data for international reporting. This does not prevent the subject matter departments from submitting data directly upon request, which should be documented in detail.

222. At the beginning of every year the Board of the Chairperson approves a release calendar, including dates but not the time of release, for official statistics in conjunction with submission calendar of data by territorial units and public institutions. The release calendar covers official statistics, including 9 macroeconomic, 16 demographic and social, 13 industrial, science and technology, 5 legal and 5 environmental statistical indicators. The release schedule is posted on the corporate website and is published for internal use. Price, foreign trade and some indicators of agricultural sector are updated in the calendar every 7-14 days. Any changes to the release calendar are announced in advance. For some important indicators, such as GDP, flash estimates at the aggregate level are available.

223. All users have simultaneous access to the published statistics through mass media. The newly released statistics are posted on the web and are sent as updates to the registered users via email. NSOM holds a press conference on the tenth day of each month to disseminate monthly statistics. In these press conferences, NSOM presents main socio-economic statistics of the country and provides interviews on topics of interest. Each month, 40-60 representatives of different television stations, radio stations, newspapers and magazines participate in the press conference.

224. Mongolia subscribes to the General Data Dissemination System of the IMF and has metadata provided on the real, fiscal, financial and external sectors as well as limited socio-demographic data. However, the information available on the IMF website dates back to 2008 and hence its relevance has to be confirmed. Metadata on the Millennium Development Indicators are provided according to the DevInfo format. Mongolia was part of an UN-ESCAP/World Bank project on Microdata Management Toolkit which had the Metadata Editor as a component several years ago. NSOM still uses these tools for documenting household surveys.

225. In terms of electronic access to official statistics, there are currently two separate websites: www.nso.mn, which is the corporate website, and www.1212.mn, which functions as an online database (based on PC-Axis) for all published statistics. There

are also Apple and Android applications for this database (Ezstat and Monstat), which allow for tailor-made tables to be extracted by users. 1212 also refers to the hotline number of NSOM which anyone can call for inquiries. In addition to the 1212 database there is the Mongolian DevInfo database which is currently inactive. 43 out of 48 sets of statistical indicators are available and accessible online.

226. In the field of dissemination, NSOM has set the use of advanced technologies, such as the Geographical Information Systems (GIS), and subscription to the Special Data Dissemination Standard (SDDS) as targets.

3.3.3 Assessment

227. The National Programme for the Development of Statistics (NPDS) 2011-2015, developed under the Monstat project and approved by the Order No.59 of 2011, outlines the actions for developing statistical dissemination. However, the current version of the LS does not cover sufficient information on dissemination nor refer to the policy document. The policy document, on the other hand, does not give clear guidance on the procedures of dissemination but rather focuses on the structure. It is recommended that the Law on Statistics and the Policy on and Basic Guidelines for Statistical Data Dissemination give coherent guidelines on dissemination. The policy document should also indicate the costing of the data products, e.g. printed publications are subject to a fee.

228. There is no clear policy on data revisions and there is no way of tracking the major errors in published data and the revisions made. It is hence recommended to design and establish the corporate revision policy and assess regularly the quality of dissemination procedures and checks.

229. The publications (more than 30 by NSOM in 2013) often include absolute figures (level data) and not computed indicators, which have more explanatory power. It is recommended that NSOM considers producing shorter publications with more analytical text that can explain the uses and scope of the data to the policymakers and general public. In general, NSOM may move towards reducing the number of publications and make further use of electronic means of dissemination.

230. It was observed that the printed and online publications did not cover sufficient metadata information for the statistics that were published. There is usually one section on the methodology that gives broad information on the collection and processing of the statistics. Metadata are expected to give detailed information on the individual statistics regarding definition, coverage, reference period, data sources, any changes in methodology, etc. It is recommended that NSOM improve the metadata standards in publications through a comprehensive Metadata Framework.

231. It is commendable that NSOM has an Advanced Release Calendar (ARC). ARC could be improved by adding the time of statistical data releases in addition to the date. It is recommended that the time of release be indicated particularly for sensitive releases such as the Consumer Price Index. The date of processing and finalisation of the data by officers in charge of sectoral statistics has been reflected in the ARC. The Department for policy implementation and coordination oversees the implementation of the ARC. In some countries, government agencies may have slightly earlier (by a few hours) access to such data. If there is such a practice, the list of persons and

organisations having pre-release access to official statistics should be made public (e.g. on the website of NSOM). In Mongolia, information on the implementation of the ARC is not available. Hence, it is not possible to get a sense of the actual timeliness/punctuality of data releases and whether the changes are announced in advance and explanations for the changes are provided. It is recommended that data on the implementation of the ARC be collected.

232. There is a link to the 1212 online database on NSOM's homepage in English. It is highly recommended that the corporate website and the 1212 website for data sharing be combined in a single portal where data users can access both sets of information easily. The English version of the website should be updated and maintained to ensure links lead to meaningful pages as much as possible.

233. In terms of international dissemination of the data, NSOM has submitted the 2012 data to IMF required for GDDS in January 2013. It is important to ensure that new submissions are reflected timely on this website. It is positive that NSOM is targeting subscription to the SDDS. It is recommended that the roadmap to integration in to the SDDS and the division of labour among the different departments be clarified. It should also be noted that SDDS alone does not cover all domains of statistics in a comprehensive way and a wider application of dissemination standards is necessary.

234. There is a need for designing a training programme for NSOM staff regarding dissemination activities covering principles and procedures of dissemination, presenting statistics in visual format, writing about statistics and producing metadata.

235. Statistical literacy activities for the users are not covered in any of the documents. Improving statistical literacy is indicated as a task of the Centre for Information, Training and Advocacy. It is highly recommended that NSOM design a policy and programme of statistical literacy in order to ensure effective use of official statistics in Mongolia, as intended and indicated in the National Programme for the Development of Statistics 2011-2015.

236. There is a need to review and standardize data dissemination and publications by territorial offices with the main implication being that microdata storage and processing be undertaken at the headquarters.

237. Last but not least, there is a major issue concerning confidentiality of data storage. As already mentioned in Chapter 1 of this report, there is neither defined policy nor practice on how, where and by whom confidential unit-level data should be stored. Clear provisions should be added to the LS in the framework of its next revision.

3.4 Communication, relations with users and stakeholders

238. The LS stipulates in Article 10 the rights and obligations of users of statistical information. According to this article, users shall be provided with data based on the list given in Article 6 of the LS. Users shall provide the source when they use and publish statistical information and shall not require statistics other than those approved and adopted by official statistical organisations. Under Article 22, illegal use of statistical information and confidentiality of information are covered. NSOM groups the users as public institutions; scientific institutions, universities and colleges; international organisations, business entities; mass media; and students and individual

users. Users such as business entities and academics are also represented on the National Statistical Council.

239. In the Policy on and Basic Guidelines for Statistical Data Dissemination and the Procedure for Data Dissemination Activities of the LS, there is no specific reference to users' participation/inputs in the design of the regular work programme of the National Statistical System (NSS) or soliciting of comments regarding data dissemination (requested frequency, disaggregation, etc.). However, NSOM has a feedback link on its website which allows users to comment on the statistical information that are disseminated. Users can also send questions and comments to information@nso.mn. There is dedicated staff at NSOM who then responds to these comments or questions.

240. NSOM does not have specific procedures for prioritizing different users' needs but there are memoranda of understanding between NSOM and selected users, e.g. ministries and mass media, on statistical cooperation. NSOM also works closely with the School of Economics of the National University of Mongolia, Teachers' University of Mongolia and the Agricultural University especially for the dissemination and analysis of different survey and census results, including SUT (Supply-Use Tables) and IOT (Input-Output Tables) analysis.

241. Since 2010, NSOM has been carrying out users' satisfaction surveys every two years based on the recommendation of the World Bank. The representatives of all user groups have participated in the survey.

Assessment:

242. Based on users' feedback, it is clear that NSOM has made progress in the statistical methodologies applied in data production and processing, and in the communication of statistical and methodological information. The 1212 online database and the related e-mail updates for registered users are the most wide-reaching dissemination tools, which have increased access to official statistics exponentially.

243. Users have given positive feedback particularly on the 1212 online database and the e-mail updates which provide quick access to up-to-date data for all users; especially for students and researchers. The 1212 online database can be improved further by allowing submissions of methodological questions and conducting open debates on the statistical methodologies underlying the production, processing and dissemination of data. Disability and informal economy were among the topics on which there is demand for more data by users.

244. Users' satisfaction surveys are indispensable for improving the relevance of statistics as well as the relations with the users in general. Through the Monstat project, NSOM has contracted a private firm to carry out user satisfaction survey in 2010 and 2012 among the frequent users of statistics. Accordingly, the survey was carried out among the registered users who frequently use targeted products in seven sectors. The respondents were chosen through simple random sampling from the list of 372 users that were registered by the Centre for Information Service and Advocacy. There is a need to increase the coverage of respondents to this survey and review the questionnaire regularly so as to ensure that new statistical products are taken into account in the questions. The reports of the user satisfaction surveys of 2010 and 2012

are available in Mongolian and English languages on the website of NSOM. The questionnaire forms of the surveys have similar contents, but for the latter survey the questionnaire form was revised based on recommendations from the World Bank. It is recommended that the results be published as soon as possible following the completion of the survey. In addition to the users' satisfaction surveys, NSOM may consider including short and specific questions for quick feedback on the electronic products online. Similar mechanisms can be introduced to assess the quality of responses given to user queries by e-mail and on the phone as well.

245. It is good practice to hold regular press conferences with the media. The outreach to the public can be further improved by increasing participation in these press conferences and by preparing user-friendly press communiqués for wider dissemination.

246. Users, who are also respondents at the institutional or individual level, indicated that they trust that NSOM respects the confidentiality of their information, e.g. data from mining companies. In recent years NSOM has improved user relations through the Monstat project and implemented a number of activities; made statistical products more user-friendly, applied a single corporate design to all statistical published products and organised workshops among users to enhance their statistical literacy. However, there is still room for improvement for establishing trust in official statistics and it remains that statistical publications and dissemination material at territorial level do not follow systematically the NSOM corporate design and quality standards. International organisations working in close collaboration with NSOM may also work on improving statistical literacy and carrying the message of the importance of an efficient and transparent statistical system to their respective counterparts in Mongolia. It is hence recommended that further investments be made in user training activities and more frequent meetings with users.

247. It is also recommended to institutionalize relations with more users by enlarging the Statistical Council (Council of NSOM) to have more members from the users' community (see also Chapter 2 of this report).

3.5 International cooperation

248. International organisations with presence in Mongolia were invited by NSOM to meet the assessment team. Representatives from the national offices of UNFPA, UNICEF, World Bank, GIZ and UNDP participated in the consultation meeting.

249. International organisations welcomed the adapted global assessment, stating that its results would provide useful inputs for design of future projects, not least the second phase of the Monstat project.

250. All agencies present praised NSOM for good collaboration. Particularly noticeable were the leadership and commitment exercised by NSOM, which ensured national ownership and long-term capacity development. The pilot use of tablets by district offices was put forward as an example of openness to innovation. Also, fund-sharing was actively pursued by NSOM to allow related costs to be fully integrated into the regular budget of the Government of Mongolia in the long-term. It was mentioned that NSOM was an exceptional partner vis-à-vis other ministries.

251. To the question of how development agencies coordinate statistical activities among themselves, the uniform answer was that NSOM has taken up the role as overall coordinator, ensuring that efforts are not duplicated. International organisations mentioned the establishment of working groups that included members from NSOM and international organisations for specific projects as a good practice.

252. Areas for improvement included improved timeliness of data, improved quality of price statistics, improved quality of population data through better collaboration with the Civil Registration Authority and increased statistical capacity at aimag and soum levels. The frequent statistics on livestock, vital events and migration at detailed administrative level, compiled from administrative reporting systems were seen as excessive and in need of a cultural shift. It was noted that user needs and cost of production of statistics could be better balanced. It was also noted that added use of GIS mapping would necessitate a review of the State Security Law. Within NSOM it was assessed that analytical capacity needed to be strengthened, including for trends analysis. Sampling was also pointed out as an area for improvement.

253. Participants mentioned that NSOM could be a stronger promoter of the use of data for policy analysis to ensure that decisions to a greater extent are based on facts and take into account trends that go beyond the election cycle of four years. In this regard, better metadata would be necessary to support and guide users. This would also increase the demand for NSOM products and thus help strengthen NSOM in the longer term.

254. Participants pointed out that discrepancies between survey and administrative data led to a number of problems, including in the context of evaluating progress towards the MDGs. Improved clarity within NSOM of what constitutes official statistics (vis-à-vis administrative data) was called for. They pointed out that territorial offices were viewed as information centres rather than as part of a statistical system. This leads in some cases to conflicts related to the principles of independence and confidentiality.

255. The need for a number of line ministries to establish statistical units, as required by the LS, was pointed out as an important element of strengthening the overall range and quality of products from NSOM.

Assessment:

256. The level of detail in the comments by participants demonstrates open and in-depth relationships between NSOM and development partners. NSOM is commended for building and nurturing these relationships and leading what appears to be a uniquely successful system for coordination of development assistance.

257. With external support provided for major investments (such as the newly established VPN network under the Monstat project) and statistical exercises (such as the recent agricultural census and the MICS/RHS surveys) there is a risk, which NSOM is well aware of, related to ensuring the long-term sustainability of the statistical programme; also in times of decreasing development assistance. Hence, it is recommended that the incorporation of major surveys and maintenance of ICT investments into the regular budget of the Government of Mongolia is pursued as a priority.

258. NSOM is a popular counterpart for international agencies owing to the dedication, commitment and responsiveness of staff and management. There is however a danger that too many projects, requiring time for servicing of international consultants and organisation of missions, impede the necessary transfer of knowledge in the process. It is recommended that NSOM carefully prioritizes projects to ensure that there is sufficient time to internalize advice provided for long-term internal knowledge and other capacities to be built.

259. International engagement by NSOM plays a vital role in strengthening the statistical capacity of Mongolia and reinforces the commitment and ability to adhere to international standards. Experience gained from co-chairing the Ulaanbaatar City Group and participating in the Bureau of the ESCAP Committee on Statistics benefits staff and management, allowing for frequent interaction with other national statistical systems for beneficial exchange. It is recommended that regular budget be sought to allow such engagement to continue.

4. DATA SOURCES AND PROCESSING, REGISTERS AND QUALITY MONITORING

4.1 Overview

260. The main objective of quality monitoring and management is to ensure the effective design and improvement of processes that ensure that products and services are fit for their purpose and meet their specifications.

261. The seven components identified by the UN-ECE when assessing the quality of data are:

a) Relevance: the degree to which statistics meet the needs of current and potential users;

b) Accuracy: the closeness of statistical estimates to true values, with the proviso that absolute accuracy can be difficult to determine when data are taken from other sources rather than directly collected;

c) Timeliness: the length of time between data being made available and the event or phenomenon they describe;

d) Punctuality: punctuality refers to the time lag between the release date of data and the target date when they should have been released;

e) Accessibility: the physical conditions in which users can obtain data;

f) Clarity: clarity refers to whether data are accompanied by sufficient and appropriate metadata, whether illustrations such as graphs and maps add value to the presentation of the data and whether information on data quality is available;

g) Comparability and consistency over time, among regions and countries, and for the same indicator among the different statistical domains.

262. The notion of cost-efficiency should also be mentioned. Whilst this is not considered a dimension of quality, it is a factor that must be taken into account in any analysis of quality. If a product can be produced more efficiently, then resources released can be used to improve the quality of that product or other products. As such, quality management not only focuses on products or services but also on the means to achieve them (processes).

263. In the past, quality monitoring in NSOM was mainly the responsibility of the heads of the substantive organisational units. Procedures and methods to monitor the quality at each stage of statistical production processes (survey planning, survey design, data collection, data processing, data analysis, and dissemination) are routinely applied. However, recently a quality team was established within NSOM. This team consists of 16 staff members from different departments and divisions (horizontal group). The team leader is the Director of Policy Implementation and Coordination Department which is the department in charge of quality. The mandate of this horizontal group is to develop a quality policy and implement it throughout Mongolian Official Statistics (Quality Management Standards). The team successfully established a Quality Policy for Mongolian Official Statistics (QPMOS). The QPMOS relies on the eight quality management principles as defined in the ISO-9000 and the eight quality components

as defined by the UN-ECE and enshrined in the ES-CoP and the MS-CoP. Among further activities and tools to develop a quality corporate culture within NSOM, one could mention producer-oriented quality reports, master design for questionnaires, handbooks and glossary as well as training for staff. There are so far no activities or objectives related to the improvement of quality through enhanced production processes and it is not stated how these activities would also encompass other producers of official statistics.

264. The system of official information, according to Article 6 of the Law on Statistics (LS), consists of a set of 48 indicators:

a) Macro-economic statistics: 9;

b) Population and social statistics: 16;

c) Industry, science and technology statistics: 13;

d) Legal statistics:5;

e) Environment statistics: 5.

265. NSOM collects data for the compilation of these indicators from various sources: primary registration, administrative and official data as well as from censuses and surveys.

266. The list of ministries and agencies providing administrative data for statistical purposes is discussed in Chapter 2.1 and provided in annex 3 of this report. 180 sets of administrative data, mainly for economic and business statistics, are sent from various ministries and agencies directly to NSOM without going through the territorial bottom-up production process from bags and khoroos to the higher territorial level. These primary data are mainly transferred to NSOM electronically or even online. 70% of all data sets used for the compilation of official statistics by NSOM originate from administrative sources; most of them on annual and semi-annual basis, the rest on monthly and quarterly frequencies. However, it seems that NSOM is not in a position to regularly assess the quality of these data nor to conduct inventories of other administrative data that could be used for statistical purposes. Conditions like deadlines required for the access or transmission of administrative data for statistical purposes are mentioned in the annual work plan of NSOM. In addition, cooperation agreements for data exchange are concluded with some ministries and agencies.

267. Primary data from population, households and farms are collected at khoroos (Capital-City sub-districts) and bags (local community). At this territorial level, Governors maintain a population and household booklet and vital statistics are collected using state civil registration forms. For agricultural statistics, Governors conduct annual livestock and animal census and maintain a property inventory. Unit involved in agriculture production are identified and related information incorporated into the household register booklet. It has to be mentioned, that in Mongolia agricultural activity is primarily conducted by nomadic herders, and can be considered a household economic activity. Data are routinely checked, processed and send to the next higher territorial level up to NSOM.

268. According to Article 21 of the LS, Governors at khoroos and bags are also involved in the following statistical activities:

a) Population and housing census (every 10 years /by-census every 5 years);

b) Agricultural census (10/5);

c) Livestock fence, wells and fodder census (3);

d) Establishment census (5);

e) Household living standard survey (quarterly);

f) As well as, at the request of NSOM, as mentioned in Article 7 of the LS, to collect information and conduct other economic and social surveys.

269. A total of 76 sets of primary statistical data are collected by NSOM, mainly through this bottom-up process: 13 from bags and khoroos, 24 from soums and Capital-City districts and 39 from aimags and the Capital-City Statistics Department and divisions. Depending on the data sets, NSOM collect them bimonthly, monthly, quarterly, biannually and/or annually. This process is monitored by NSOM and based on its annual work programme.

270. It is important to mention that in some cases unit-level data are controlled and aggregated at the lowest territorial level and then sent to the next level for further quality controls and aggregation up to NSOM. To some extent, this procedure does not allow NSOM to check and cross-check the quality of unit-level information in a more systemic way and to secure coherence and consistency of this information. This comment is even more relevant for sample surveys for which non-response is better monitored (imputation or replacement of the statistical unit) by methodologist at the central office (NSOM). It is therefore also essential that the most up-to-date registers used for sampling design are available at NSOM and not (only) in the regions.

271. Given the economic structure of the country, business and economic data collection is mainly conducted at soums and aimags centres but also in the Capital-City and its districts. In Mongolia most of the jobs and value added generated by the industry and services are concentrated in Ulaanbaatar. It is also important to mention that data for business statistics (mining, industry, trade, construction and services) are collected mainly through exhaustive surveys (statistical reporting system); at least for big enterprises.

272. The statistical business register is based on the results of the last three establishment censuses (1998, 2006 and 2011) and on the results of regular reports and surveys conducted by NSOM. Unfortunately the last establishment census did not cover individual entrepreneurs and therefore related information in the register has not been updated (individual entrepreneur statistical register). A third economic register is the agricultural register. More information on registers and related censuses are provided in Chapter 4 of this report.

273. In the framework of the present National Programme for the Development of Statistics (NPDS), sampling methods will be further developed. Sample surveys have been mainly used for the household sector (Living Standard Survey, Labour Force

Survey, and Social Indicator Survey) but through Monstat project (World Bank financed project) this development has extended to agricultural and economic statistics. For example, the sample survey for industrial statistics was conducted for the first time in 2001 and gradually expanded to other business and economic statistics. It is also interesting to mention that some sample surveys have been launched recently in order to complement or improve the quality of existing statistical products, for example the non-observed economy survey, the self-employment (individual entrepreneur) survey and the micro-mining survey. However most of these new sample surveys, in particular for business statistics, are not mentioned in Article 7 of the LS on *conducting censuses and surveys.*

274. In that respect some organisational measures have been taken and in particular a sampling team was created with one member from the Public Administration and Management Department, two staff from the Macro-Economic Department and three staff from Population and Social Statistics Department.

General Assessment:

275. The Statistics Authority (SAM) and in particular NSOM have achieved impressive progress in the modernization of data collection, statistical registers, and data processing. The report welcome this development and support further improvement of the overall production processes from the data collection to the dissemination as planned in the NPDS. These recent developments and further expected improvement will have a strong positive impact on the quality of NSOM products and services.

276. The establishment of a horizontal quality team and the development of a QPMOS with the clear objective to implement it throughout NSOM are excellent initiatives for the enhancement of statistical quality. This team could also consider documenting the major production processes within NSOM using the Generic Statistical Business Process Model (GSBPM) developed by the UN-ECE under the auspices of the High-level Group for Modernisation of Statistics.

277. NSOM is encouraged to continue expanding data collection through sampling surveys, in particular for economic and business statistics and explore further opportunities to use administrative data for the production of official statistics. As mentioned previously the improvement of information and communication technologies within the SAM and between NSOM and other producers of statistics (administrative and official) should allow this development. In that respect, the implementation of e-collection of data at territorial level and on line surveys for business statistics as an alternative to traditional paper data collection will have a positive impact on quality. Indeed, data processing and related quality checks could be gradually performed in a more centralised way, freeing human resources from the routine data collection and aggregation procedures. More attention and resources would be available for data analysis and quality checking (intrinsic quality of data) but also for the interpretation, dissemination and communication of statistical information (clarity, accessibility…).

278. In that respect and alongside the newly established sampling team, it is strongly recommended to set up a methodology/sampling unit within NSOM in order to handle the design and update of sampling frames as well as the monitoring of all stages of sample surveys data processing.

4.2 Social and demographic statistics

279. There are three sources of demographic data in Mongolia: the Population and Household Register (PHR), Population Vital Statistics Register of Mongolia and the Population and Housing Census (PHC), the last one of which was conducted in 2010. Based on Article 7 of the Law on Statistics, the following indicators are collected as part of official statistics, on a regular basis: age and sex, birth, mortality, natural growth, marriage, divorce and adoption.

4.2.1 Population and Household Register, Vital Register and the Census

280. The collection of population data by the primary administrative units, using the Population and Household Register booklets dates back to 1977 in Mongolia. The Population and Household Register (PHR) is regulated by, in addition to the Law on Statistics (LS), the Law on Administration and Administrative Units and the State policy on population development of the Government of Mongolia.

281. The PHR booklets are periodically updated with information on vital statistics of the surveyed households by bags and khoroos Governors. PHR is used for monitoring population movements in inter-census periods and also for targeted social programs.

282. NSOM has been compiling the PHR data since 2006 with updates at the end of each year. However, the PHR seems to be an administrative register more than a statistical one. If ministries and agencies, other than producers of official statistics are using unit-level information from the PHR for policy purposes, this could be in favour of or against specific persons or households. In this case, the register should not be compiled by NSOM (see also Chapter 1 of this report).

Population Vital Statistics and Migration

283. In addition to the LS, the General State Registration and Civil Registration laws also govern the collection and dissemination of vital statistics. There are 32 officers in charge of population affairs working at the central and local statistical offices and the Governors of soums and districts are also responsible for the collection of vital statistics data. State budget ensures the necessary financial provisions.

284. NSOM produces the data on birth, mortality, marriage, divorce and adoption for the national statistical report twice a year while data on local migration accessed from the Civil Registration Authority are compiled once a year. These data are used for official statistical reports and research and included in the Statistical Yearbook.

285. Moreover, data on birth and mortality are received monthly from the Ministry of Health and the monthly and annual population estimates are derived by component method and included in the quarterly bulletin.

286. The authoritative source of information for population statistics is the Vital Register, as for any errors during compilation NSOM contacts the Civil Registration Authority. The balance and logical examinations are conducted using the Civil Registration Form.

287. Since 2012, NSOM and the Civil Registration Authority have been integrating aggregated demographic data collected through the Population and Household Registration book and the Civil Registration form. The improvements in the IT infrastructure have been a real advantage in this respect. As for the PHR, the question is whether the Civil Registration Authority is to be considered a producer of official statistics. Most probably not, and therefore the activities for the maintenance of this register should be the sole responsibility of the Civil Registration Authority, which eventually gives access to its register to NSOM for statistical purposes.

288. In terms of migration statistics, there is not enough information provided by the Civil Register. Instead, the main source of data is the Border Control Agency of which all patrol points are connected online through a satellite and they provide information on all inbound and outbound passengers. All passengers filled out departure and arrival forms indicating the duration of stay up to 2011. Since then, Mongolian citizens are no longer required to fill out such forms.

Population and Housing Census

289. Apart from the relevant articles of the LS, the Law on Population and Housing Census (LPHC) of Mongolia was approved on 3rd January 2008, which was the first time a law specifically for the census was enacted. In addition, the *Provisional Procedure on Policy on Data Security of Statistical Sector and Data Protection,* the *Provisional Procedure on Use of the Census and Sample Survey Primary Data by Users,* and the *Procedure for the Activities towards Data Receiving and Entry, Data Checking and Correction* were provided for the census operations.

290. PHC is organized every 10 years and inter-census survey carried out every 5 years. This survey will be conducted in 2015 for the first time. The last PHC was administered in 2010 and the results were produced within six months. Population projections of Mongolia are estimated upon completion of every census and the results are disseminated.

291. The Population and Housing Census Bureau (unit) of NSOM employs 9 staff members. The Census Commission for the 2010 round has employed 363 staff, 2,176 staff at the temporary bureaus, 3,500 supervisors and 11,600 enumerators. In total 2,754,685 people were recorded; 2,647,545 of these persons lived on the territory of Mongolia and 107,140 lived abroad. In total, 713,780 households were identified of which 322,836 were living in gers and 382,808 were living in apartments/houses and the rest resided in other types of housing. The census was financed by the state budget and supported by the World Bank and the UN Population Fund (UNFPA).

292. The criterion for usual residence according to UN-ECE/CES recommendations is 12 months. In Mongolia, this threshold was lowered to 6 months, including foreigners staying in the country for a minimum of 6 months. In the case of nomadic population, NSOM employed the criterion of staying in the same bag for at least 6 months and 1 day in order to delineate the usual residence.

293. One of the special features of the last PHC was online registration of Mongolian citizens living abroad. The software for registration, permission and completing the census questionnaire and data collection is developed by NSO using Symphony framework technology. However, considering the differences in technological

conditions of the countries where citizens lived in or due to the insufficient technological skills, registration through the questionnaire and delivery of the completed questionnaires to NSOM was organized at the Mongolian diplomatic representations abroad. During the data processing, the completed questionnaires were entered electronically and cross-checks were provided with XAOCT-1 to verify whether people were double registered by their family members in Mongolia.

294. In order to avoid entry errors, a double data entry method was used for census data. Errors were identified immediately and corrected. A post-enumeration survey covering one per cent of the population was conducted following the completion of enumeration for the PHC.

295. Non-stop production structure was created to ensure simultaneous activities, such as checking and receiving of questionnaires, coding, data entry and correction processes. The coding process was completed on 12 December 2010, while data entry was done between 7 January and 16 April 2011, including main census and post-enumeration survey data entry and double entry. Data checking and editing were carried out between 18 April and 5 May 2011. Automatic error checking and editing through the software developed under the instructions of the Population and Housing Census Bureau was completed on 10 May and output tables were subsequently produced.

Assessment:

296. The Population and Household Register serves both administrative and statistical purposes. The personal details of household members are included in the database, as was demonstrated during the mission. It is recommended that the practices around using the Population and Household Register be reviewed in order to ensure that confidentiality of the data is not compromised.

297. There are reportedly discrepancies between the Population and Household Register and the Civil Register data. The current practice indicates that the latter is used as the authoritative data source when it comes to data validation. There are real drawbacks to this, as the quality of the Civil Register is not adequate due to under-reporting of deaths and manual recording of information. The data problems have been reduced in the case of child registration due to the government policy providing allowance for each child of the family who is registered. In addition, NSOM does not have access to the raw data from the Civil Register due to legal constraints, which hampers the quality assurance of demographic statistics.

298. It is strongly recommended to establish a consolidated and central population register, assigning a unique ID to each person in the country. It is also mentioned in the Guidance Questionnaire that the Ministry of Health publishes its figures on fertility and mortality on a monthly and quarterly basis. There is a need to ensure the quality of official figures on vital statistics and avoid publishing multiple figures by different agencies.

299. NSOM generally followed the recommendations included in the United Nations Principles and Recommendations for PHCs in the design and implementation of the census. According to these guidelines, a fixed time period for determining the usual residence of the individual shall be identified and the 12-month criterion is applied.

Mongolia has opted for the duration of minimum of 6 months and 1 day stay in the past 12 months.

300. PHCs identify the usually resident and temporarily absent persons as part of the final population estimate. In the case of PHC in Mongolia, NSOM also identified Mongolians residing abroad using diplomatic mission connections, which is not usual practice in conducting censuses. This, however, is due to the inadequacy of migration data available in the country. Although, it may not have been a reliable source of migration data, the discontinuation of the departure and arrival forms for Mongolian citizens removed a main source of data in this respect. There are plans to implement biometric passports with microchips, which would be a much more reliable source of data on population movements.

301. There is a need to refine the definition of households used in Mongolia which currently corresponds to the dwelling, based on international guidelines. There are cases when there may be more than one household in one dwelling, e.g. students sharing housing, etc. It is recommended that a decision tree be prepared to assist with determining cases of multiple households in one dwelling.

302. In preparation for the next round of Population and Housing Census and in order to benefit from the Geographic Information Systems in a more efficient way, it is recommended that NSOM links the population register with the cadastral maps maintained by the Land Authority of Mongolia.

303. The current practice is to store the completed Census questionnaires at the National Archives and this risks the confidentiality of highly sensitive information. It is strongly recommended to revisit this practice and store the questionnaires at NSOM and discard at least the part of the questionnaires containing personal information, e.g. the name and address of the respondent.

304. The current collection of data on migration seems incomplete and there is room for improvement. For instance, the Household Socio-Economic Survey and the Labour Force Survey can be used for verifying and/or complementing the migration data collected from administrative sources. If possible, mirror data sharing arrangements shall be established with receiving and sending countries in order to have better estimates of migration inflows and outflows.

4.2.2 Household Surveys

305. The following sample surveys are carried in Mongolia on a regular basis:

a) Household Socio-Economic Survey (quarterly) (HSES + LSMS);

b) Labour Force Survey (quarterly);

c) Wage and Salary Survey (quarterly);

d) Social Indicators Sample Survey (every 5 years) (MICS + RHS+ DHS);

e) Time Use Survey (every 4 years);

f) Democratic Governance Survey (quarterly);

g) Survey of Coping with Climate Shocks in Mongolia.

306. There are 75 enumerators, 24 supervisors and 22 data entry staff working on a contractual basis in order to collect the data through sample surveys. Once the data are received by NSOM, they are validated and processed at the headquarters. NSOM uses CSPro 5.0 for data entry and validation, whereas for analysis STATA 12.1 or SPSS 18.0 are available. In the case of the Social Indicators Sample Survey, 120 enumerators and 20 supervisors are working on data collection using laptops. The data collection period for the last Social Indicators Surveys was 30 September-25 December 2013.

307. For sample surveys, NSOM uses the results of the population census for preparing the sampling frame. There is no official procedure to evaluate the sampling frame used for household based surveys. There is no designated sampling unit in NSOM and an official procedure to evaluate the sampling frame used for household based surveys does not exist. Similarly, response burden is not assessed.

308. Apart from the sample surveys, NSOM administers reporting forms (Form 14 for the capital and aimags and Form 108 for ministries and agencies) for the collection of the 21 indicators for population and social statistics, as stipulated in the LS.

Household Socio-Economic Survey

309. The Household Income and Expenditure Survey (HIES) has been conducted since 1966 as a sample survey. During this period, the survey methodology and design have constantly improved in order to measure employment of household members. HIES surveys 1,000-2,808 households per quarter depending on growth of the population in order to measure, employment of household members, income sources and consumption. In addition, dedicated Living Standards Measurement Surveys (LSMS) were conducted two times in 1995 and 1998, and HIES/LSMS was conducted in 2002-3 with a sample size of over 3,000 households. Since 2007, NSOM has begun administering the quarterly Household Socio-Economic Survey, which combines the HIES and LSMS surveys.

310. The sampling is processed in two stages in the city and three stages in rural areas. In the city, in the first stage, sample primary units or khesegs are selected and in the second stage target households are selected. In the rural areas in the first stage soums are selected from the aimags, then in the second stage the sample primary units or bags are selected and in third stage households from sample primary units are selected. Lists of the households of the sample primary units for a certain month are updated by the primary administrative units through the Capital-City and aimags Statistics Department/divisions one month before the survey in order to improve the participation in the survey.

311. The process of survey is indicated in a detailed manner in *Procedure of NSOM survey team activity* and *Procedure on data collection team* decree of the Chairperson of NSO number 01/193 from 23 December 2011.

312. There are two types of HSES. The short version is used to estimate income, expenditure and consumption whereas the longer one aims at estimating the key poverty indicators. The short HSES is conducted in odd years and has a sample size of

11,232 while the long HSES is conducted in the even years and has a sample size of 16,200. The sample size was recently expanded through the technical assistance of the Monstat project and the World Bank. The following questionnaires are in the 2013 HSES: HSES-1 (including non-food section with 37 sub-groups and 375 items); HSES 2a, 2b (including food section with 13 sub-groups and 123 items) and HSES-3 (the diary that the household keeps for 30 days—this is filled out by the selected households in the urban areas for each ten-days recording consumed food items. The enumerator visits households three times per month and collects the diary).

Labour Force Survey

313. The first Labour Force Survey (LFS) in Mongolia was conducted in 2002-3 with support from the ILO. Since 2006, LFS has been conducted on a quarterly basis and since 2008 the reporting has moved from annual to quarterly cycles as well. In 2002-3, 2006-7 and 2011-12, the Child Labour Survey as a module of the LFS was conducted and in 2007-8, the two-phased 1-2 Survey as a module of the LFS was implemented in cooperation with ESCAP in order to measure informal employment and the contribution of informal sector to GDP using two different questionnaires for households and enterprises.

314. The sample size of the LFS is 12,816 households per year, i.e. 3,204 households per quarter or 1,608 households per month are surveyed. 75 enumerators interview the households before the 25th of each month and before the 5th of the following month the questionnaires are checked and submitted by the supervisors. NSOM receives the data before the 12th of the month after which the preparation and the dissemination of the report is undertaken. The results of LFS are used for producing total number of unemployed persons on a quarterly and an annual basis. Administrative data are used for computing the figures of the registered unemployed recorded by labour offices in aimags and districts and in labour exchange offices on a monthly basis.

Wage and Salary Survey

315. The Wage and Salary Survey has a sample size of 1,308 units, and the data are obtained on paper or in excel format from the aimags and districts. Data are collected and entered by a team of 31 persons across the statistical system before the 21st day of January, April, July and October of the given year, and two persons are in charge of the aggregation of data at NSOM before the 10th day of the month following the submission of the data from the territorial offices.

316. In recent years, there have been two ad-hoc surveys conducted: Wage Structure Survey in 2010 (in cooperation with the Ministry of Labour) and Labour Cost Survey in 2013. The administrative data are not used for unemployment figures in Mongolia.

Assessment:

317. There is a need to distinguish more clearly data collected through sample surveys and through administrative reporting forms and their use. Currently, the approach seems to be that the official statistics are those collected through reporting forms and sample surveys are additional information.

318. It is highly recommended to form a sampling unit to handle the design of the sampling frame and any required updates. With the conduct of the inter-census survey, there will be more up-to-date data available for frequent revisions of the sampling frames. This sampling unit shall also implement international standards in assessing the efficiency of the sample surveys vis-à-vis the indicators and the breakdowns required at the analysis stage.

319. In addition to assessing the quality and the efficiency of the sampling design, it is essential to evaluate the response burden imposed by each survey. Response burden may be due to a range of factors including survey design, questionnaire length, publicity or implementation of the survey. Identifying the magnitude and the factors contributing to response burden would improve the quality of surveys and reduce the associated costs.

320. The enterprise and establishment-based survey shall be conducted in close collaboration with the NSOM department that is in charge of economic statistics, as this is a key source of information for calculating the compensation of employees in the compilation of national accounts. The sampling arrangements for this particular survey are not clear.

4.2.3 Classifications and nomenclatures

321. Indicators, definitions and classifications used in demographic statistics are generally in line with international recommendations and standards. The UN publication *Principles and recommendation on population and housing census* and the *Methods and materials of demography* is used in the practice. Moreover, the administration unit codes and classifications are used for results of PHC.

322. The main concepts and definitions of *Principles Recommendations for UN Population and Housing Census* (2nd revised version UN New York, 2008) are broadly followed. Classifications used for the PHC and sample surveys are as follows:

a) International Standard Industrial Classification, ISIC-4.0;

b) YAMAT-08 (based on the International Standard Classification of Occupations - ISCO-08);

c) International Standard Classification of Labour Cost, ISCLC-66;

d) International Classification by Status in Employment, ICSE-93;

e) National Classification of Individual Consumption by Purpose (based on the Classification Of Individual Consumption by Purpose adapted for the Household Budget Surveys, COICOP-HBS), 2003;

f) International Standard Classification of Education, ISCED-97;

g) International Classification of Diseases, ICD-10;

h) Code for administrative and territorial units of Mongolia MNS-5641-1:2006;

i) Codes for cities and village;

j) Codes for regions of Mongolia;

k) Codes for world countries;

l) Codes for ethnic groups and minorities.

Assessment:

323. In general, NSOM staff is up-to-date about the existing international standards and classifications in the social and demographic domain. Nomenclatures used by NSOM for Social and population statistics are in line with corresponding international classifications.

4.3 Economic and business statistics

4.3.1 Statistical business registers and censuses

324. NSOM has conducted establishment (or business) censuses five times. The censuses in 1991 and 1994 did not cover all economic sectors. The last three censuses conducted in 1998, 2006 and 2011 covered all kinds of establishments and their branches. The establishment census also covered individual entrepreneurs in 2006 but not in 2011, due to lack of resources.

325. In the 2011 business census, the International Standard Industrial Classification of all economic activities, version 4.0 (ISIC-4.0), was implemented and a geographic information system was created. The last census embraced more property/assets and IT indicators than the previous ones.

326. In 1998, NSOM, with the support of the TACIS Programme, established a statistical business register database based on the results of the 1998 establishment census. Since then, the register has been fully updated two times based on the 2006 and 2011 establishment censuses. During the last three years, further work on improving the business register has taken place in the framework of the Monstat project financed by the World Bank. Several surveys have been carried out to further improve the overall coverage and accuracy of the register as the sampling frame for establishment and agriculture surveys. In particular, within the framework of the Monstat project, NSOM conducted a survey that identified entities in the register that are engaged in the agricultural sector, a survey on entities whose addresses are unclear and a survey on large businesses as well as a survey on businesses with foreign investments which involved 2,800 enterprises. These surveys have enabled updating the database.

327. Concerning the registration procedure for the business register, the General Authority for State Registration of Mongolia is the central authority that registers business entities and establishments. By using the business register database, the General Authority for State Registration and the General Taxation Department to identify newly established entities and establishments. The business register database is updated through a quarterly survey conducted by the territorial statistical divisions

that elicit information on new business entities and establishments already registered in the database.

328. The information is revised and updated once a year based on an annual economic statistical survey and an annual establishment sample survey. The economic survey provides economic information like turnover and number of employees, and the establishment survey information on addresses and types of economic activities.

329. In addition, NSOM updates the business register database using: the Foreign Investment Agency registration of foreign investment funded businesses and the Financial Regulatory Commission registration of banking and non-banking institutions, saving and loan cooperatives and insurance and brokers companies. Other relevant registers owned by the Ministry of Education, Culture and Science, the Ministry of Health, the Ministry of Finance, the State Property Committee, the Mongol Bank, the State Supreme Court are used for collecting information. The business register database is updated annually with the data and sources mentioned above. NSOM accesses the data from these agencies and institutions electronically.

330. This information coming from various sources allows for cross-checking data about every business entity and establishment and, when needed, to correct, update and complement the register. The numbers of employees, annual sales, tangible and intangible assets are updated in the business register one month after the completion of the data processing of the annual statistical report.

331. National classifications used in the framework of the economic registers and business census are broadly in line with international standards. Only principal activities of the establishments were included in the business register between 1998 and 2008, but since 2009 the business register has changed its structure and includes now also secondary and ancillary economic activities. The International Standard Industrial Classification of all economic activities, version 4.0 (ISIC-4.0), is also used by the General Taxation Department and the General Authority for State Registration.

332. NSOM emphasised the very good cooperation with the General Authority for State Registration. The exchange of data is based on an agreement and a working group between NSOM and the providers of administrative data was established. During the first assessment mission (October 2013), it was observed that the administrative and statistical registers did not have a common identification number. The recommendation to complement the administrative identification number with a statistical code (e.g. economic activity) was proposed. This recommendation was already implemented between the first and second global assessment missions.

333. NSOM informed assessors of several initiatives for further improving the quality of the business register (BR) in line with international recommendations. Recently, within the Monstat project, a BR management system was developed for collecting, updating and managing BR data, replacing a procedure that was to a large extent based on manual operations. The former manual procedure was not only time consuming but also a sources of mistakes. Unfortunately, for some of the government agencies involved in the data collection for business registers, the access to previous records are not possible. This speaks in favour of developing one common IT platform for the maintenance and update of the business register and the statistical business register.

334. One remaining issue is related to the large number of inactive entities. At the end of June 2013, about 95,000 establishments were registered, out of which 42,700 sleeping entities (45.4%). Among the sleeping entities: 98.2% had 1-9 employees; 1.2% had 10-19 employees; 0.5% had 20-49 employees; and 0.1% more than 50 employees. For 15.6% of the sleeping entities, the addresses were even unknown. The existence of some of these sleeping entities can probably be explained by the fact that *dummy companies* are created for the sole purposes of certain benefits such as access to credit or tax avoidance.

335. The collection of addresses for some foreign enterprises is also difficult, since many of these companies are active in Mongolia for seasonal activities. This is often the case for foreign construction companies, from which it is difficult to obtain responses. So far the legal environment to impose sanctions (e.g. fines) for breaching provisions of the LS is rather weak.

336. Another issue concerns the coverage of individual entrepreneurs since the business register only records establishments with diverse ownership status. The last establishment census did not cover individual entrepreneurs and therefore related information in the register has not been updated (individual entrepreneur statistical register).

Assessment:

337. A statistical business register is the main survey sampling frame and as such contributed to the improvement of the quality and the coherence of economic statistics. The statistical business register of Mongolia is broadly in line with international recommendations and is regularly updated using a large variety of data sources. Since its establishment several improvements have been made and NSOM is further committed to enhance its accuracy and coverage. The assessors welcome the implementation of one identification number for each entity for administrative and statistical purposes and the development of new software that will automatize data quality procedures by cross-checking information from different sources.

338. One could mention that a common IT platform should be developed and used by all providers of administrative data for the maintenance and update of the business register. An alternative could be the development of an application programme by NSO compatible with different IT platforms run by other government agencies. However, this solution has some risks, especially if government agencies were to decide to move to another system without informing NSOM in advance.

339. It will be important in the near future to improve records for individual entrepreneurs since official statistics for these production units relies on sample surveys and that the business register constitutes the best frame for this kind of operations. The issue of sleeping units needs also special attention since they represent close to 50% of the total entities recorded in the business register.

340. The next business census should cover all economic entities regardless of their economic activities and legal forms, including individual entrepreneurs. But economic censuses are heavy operations monopolising human and financial resources. One solution would consist in implementing a rolling economic census covering every year different economic activities and/or legal forms. This will have also the

advantage of better spreading budgetary constraints over time and efficiently using know how available in NSOM.

4.3.2 Business surveys

341. NSOM conducts various economic surveys (reports and sample surveys), such as for industry, trade and NGO. Before launching a survey, the following considerations are carefully analysed and assessed:

a) Survey background and prerequisite;

b) Survey objectives;

c) Survey frame and principles;

d) Survey organisation;

e) Expected output and further actions;

f) Experiences of conducting the survey at international level;

g) Human and financial resources to be involved;

h) Survey workflow plan.

When designing questionnaires for business statistics surveys, NSOM takes utmost account of the needs for the compilation of national accounts.

342. Surveys of all economic sectors are conducted based on the records of the statistical business register. Most of data, in particular for big enterprises, are collected through exhaustive surveys, also called statistical reports. Data for sales, revenues, total expenditures, freight, passenger transport and production of some main products are collected for monthly and quarterly statistical reports. Data related to value added and investments, such as revenues and expenditures, wages, depreciation, and interest rates on loans are collected from business entities and establishments for the annual statistical reports. NSOM has started to collect data through sample surveys in 2001; however this is still under development. Sample surveys for the industrial sector and NGOs are carried out based on the number of employees. For the trade sector, sampling design is made based on annual revenues.

343. Information about economic operators is also gathered from administrative sources. NSOM aims at keeping the response burden low, and hence cooperates with ministries and agencies in order to avoid duplication between official statistics and administrative statistics. For example, in 2013, additional information on stock of assets was requested by the Ministry of Finance along with information on the balance sheet. This allowed NSOM to compile information that eventually could be used for the compilation of national accounts aggregates related to financial accounts and balance sheets.

344. Fifteen indicators out of 48 indicated in Article 6 of the LS are collected through reports and surveys. These are the following:

a) Agriculture, forestry;

b) Industry;

c) Construction;

d) Domestic trade;

e) Hotel;

f) Restaurant;

g) Transportation;

h) Communication;

i) Tourism;

j) Finance, bank, credit;

k) Veterinary;

l) Non-governmental organisations.

345. Detailed information on annual activities of business entities (structural business statistics) are collected through integrated questionnaires, while for monthly and quarterly data (short-term statistics) this is not the case. For economic statistical surveys and reports, the *Central Product Classification* (CPC) and the *International Standard Industrial Classification* (ISIC) are used by NSOM but also by the agencies and ministries collecting data for statistical purposes.

346. Under Chapter 5 of this report (macroeconomic and business statistics) more detailed information is provided on method of data collection (sample surveys and statistical reports). It is interesting nevertheless to note that for sample surveys, the following parameters are observed (sampling plan):

a) Industry (N=4192, n=1697, rr =0.99)

b) Trade sector (N=18647, n=6064, rr = 0.96)

c) Non- Governmental Organisation (N=2369, n=1403, rr =0.91)

Where *N* is the **N**umber in the total population, *n* is the **n**umber of units being sampled and *rr* the **r**esponse **r**ate.

Assessment:

347. NSOM is closely monitoring the collection of data for the compilation of economic statistics and using systematically administrative data when they are available. The main objective is to avoid duplication of data collection and thus reduce the burden on respondents. An additional initiative would be to assess whether it is systematically needed to collect information from exhaustive surveys (statistical reports) or if these

could be replaced gradually by sample surveys, in particular for small and medium size businesses.

348. In that respect, it would be important to rethink the overall data collection system within the Statistics Authority of Mongolia (SAM) since sample surveys request a more centralised approach of data collection: sampling frame (business register), sample selection, data editing, quality check, non-response, replacement or imputation of missing values and extrapolation. A methodological/sampling unit could be set up in the central office dealing primarily with sample surveys for both economic and social statistics; under the data Processing and Technology Department or the Policy Implementation and Coordination Department already in charge of quality.

4.4 Agricultural statistics

349. The share of agriculture in the economy of Mongolia has decreased during the past years, with the agricultural sector accounting for 14.8% of GDP and 7.1% of exports in 2012. However, 34.9% of employment is in the agricultural sector which continues to be the main livelihood for many families in rural areas.

350. At bag level, the main activities of Governors are related to agriculture. Data on natural losses of adult animals are collected monthly during Jan-June, and for September. Number of female breeding stock giving birth is collected monthly during Mar-Jun and in September; sown area during May-July, and crops during Sep-Nov.

351. Three staff at NSOM and 31 staff at territorial level are dedicated to agriculture-related activities. Every year, a livestock census is conducted and every three year, a census on fences, walls and fodder. However, these censuses are conducted by Governors at bags and khoroos and their results are also used for administrative purposes. It is therefore not obvious if they should be considered collection of data for official statistics or for administrative purposes. In addition to these regular, nation-wide and full enumerations, an agricultural census is planned for every 10 years (with a bi-census every 5 years), the first agricultural census having been conducted in 2012.

352. The 2012 agricultural census was conducted with the assistance of the UN Food and Agriculture Organisation (FAO) and NASS/USDA, using a sampling frame established on the basis of the 2010 population and housing census. A geo-spatial database on agriculture was established as part of the exercise, enabling enumerators to locate farm land on the basis of satellite imagery.

353. On an annual basis, NSOM receives administrative information from the Ministry of Agriculture and Industry. Data includes information on fallow land, technical equipment, seed, wells, breeding animals, pasture and grassland protection and intensive livestock husbandry. Individual records are kept at soum or aimag level. The data are published by NSOM without further processing.

354. The Ministry of Finance has recently embarked on a livestock insurance scheme. For this purpose NSOM is conducting a semi-annual survey of live-stock, which is paid for by project funds. The survey includes information that is also reported regularly by the bags, adding information of the cause of death of animals for insurance purposes. At present, NSOM does not publish the survey results but transfers them to

the Ministry of Finance and uses the findings to verify the monthly reporting from bags.

355. Verification using the results of the census points to some quality issues with data collected from the traditional administrative reporting system. For example losses in young animals appear to have been under-reported. This supports the shared view among staff from the Ministry of Agriculture and Industry and NSOM that the quality of those data is inadequate particularly due to challenges related to field operations (coverage suffering from long distances and related high transportation costs).

Assessment:

356. A large amount of information is collected and published on the agricultural sector, reflecting the economic and cultural importance in particular of livestock to Mongolian society. There are, however, trade-offs between cost of data production and use of the resulting statistics, and the assessors find that a better balance could be struck.

357. Considering the quality issues, which have emerged on the basis of the recently conducted census and insurance survey, the inclusion of agricultural census in the programme of NSOM and the growing capacity for conducting censuses and surveys, NSOM should consider the following, in close consultation with the Ministry of Agriculture and Industry and the territorial offices:

a) Analyse further the quality of data from the administrative reporting system, with a view to assessing its usefulness for statistical purposes.

b) Analyse the demand for data among policy makers, live-stock owners, crop producers and other entities involved in the agricultural sector with a view to identifying options for limiting the frequency and detail of information collected and freeing up resources for strengthened quality assurance.

358. Particularly to the insurance-related survey conducted at the request of the Ministry of Finance, it is recommended that: NSOM immediately publishes the results of the survey conducted for the Ministry of Finance, aggregated to soum level in order not to violate confidentiality. All products of NSOM are public goods and should thus be publically available.

359. It is probably for agricultural statistics that the borderline between administrative and statistical data collection is the most ambiguous. It is fundamental to assess to what extent territorial statistics authorities and in particular Governors of bags and khoroos are involved in both. As mentioned in Chapter 1 of this report, if data are collected simultaneously for administrative and statistical purposes they have to be labelled as administrative and collected by authorities that are not considered producers of official statistics.

5. STATISTICAL DOMAINS

5.1 Social and demographic statistics

5.1.1 Demographic statistics

360. Demographic statistics are the responsibility of the Population and Social Statistics Department which also has a special Population and Housing Census Bureau within NSOM with data provided by the Civil Registration Authority (Population Vital Register) and the General Authority for Border Protection (migration). The Law on Statistics (LS), Law on Population and Housing Census (LPHC), Law on Administration and Administrative Units and the Management and Human Development Policy of the Government, and the General State Registration and Civil Registration laws are pertinent in the production of these data.

361. The key indicators in this domain are categorized as vital statistics (births, deaths, internal migration, marriages, divorces and adoptions) and other demographic indicators (age, sex, ethnicity, citizenship) and geographic and migration indicators (place of birth, usual and present residence, duration of residence, usual residence one year ago and usual residence five years ago).

362. Migration indicators are further divided into internal and international migration statistics and level data on immigration and emigration are provided disaggregated by sex and age group. In addition, reasons for migration are collected. Data for inbound and outbound passengers, who are Mongolian citizens, are submitted quarterly by the General Authority for Border Protection to NSOM. The data on foreign nationals living in Mongolia, on the other hand, are submitted on an annual basis by Mongolian Immigration Agency.

363. Population data are disseminated quarterly and annually. Quarterly population is disseminated through monthly bulletin, statistical booklet and posted on the webpage (www.1212.mn and www.nso.mn) 15 days after the end of the reference quarter. The Statistical Yearbook is the annual publication covering population data.

364. There were 84 tables on population, 19 tables on housing and 12 tables on Internet and cell phone consumption based on the results of the 2010 Population and Housing Census. Furthermore, owing to the use of the geographical information system in the census operations, a comprehensive nationwide, aimags and Capital-City map was developed for the first time.

365. In addition to the electronic means of dissemination, NSOM prepared a printed version of the main results of the census and 12 monographs on different social aspects, which were disseminated to the local and international users.

Assessment:

366. The population data are produced by two separate registers and the Population and Housing Census whereas partial migration data are available from the General Authority for Border Protection. This fragmented system of data collection results in an incomplete picture of the population movements in Mongolia, especially

considering the added difficulty of covering the nomadic persons. It is urgently recommended to consolidate the population register with a unique ID for each person.

367. In terms of enhancing the analytical use of demographic statistics, it is important to link migration data with other demographic characteristics. Household-based surveys can be used to complement migration data from administrative and register-based sources both in terms of improving coverage and the range of variable for analytical purposes.

5.1.2 Gender statistics

368. Gender Statistics is the responsibility of the Population and Social Statistics Department of NSOM. The laws and procedures that are relevant for the production of gender statistics are: the Law on Statistics (LS), Law on Gender Equality, Mid-term Strategy for Implementing the Law of Mongolia on Gender Equality and the Frame of Indicators for Gender Statistics developed under the Monstat project and approved by the Order of NSOM Chairperson. The framework for gender statistics covers 216 indicators in Mongolia of which 81 key indicators are approved by the National Committee on Gender Equality. These indicators are used in the annual reports of each ministry on gender equality. The key indicators are categorized under population, health, education, poverty, economy, authority/decision making, human rights/gender-based violence, information and communication.

369. In 1989, the first census monograph specifically on women and children was published in Mongolia. Based on the results of the 2010 Population and Housing Census, a monograph on gender equality was published covering gender disparities in a range of aspects, e.g. education, employment, etc.

Assessment:

370. NSOM refers to international methodological work on gender statistics including *United Nations manuals on Gender Statistics*, the *UN-ECE manual on Developing Gender Statistics: A Practical Tool*, and census-specific manuals prepared by UNFPA in cooperation with UN DESA. Given the interest from the policymakers gender statistics is likely to stay a priority for NSOM. Although, Time-Use Surveys are said to be used for some of the indicators, they can be better adapted to deriving gender indicators (and not only used for sex disaggregation). It is important to have a clear conceptual framework based on which the indicators are to be produced rather than just a list of indicators that are disaggregated by sex.

5.1.3 Living Standards Statistics

371. The production and dissemination of living standards statistics are the responsibility of the Population and Social Statistics Department of NSOM. The following laws and procedures are pertinent to the production of living standards statistics in Mongolia: Law on Minimum Subsistence Level Law on Family, Law on Minimum Allowance, Law on Higher Education, Law on Social Welfare, Procedure on providing loans for education fee and repayment of loans and Procedure on grants and non-repayable subsidies. Between 1966 and 2007, NSOM conducted the quarterly Household Income and Expenditure Survey (HIES), which was the principal source for living standards data.

372. The poverty estimation methodology has been elaborated in cooperation with the World Bank for which the measure of economic wellbeing is consumption. Additionally, NSOM has estimated and announced poverty numbers in 2011 and 2012 in collaboration with the World Bank. In estimating the poverty line there are two approaches which have different weaknesses and strengths. The cost of basic needs method for estimating the poverty line at base year is not affected by methodological changes but it cannot be used to track trends. An index approach to estimating poverty lines using the Consumer Price Index (CPI), while ensuring comparability over time hinders sub-national poverty measurement, as CPI at the national level is applied. The index approach uses two different indices for food and non-food components of the poverty line. The food poverty line indexed to a base year is computed taking into account food price changes calculated from HSES data in a given year (Fischer index). The non-food poverty line, on the other hand, uses price index of the non-food group in CPI (Laspeyres index). Currently, poverty is estimated at national and regional level (West, Khangai, East, Central and Ulaanbaatar) as well as for urban and rural areas. Biennial estimation at the aimags and lower levels is targeted through the increasing of the sample size starting in 2014.

373. The results of the last Population and Housing Census have been combined with the results of the 2011 HSES (Household Socio-Economic Survey) in order to undertake a poverty mapping exercise at national, regional, aimag, soum/district and khoroo levels in cooperation with UNDP. HSES data are also used in estimating some MDG indicators. In addition, together with the Ministry of Population Development and Social Protection and the Asian Development Bank (ADB), NSOM developed a proxy means testing methodology using HSES data. The poverty methodology applied in the proxy means testing is different and is based on administrative data managed by the Ministry to measure living standards of households.

374. The indicators that are disseminated are categorized under household income and expenditure (monthly average income per household and composition, monthly average expenditure per household and composition, monthly average per capita food consumption and composition of daily foodstuff consumption, and calories per person), main poverty measures (poverty headcount, poverty gap, and severity of poverty), inequality (Gini coefficient and consumption change by group—decile and quintile) and living indicators. For the latter, poverty status of the household is given by number of household members, household assets, head of household characteristics, level of education, employment and health of population. Household income and expenditure indicators are disseminated on a quarterly basis, whereas the poverty measures are published annually. Inequality is published at national and regional level. In addition, HSES data are used for estimating the weights for the Consumer Price Index.

375. The quarterly publication is the Bulletin of Statistics whereas the annual results are covered in the Mongolian Statistical Yearbook and the Poverty Profile. In addition to these publications, the most recent data are available on www.1212.mn, which also covers a database of anonymised microdata database.

Assessment:

376. The availability and the quality of living standards statistics in Mongolia are satisfactory, and their development benefitted from the support of the World Bank, although the time series are short given the change of methodology. It is recommended to work on linking the time series back to 2007 HSES, which is the earliest data source for this operation.

377. Given that HSES is conducted quarterly, there may be room for collecting panel data for at least a sub-sample of households. Panel data allow deeper poverty analysis allowing the assessment of the vulnerability of households as well as the determinants of poverty, i.e. going beyond correlations of household characteristics and poverty status and delving into the causes of poverty.

378. There may also be benefits in using overlapping samples for HSES and LFS with a view to increasing the analytical power of the data, including difficult-to-construct indicators such as working poverty.

379. NSOM shall study carefully the benefits of increasing the sample size in order to estimate poverty at lower administrative levels. The ultimate aim should be full sustainability of HSES with in-house expertise and national funding given the prominence of the data collected.

5.1.4 Labour market statistics

380. The Population and Social Statistics Department of NSOM is responsible for labour market statistics. The pertinent laws are: Law on Statistics (LS), Law on Labour, Law on Minimum Wage, Law on Civil Service, Law on Social Insurance, Law on Social Welfare, Law on Social Welfare of Physically Disabled Citizens, Law on Sending Labour Force abroad and Bringing Labour Force and Specialists from abroad, Law on Occupational Health and Safety, and Law on Family.

381. The data sources for labour market come from the Population and Housing Census, the quarterly Labour Force Survey (LFS), the quarterly Wage and Salary Survey and the monthly data from the administrative register on the newly employed and registered unemployed maintained by the Ministry of Labour.

382. Key indicators recommended by the ILO, such as the economically active and inactive population, employment and unemployment rates and labour force participation rate, are disseminated on a quarterly and annual basis in Mongolia. Furthermore, employment-to-population ratio, employment by status in employment, sector and occupation; part-time workers, hours of work, employment in informal economy, youth unemployment, long-term unemployment, educational attainment and literacy, average monthly wages and labour productivity are estimated using the available data sources. However, time-related unemployment, hourly compensation costs and working poor indicators are currently not estimated in Mongolia.

383. The LFS questionnaire has eight sections covering the household roster, education and training, current activities, availability for more work, unemployment, usual activities, past employment record and current activities without pay.

384. The Wages and Salaries Survey provides data for calculating basic wage, after payment, bonus, honorarium and compensation of employees. The average pay and salaries are computed using unweighted raw data. The indicators are calculated separately for Mongolian citizens (by capital/aimag, sex, occupation, division, legal status and type of ownership of enterprise) and foreign residents (by capital/aimag, sex, division, legal status and type of ownership of enterprise).

385. In 2013, NSOM and the Ministry of Population Development and Social Protection formed a working group in order to harmonize wage statistics collected through sample surveys with the data from the Social Insurance Fund.

386. Labour market statistics are disseminated through monthly and quarterly statistical bulletins and reviews and annually through the Statistical Yearbook. Indicators and anonymised microdata from the LFS are uploaded on www.1212.mn and EzStat application. Data requested through the dedicated questionnaires are provided to the ILO and to the GDDS. There is also an annual printed Labour Force Survey Report.

Assessment:

387. One challenge for labour market statistics in Mongolia, given the seasonal nature of work in the country, is the definition of employment and unemployment using the criterion of *having worked at least one hour in the past week*. The logistical difficulties of reaching the herders, especially in the winter months are also hampering data collection activities. In addition, based on the current LFS questionnaire, it is not possible to separate nomadic and settled farming practices. The new resolution concerning statistics of work, employment and labour underutilization represents an opportunity to rework the national definitions in Mongolia.

388. The LFS questionnaire is long and likely to be burdensome for the respondents.

389. In order to calculate indicators such as working poor, it is recommended to consider linking the samples of the LFS with that of the Household Socio-Economic Survey (HSES). An experimental study can be undertaken using statistical matching techniques.

390. NSOM aims at conducting the Labour Cost Survey (LCS) regularly. It is recommended to consider this vis-à-vis the quarterly Wage and Salary Survey and assess whether the two surveys could be merged.

5.1.5 Education and culture statistics

Education

391. In Mongolia, statistics on education are governed by the LS, Law on Education, Law on Higher Education, Law on Primary and Secondary Education, Law on Preschool Education, and other relevant policy documents.

392. The Ministry of Education and Science (MES) and the Ministry of Labour are the government agencies that collect education data, through 37 forms for administrative records. MES collects and compiles annual data and reports on preschool, primary, secondary and higher education statistics and starting in 2012, the Ministry of Labour

has been collecting and compiling annual data and reports on vocational education statistics. Data on education abroad are available from state loans or intergovernmental cooperation data but students who go abroad using their own means are not captured in statistics.

393. Once a year, in accordance with the calendar data on preschool, primary, secondary and higher education are produced and submitted by MES and data on vocational education are produced and submitted by the Ministry of Labour. Additionally, every quarter aimags and Capital-City Statistics Department and divisions produce and submit data on *Income and expenditure of private enterprises running temporary vocational activities* to NSOM. NSOM's role is to check, validate and disseminate education statistics.

394. Methodology and classifications for education statistics have been developed under the auspices of the Monstat project. Thus education statistics in Mongolia are compiled according to the following classifications:

a) UNESCO International standards and classification of education (ISCED) 97;

b) National standard classification of occupations based on the International Standard Classification of Occupations (ISCO)-08;

c) International standard industrial classification ISIC-4.0.

395. NSOM has made efforts to harmonize the classifications used by developing a national classification and methodology for education statistics in accordance with the ICSED 2011 and the Education Indicators Technical Guidelines 2009 by UNESCO.

396. Education data are disseminated on the www.1212.mn online database and reported to UNESCO. The official statistics approved by NSOM are also made available on the MES website. MES also have a statistical yearbook and reportedly there is no discrepancy between the data covered in this publication and data disseminated by NSOM.

397. Education data are also used as source data for estimation of GDP. NSOM submits value-added of educational products based on data on establishments running vocational education activities from aimags and Capital-City Statistics Department and divisions and income and expenditure statements of educational establishments from MES.

Culture

398. The framework for statistics on culture is provided by the LS, Law on Culture, and other relevant laws and regulations in Mongolia. The culture and art data are produced by the Ministry of Culture, Sports and Tourism using 10 official and 7 administrative forms. Additionally, the aimags and Capital-City Statistics Department and divisions get data on *Revenue and expenditure of private enterprises running leisure time, cultural and physical cultural activities.*

399. The data are then submitted to NSOM where the Department of Population and Social Statistics processes the data, reflects them in the yearly bulletin and yearbook and disseminates them in accordance with the dissemination timetable.

400. The following guidelines are used in producing and disseminating culture and art data:

a) A guideline for producing statistical data on culture and art sector approved by the Ministry of Education and Science in 2003. The indicators such as museum, cultural centre, cinema, theatre, performances of ensembles and the number of employees are produced.

b) Framework of cultural statistics, UNESCO 2009.

401. The following classifications are used for culture, science and technology statistics:

a) National standard classification of occupations based on the International Standard Classification of Occupations (ISCO)-08.

b) International standard industrial classification ISIC-4.0.

402. The data are disseminated through the www.1212.mn online database and MES publications.

Assessment:

403. The ambition of NSOM in education and culture statistics is to establish a national programme of data collection with the supporting methodologies based on international standards. Such a programme has to be developed in cooperation with the Ministry of Education and Science, and the Ministry of Culture, Sports and Tourism.

404. As for the other statistical domains, it is highly recommended that NSOM access the microdata on education and culture for robust quality assurance.

405. There is a need for reviewing the 37 forms used for collecting education data in order to harmonize concepts and to remove duplications.

406. UNESCO has issued a revised version of ISCED in 2011 which the UNESCO member countries are expected to use in their reporting as of 2014. NSOM already has plans to collaborate with UNESCO in implementing the revised classification.

407. For culture statistics, Time Use Surveys, in addition to administrative data collected by the Ministry of Culture, Sports and Tourism, can be used, e.g. for cultural activities and for entertainment.

5.1.6 Public health statistics

408. The work on health statistics is governed by the LS, Law of Mongolia on health, the National programme on reproductive health and relevant policy documents. The Ministry of Health, through the Statistical Data Division under the Health Development Centre, is the main producer of health statistics in Mongolia. Health data are collected through six forms by the Ministry of Health and through surveys by NSOM. The data collected by the Ministry of Health are submitted monthly to NSOM at the aggregate level. NSOM has one staff in charge of methodological development, questionnaire revisions, reviewing, processing and compiling of health data.

409. Indicators on inpatient and communicable diseases, fertility and mortality, including maternal and infant mortality, are examples of key statistics produced in this area. The source data comes from the statistician-feldshers at soum level and from statistician-doctors and nurses at district, aimag and the Capital-City levels. These source data are reported by the Ministry of Health. For any checks and edits regarding the raw data, NSOM has to communicate officially with the latter.

410. NSOM uses the International Classification of Diseases ICD-10, as approved by the World Health Organisation, and has developed the methodology for estimating health indicators in cooperation with the Ministry of Health in 2009.

411. Although there is monthly death data submitted to NSOM by the Ministry of Health, the official data are available annually and compiled in the civil register. The causes of death are obtained from hospital reports. In terms of the MDGs, all health indicators except for medicine consumption are available. NSOM conducted the Multiple Indicator Cluster Survey (MICS) four times, i.e. every five years over 1995-2010. The Reproductive Health Survey (RHS) has been conducted every five years since 1998, and the first Demographic Health Survey (DHS) was launched in September 2013.

412. When the administrative data are compared with the survey data, infant mortality is higher in the latter. The discrepancy was very large in 1998 although it is on a decreasing trend. The latest figures for infant mortality were 21/1000 (Ministry of Health); 24/1000 (RHS, UNFPA) and 35/1000 (MICS, UNICEF). NSOM reports all three figures to the MDG database for this indicator.

413. NSOM aims to reduce the gap between the birth and death statistics in the civil registration and the administrative statistics on health and in general expand the health indicator database.

414. Health data are disseminated in monthly, quarterly and annual printed reports as well as through the www.1212.mn online database.

415. The Ministry of Health disseminates monthly, quarterly and annual data through in printed and electronic forms to users (www.chd.moh.mn).

Assessment:

416. NSOM and the Ministry of Health have an established mechanism for working on the production of health indicators together. As for other domains of statistics, NSOM does not have access to the microdata on health, which means that their involvement in quality assurance of the final statistics is limited. In order to allow more robust data checks and edits, NSOM should have access to microdata on health for statistical purposes.

417. The definitions and classifications across the data sources, especially the administrative ones, have to be harmonized and standardised for comparability.

418. As NSOM has rightly pointed out, the reconciliation of data from the civil register and from the administrative register maintained by the Ministry of Health is essential. It is

also important to continue to compare the figures for key health indicators based on register and survey data.

419. The Social Indicator Sample Survey results are planned to be used to monitor the progress towards the goals and targets of the United Nations Millennium Declaration. The Action Plan of *A World Fit For Children* and other national programmes and policies such as the *National Programme to improve Child Development and Protection* and Reproductive Health Survey can be used for verifying and/or complementing the health-related data collected from administrative sources.

5.1.7 Disability Statistics

420. The production and dissemination of disability statistics are governed by the LS, the Law of Mongolia on Social Protection of Disabled Citizens, and other relevant policy documents.

421. NSOM is the agency in charge of producing statistical indicators on disability. There are three sources of disability data: Population and Household Registration Book (bags and khoroos), Form NS-1 on social indicators of Household and Population, and the Population and Housing Census. For the latter, it is not possible to identify disability effectively for children aged 0-5. All these three sources apply the same concept of disability.

422. The Population and Household Registration Book were updated in 2011 and NSOM has updated the NS-1 form for some social indicators on population and household. The NS-1 form is administered yearly at the aimag, Capital-City, soum and district levels in accordance with the calendar. NSOM has one staff responsible for disability statistics who works on the aggregated data received.

423. Other sources of data on disability from non-governmental organisations show a higher percentage of population with some kind of disability than official sources.

424. NSOM applies the UN Guidelines and principles for the development of disability statistics (short and extended set of indicators) developed by the Washington Group on Disability Statistics. The International Classification on Functioning and Disability and Health (ICF 2001), as approved by the World Health Organisation, is used.

425. Disability statistics are included in the yearly bulletin and the Statistical Yearbook. The indicators are also integrated in the online database www.1212.mn. After the 2010 Census, a monograph on Persons with Disabilities, cross-tabulating disability with other census variables, was published.

Assessment:

426. In Mongolia, some quality of life indicators available are available (e.g. access to buildings), as a result of cross-tabulations with other census variables. There are, however, no specific quality of life indicators for disability which could be of interest for policymakers.

5.1.8 Social protection statistics

427. Social protection statistics are governed by the LS, Law on Social Insurance, Law on Social Welfare and other relevant laws and regulations in Mongolia.

428. The agencies in charge of data collection are the Social Insurance General Office and Social Welfare Service General Office under the Ministry of Population Development and Social Protection. Data related to social welfare used to be available from the state budget but NSOM has currently difficulty getting the data, as the budgeting is now done at the local government level. Private expenditure on healthcare is available from Household Socioeconomic Survey and expenditures in private institutions of healthcare obtained from establishment surveys.

429. NSOM processes and disseminates social insurance statistical data including health insurance and welfare statistical data received monthly.

430. For the compilation of social protection statistics the national standard classification of occupations based on the International Standard Classification of Occupations (ISCO)-08 is used.

431. NSOM disseminates a brochure and bulletin with the data on social insurance and social welfare in printed and electronics forms on a monthly and quarterly basis. Additionally, it disseminates data in the Statistical Yearbook and an annual brochure. The data are also uploaded on the corporate website www.nso.mn and in the www.1212.mn online database on a monthly basis.

432. As for the other agencies, there is an annual yearbook of social insurance but social welfare does not have any dedicated publications. The Social Welfare Service General Office is newly founded; previously, it was under the Authority of Labour, Welfare and Service.

Assessment:

433. As for the other statistical domains, it is highly recommended that NSOM get access to microdata from the state budget and other government agencies. The data on social insurance expenditure is a key input for compiling the national accounts' government and household accounts and the consistency of the concepts and classifications with the relevant macroeconomic frameworks should be further assessed.

5.1.9 Crime statistics

434. The collection and dissemination of crime statistics is the responsibility of the Population and Social Statistics Department of NSOM. Data on crime has been collected since 1965 in Mongolia and published since 1980.

435. Apart from the LS, the Criminal Code, Criminal Procedure Code, Law on Prevention of Crimes, Law on Court, Law on the Implementation of Court Decisions, and the Law on Anti-Corruption constitute the legal framework for crime statistics.

436. Data about number of committed offences by type (including crimes against administration order), suspects and defendants, victims, damage caused by crime, and

redeemed damages is collected by the General Police Department and made available to NSOM. The Independent Authority against Corruption provides data to the General Police Department on corruption (e.g. receiving or giving bribes and intermediating in bribery) that are transmitted to NSOM. The General Authority for Implementing Court Decisions provides the number of performed acts directly to NSOM, as does the Judicial Council of Mongolia for the number of persons convicted of crime by age, sex and types of crime/conviction. The number of persons in prison is not published in Mongolia but it is used in population estimates and the data are reported on the international level to UNODC.

437. The data for crime statistics is collected through numerous forms from the above agencies. Crime statistics are disseminated, in addition to sharing them through electronic media, in the monthly Bulletin of Statistics and other dedicated publications and annually in the Statistical Yearbook.

Assessment:

438. There is currently no dedicated sample survey that collects data on crime and impact of crime in Mongolia. NSOM is preparing for a Crime Victimization Survey, which is fully funded and planned to take place in 2014. This survey will most likely enhance information related to the social aspects/impacts of crime. However, the preparations are not yet completed, as the discussions with stakeholders have still not been conducted, and the survey design is not yet fully developed. NSOM requires technical assistance in order to conduct the survey successfully in such a short period of time. There is significant interest in the results of the survey; especially from the newly established agency in charge of issues related to crime victims in Mongolia.

439. For the upcoming victimisation survey, the national classification for crimes will be used. There is currently no clear timeline given for the implementation of the International Classification of Crimes for Statistical Purposes. It is recommended to plan this survey with a longer perspective rather than as an ad-hoc survey and consider application of the international classification.

440. There is currently no information on the *fare of crime* or the *impact of security threats on the quality of life* in Mongolia. Such information could be collected through household surveys. Another interesting analysis could relate to the number of prisoners decomposed by the length of sentences and committed crimes.

5.2 Macroeconomic statistics

5.2.1 National accounts

441. Macroeconomic statistics are essential statistics for sound economic policymaking in every country. In Mongolia, the national accounts are produced by NSOM while other macroeconomic statistics such as balance of payment and government finance statistics are produced respectively by the Central Bank of Mongolia (BoM) and the Ministry of Finance (MoF). The key macroeconomic indicators are also listed to be specifically included as official statistical information in Article 6 of the Law on Statistics (LS).

442. Macroeconomic statistics, and in particular national accounts and related economic statistics, have significantly benefitted from the Monstat project. Methodology, nomenclatures and classification have been aligned to a large extent to internationally agreed standards and recommendations thanks the above mentioned project but also with substantive support from DESTATIS and the IMF.

443. 20 staff members from the Macroeconomic Statistics Department (MESD) but also from the Population and Social Statistics Department are responsible for the annual report of the sectors' activities (structural and short-term economic statistics), while 9 officers of MESD are more specifically responsible for compiling national accounts statistics. In total 29 staff members are directly or indirectly involved in the production of national accounts figures.

444. National accounts in Mongolia are produced according to the 1993 manual of the System of National Accounts (SNA93). NSOM compiles annual and quarterly GDP at national level, GDP at aimag and regional levels, the sequence of accounts up to the capital account by institutional sectors, Supply-Use Tables (SUT), and Input-Output Tables (IOT).

445. Nomenclature and classifications used in Mongolia for the national accounts are based on international standards and further adapted to national peculiarities:

a) Classification for economic activities (revision 4.0), which is in compliance with the International Standard Industrial Classification of All Economic Activities Revision 4 (ISIC-4.0);

b) Classification of product and services in compliance with the UN Central Product Classification version 2.0 (CPC-2.0);

c) Classification of economic sector in compliance with the SNA93;

d) Classification of the functions of the Government, revenue and expenditure in compliance with the UN Classification of the Functions of Government (COFOG);

e) Classification of goods and services for individual consumption by purpose in compliance with Classifications of Individual Consumption by Purpose (COICOP);

f) Classification of the purposes of non-governmental organisations developed in compliance with the UN Classification of the Purposes of Non-Profit Institutions Serving Households (COPNI);

g) Harmonized commodity description and coding system in compliance with the Harmonized Commodity Description and Coding System, generally referred to as the Harmonized System (HS) by the World Customs Organisation;

h) Classification of financial and non-financial assets in compliance with the 2008 SNA;

i) Classification and codes of administration and territory which is adopted by the National Centre for Standardization and Metrology.

446. Mongolia has achieved Milestone 4 of SNA93 as defined by the Inter-Secretariat Working Group on National Accounts (ISWGNA). This means that GDP, GNI and

institutional sector accounts until capital accounts are produced and disseminated. But financial accounts, other changes in assets accounts and balance sheets are not compiled (milestones 5 and 6).

447. Concerning source data, the following are important inputs into the national accounts of Mongolia:

a) Livestock census;

b) Monthly, quarterly and annual reports and surveys by economic sector;

c) Data from household surveys;

d) Monthly and annual government revenue and expenditure statements from the MoF;

e) The Balance of Payments statistics (BoP) from the Central Bank of Mongolia;

f) Price statistics and other indicators for the calculation of the GDP at constant prices;

g) List of active establishments from the statistical business register;

h) Information from the *Taxpayers Database* from the General Department of Taxation;

i) Non-observed economic surveys: HUEMS (Household Unincorporated Enterprises with some Market Production), Artisanal mining, illegal production, intentional distortion of business accounting…).

448. **Annual GDP** is estimated by all three approaches: production, expenditure and income. The GDP by the production approach is calculated at both current prices and constant prices (base year 2005) with time series starting from 1990. GDP by the expenditure approach is available from year 2000 at current prices and at constant prices (base year 2005) and GDP by income approach is available from 2002 at current prices.

449. **Quarterly GDP** at both current and constant prices (base year 2005) are compiled by the production and expenditure approaches. Quarterly estimates with production method are produced since 2000 at current and constant prices and as from 2005, quarterly GDP estimates are also produced at current and constant prices using the expenditure approach. Seasonal adjusted estimates were recently produced using Demetra+ software in the framework of the Monstat project. Since 2011, seasonal adjusted quarterly time series are produced on an experimental basis. Quarterly data are benchmarked to the annual results.

450. Annual **Gross Regional Products** (RGDP) are compiled for the 21 aimags and the Capital-City and include estimates for gross value added by type of economic activity at current prices. The compilation of RGDP is made by NSOM, and regional GDP data are available from reference year 2002.

451. As mentioned earlier, NSOM has compiled since 2005 the annual **sequence of accounts by institutional sectors** up to the capital accounts according to the SNA93

methodology. A specific investment survey is conducted on a regular basis and its results used for the compilation of the capital accounts and the GDP.

452. In 1963, Mongolia compiled **Input-Output Tables** (IOT) for the first time based on the methodology provided by the Council for Mutual Economic Assistance (Comecon). In 1966, 1970, 1977, 1983 and 1987, IOT were estimated using this methodology. After the transition to the market economy, the SNA was introduced and IOT were compiled according to the international methodology for the years 1997, 2000, 2005 and 2010. In the LS, Supply-Use Tables (SUT) and IOT are mentioned in Article 7, stating that they should be produced every five years. SUT and IOT for 2010 are available at current prices and cover 203 activities and 311 products. SUT is aggregated into 68x55 (products and industries), 68x48, 48x32, 32x20, 20x20 and 5x4, and IOT is aggregated in square matrices of 55, 48, 32, 20 and 4. SUT at 68x48 and IOT at 55 and 48 are now also available to users. With the assistance from Destatis and the IMF, NSOM is planning to produce annual SUT from year 2014 at current and constant prices according to the 2008 SNA methodology.

453. NSOM has carried out activities to identify unregistered or **non-observed economy** since 1997 with the assistance of international organisations and more recently in the framework of the Monstat project. In that respect, several surveys have been conducted, and the value added from the informal sector estimated and incorporated into the GDP. The *National Programme for strengthening national statistical system of Mongolia 2011-2015* (Resolution No 59 of the State Great Khural, 1 December 2011), mentions as an objective the improvement of GDP estimation, scope and coverage, data quality and methodology, and therefore initiatives were taken to identify and measure the non-observed economy. A first attempt was made in 2012 following the recommendations of the OECD Handbook from 2002 *Measuring the Non-Observed Economy*, the SNA 2008 recommendations and the results of the UN-ECE 2008 *Survey on Country Practices on Non-Observed Economy in National Accounts*. Estimations were conducted for 2010 for the seven types of exhaustiveness (N1-N7) according to the Eurostat tabular approach.

454. As mentioned above, important data sources for the estimation of the non-observed economy are the surveys on self-employment (every five years), HUEMS, artisanal mining, illegal production and intentional distortion of business accounting. The combination of all these data sources allows NSOM to estimate annually the magnitude of the non-observed economy and to adapt the GDP and other SNA aggregates accordingly.

Table 4: Timeliness of national accounts estimates and tables:

National Accounts aggregates and tables	Timeliness - 2013	Timeliness 2014 -
Quarterly GDP (Q 1and 2)	42 days after reporting period	30 days after reporting period
Quarterly GDP (Q 3 and 4)	14 days after reporting period	30 days after reporting period
Preliminary GDP (annual)		30 days after reporting period
Preliminary RGDP and GNI (annual)	4 months after reporting period	4 months after reporting period
Final GDP, GNI and RGDP (annual)	6,5 months after reporting period	6,5 months after reporting period
Accounts by institutional sectors of the economy	8 months after reporting period	8 months after reporting period
SUT and IOT	3.5 years after reporting period (every 5 years)	3.5 years after reporting period (annual SUT)

455. National accounts are disseminated in monthly and quarterly bulletins, the statistical yearbook and on NSOM website (www.1212.mn). Data are prepared and disseminated in a timely manner at the request of users and international organisations such as UN Statistical Division, World Bank, International Monetary Fund, Asian Development Bank (ADB) and the Asian Productivity Organisation.

456. NSOM has also published *Main indicators of System of National Accounts*. In this publication, the main activities and results in implementing the SNEB (System of National Economic Balance for COMECON countries) and SNA have been reflected and the available national accounts data series since 1940 have been included.

457. According to NSOM, the main issues for the further development of national accounts in Mongolia are the implementation of 2008 SNA, improving the methodology for the estimation of the GDP and in particular its exhaustiveness, calculation of the GDP at constant prices using double deflation method, and the compilation of national accounts data series since 2005 with the 2010 SUT as base year. NSOM plan as from 2014 to produce annual SUT.

458. In the long run, NSOM aims at estimating annual RGDP at constant prices, to complete the sequence of accounts up to the balance sheets (2008 SNA) including other changes in volume accounts, annual SUT at current and constant prices, and environmental accounts (System of Environmental-Economic Accounting / SEEA).

Assessment:

459. NSOM produces national accounts in broad compliance with international guidelines and recommendations. The implementation of 2008 SNA is a major operation in progress that is also an excellent opportunity to review systematically all input data whether collected from administrative information, or statistical surveys (censuses, reports and sample surveys). One major objective would be to increase coherence and consistence of all economic statistics (business and macroeconomic statistics) through a more integrated approach. This task will be facilitated in Mongolia since major economic statistics are produced within the same department at NSOM: Macroeconomic Statistics Department and its Economic Statistics Division. While implementing the 2008 SNA, efforts should be focused on elements that are assumed to have the biggest impact on the GDP and other macroeconomic indicators. For the new base year to be chosen for the new SNA, it is recommended to compile detailed SUT at current and constant prices prior to the publication of the new figures. This would allow NSOM to consider the quality of input data as well as to assess the validity of new estimates and assumptions adopted. SUT are excellent frameworks to measure the quality and consistency of national accounts data at current and constant prices.

460. It is fundamental that the three major macroeconomic statistics (GFS, BoP and SNA) are revised and implemented in a coordinated way. Many methodological decisions taken for the compilation of one of these statistics would have a direct impact on the others. The BoM is at present implementing the 6th edition of the BPM, which is a prerequisite for the compilation of national accounts according to the 2008 methodology, but assessors have strong concerns about the full implementation of the GFS by the Ministry of Finance.

461. In that respect, this report welcomes NSOM initiative to set up an inter-agency coordination groups (GFS-BoP-SNA) with relevant statisticians from the Ministry of Finance and the Bank of Mongolia. But this group, coordinating methodological development, should not be under professional scrutiny of policy makers in order to fulfil the principle of professional independence. This group should be also in charge of the development of an information strategy. Indeed, users must be prepared to and understand the forthcoming changes that will occur in next years. Ideally these three organisations should develop a joint information policy and eventually present the new results of the macroeconomic statistics and back casted time series jointly. National and international users would be confused if for instance the BoP results according to the 6th edition of the BPM would be published before or after the 2008 SNA revised data. As mentioned above and discussed in section 5.2.3 of this report, it is urgent to improve, if not even start, with the compilation of proper GFS as soon as possible.

462. Production of SUT and IOT tables are demanding tasks, and one should consider compiling detailed tables only every five years (as this was the practice in 2013). However, it is recommended that NSOM produces aggregated SUT at constant and current prices every year for assessing the quality and consistency of economic statistics and in particular national accounts data and non-observed economy. This recommendation is without prejudice to the fact that detailed SUT and IOT should be

produced for the new base year to be adopted in the framework of the implementation of the 2008 SNA.

463. One should not be over ambitious and carefully consider priorities when it comes to the extension of the sequence of accounts by institutional sectors. It could be recommended to implement along with the some of the most important methodological changes proposed in the 2008 SNA to work on the compilation of financial accounts. The production of full balance sheets for the economy and by institutional sectors could be postponed according to the recommendations provided by the ISWGNA.

464. In that respect, the sustainability of the recent improvements in economic statistics (business and macro- economic) is a matter of concern for the assessors. Most of these improvements have been achieved with the assistance and financial support of international organisations and bilateral partners. Once these projects will come to an end, NSOM should be in a position, also financially, to maintain this very high-level of service provided to users and further satisfy their expectations. This is not only valid for national accounts and other business statistics, but for all deliveries of the National Statistical System of Mongolia.

465. Further to this, users would like most probably to get one long time series of revised national accounts data (one base year), if possible. Another potential request is a clear and public revision policy on why and how often national accounts data (annual, regional and quarterly) are/will be updated. This issue is independent of the implementation of the 2008 SNA but concerns changes of base year and refining national accounts data due to new or improved data sources. National accounts data in Purchasing Power Parities (PPP) could also be published.

5.2.2 External trade statistics

466. The external trade statistics (ETS) of Mongolia are compiled jointly by the Statistical Analysis division of the Customs General Administration (CGA) and the Macroeconomic Statistics Department of NSOM based on an agreement signed in 2011 between both organisations. Statistical activities of the CGA are conducted in accordance with the Customs Law that is a sound legal basis for the compilation of the ETS (see also Chapter 1.3 on other legislation related to statistics). This cooperation seems to work well and the CGA is delivering external trade data to NSOM that in return provides methodological support to the CGA. Nine staff members are in charge of the ETS in the CGA and one part-time at NSOM.

467. Mongolia has signed the Kyoto Convention on the Simplification and Harmonisation of Customs Procedures.

468. The methodology for the compilation and dissemination of the ETS complies broadly with the 2nd edition of the UN Concepts and Definitions of International Merchandise Trade Statistics. The ETS is disseminated by NSOM in printed publications and on its website. The CGA also publishes the data. The ETS is made available to the public bimonthly (3 days after the reference period), monthly (9 days) and quarterly (9 days). The final annual ETS is published 90 days after the end of the reference period along with the revised monthly and quarterly figures. If necessary NSOM and the CGA hold a consultation meeting before the public release of the data.

469. ETS data for the compilation of the Balance of Payments (BoP) are sent directly by the CGA to the Bank of Mongolia (BoM) for the compilation of the Balance of Payments. The BoM also publishes monthly external trade data but only aggregated figures in its *trade review* along with some analytical comments.

470. The customs declarations are the main source of data for the compilation of the ETS. Until recently the threshold value for customs declaration was 3 mln MNT, but this procedure has changed recently and data under this threshold will be incorporated into the ETS. The collected information is uploaded in a data warehouse system at the CGA, which allows running automatic quality and consistency checks and identifying outliers. This procedure is performed using unit values. Estimates are not used to replace missing information. Once data are polished, they are sent to NSOM for further quality checks at aggregated level.

471. The CGA and NSOM are regularly conducting bilateral reconciliation studies with major trade partners and in particular Russia and China. No reconciliation studies have been conducted with the European Union, South-Korea and Japan. However, China represents 90% of the total exports, and Russia and China together roughly 55% of the total imports.

472. The Harmonised System (HS) at the 8^{th} digit level is used as a basis for the CGA commodity database (data warehouse). The same coding but at the 6^{th} digit level is used for the ETS. Since 2005 data are also available according to the Standard International Trade Classification (SITC). Moreover, data are recorded and disseminated by mode of transport. However data are neither collected in terms of Common Product Classification (CPC or CPA in the EU) nor by Industrial Classification of all Economic Activities (ISIC or NACE in the EU). For this purpose, users must convert the ETS data with the correspondence tables provided on the UNSD website.

473. Data available by CPC and ISIC would help to check consistency of ETS with other economic and business statistics as for example the SUT and IOT compiled in the framework of the national accounts.

474. Data are available by country of origin for imports and country of destination for exports. Imported goods are at Cost Insurance Freight (CIF) value and exported goods at Free on Board (FOB) value. For the purpose of the Balance of Payments statistics (BoP) which defines imports as well as exports at FOB value, the CGA makes an estimate of insurance and transport costs that is communicated to the BoM.

475. For shuttle trade a specific survey is conducted at the border. The results are added to the ETS but no estimates of informal imports and exports are made so far.

476. Customs declaration allows for the identification of temporary imports of goods for inward processing and temporary exports of goods for outward processing. However, there is still room for improvements concerning the calculation of external trade volume indices and external trade price indices.

Assessment:

477. It is recommended to conclude as soon as possible the implementation of ETS according to the 2010 UN Concepts and Definitions of International Merchandise Trade Statistics. This 3rd edition is broadly compliant with the 6th Manual of the Balance of Payments (BPM6) and the 2008 System of National accounts (2008 SNA). Without this implementation, data inconsistencies between these 3 economic statistics would increase, creating additional compilation difficulties for the 6th BoP and the 2008 SNA.

478. In the framework of this necessary revision, technical assistance should be provided to the CGA and NSOM in order to improve the compilation of external trade volume indices and the calculation of external trade price indices. For the latter price movements for exported items could be sourced from the Producer Price Index (PPI) and additional price collection (survey) undertaken for imports (see also section 5.2.5 of this report on Price indices). It would be interesting to consider if information on informal trade could be collected from existing data sources or from specific modules to be added to existing surveys (e.g. Household Socio-economic Survey). This last point is not only valid for ETS but for many economic statistics including national accounts.

479. Bilateral reconciliation studies are good tools to improve the ETS. Such studies (mirror exercises) are already conducted with Russia and China but could be extended to other important trade partners like the EU, Korea and Japan. If necessary, corrective measures should be implemented bilaterally in order to gradually reduce the gaps.

480. In most cases intra-annual ETS data are disseminated on a cumulative base. It is recommended to gradually publish and disseminate monthly and quarterly ETS on discrete base and to make also available long time series of external trade data seasonally adjusted.

5.2.3 Government Finance Statistics

481. As in many countries, government finance statistics (GFS) in Mongolia is produced by the Ministry of Finance (MoF). The legal basis for these operations is, in addition to the LS, the Budget Law of Mongolia and two decrees from the MoF. The latest decree of 10 January 2014 was on a renewed economic classification.

482. The data sources can be split into four categories: state budget entities; local budget entities; the Human Development Fund; and the Social Security Fund as illustrated in the figure 4 on next page.

483. The handling of the data flows have been streamlined through software developed in the framework of a World Bank project, i.e. Government Finance Management Information System (GFMIS). In the GFMIS a common set of classification is used by the data providers and is based on a Decree 05 of 10 January 2014 of the Ministry of Finance renewing Decree 49 of 24 February 2003.

484. Concerning the data flows, monthly and quarterly budget execution reports from the State Budget, Social Insurance Fund, Human Development Fund and Aimags and the Capital-City are prepared and approved in accordance with the following calendar:

a) The direct budget Governors (level VI) submit monthly and quarterly budget execution reports to the respective central budget Governors (level V) by the **2nd** day of each month;

b) The central budget Governors and the two special funds shall submit monthly and quarterly budget execution report to the general budget Governor (level IV) by the 4th day of each month;

c) General budget Governors shall submit monthly and quarterly budget execution report to the Central Administrative Body (MoF) responsible for finance and budget by the 6th day of each month;

d) The Central Administrative Body responsible for finance and budget shall approve monthly and quarterly unified budget execution reports by the 8th of each month. On the 8th day data are also transmitted to NSO that also disseminate statistical reports on the 10th day of the month;

e) The Central Administrative Body responsible for finance and budget shall publish monthly and quarterly unified budget execution reports by the 15th of each month.

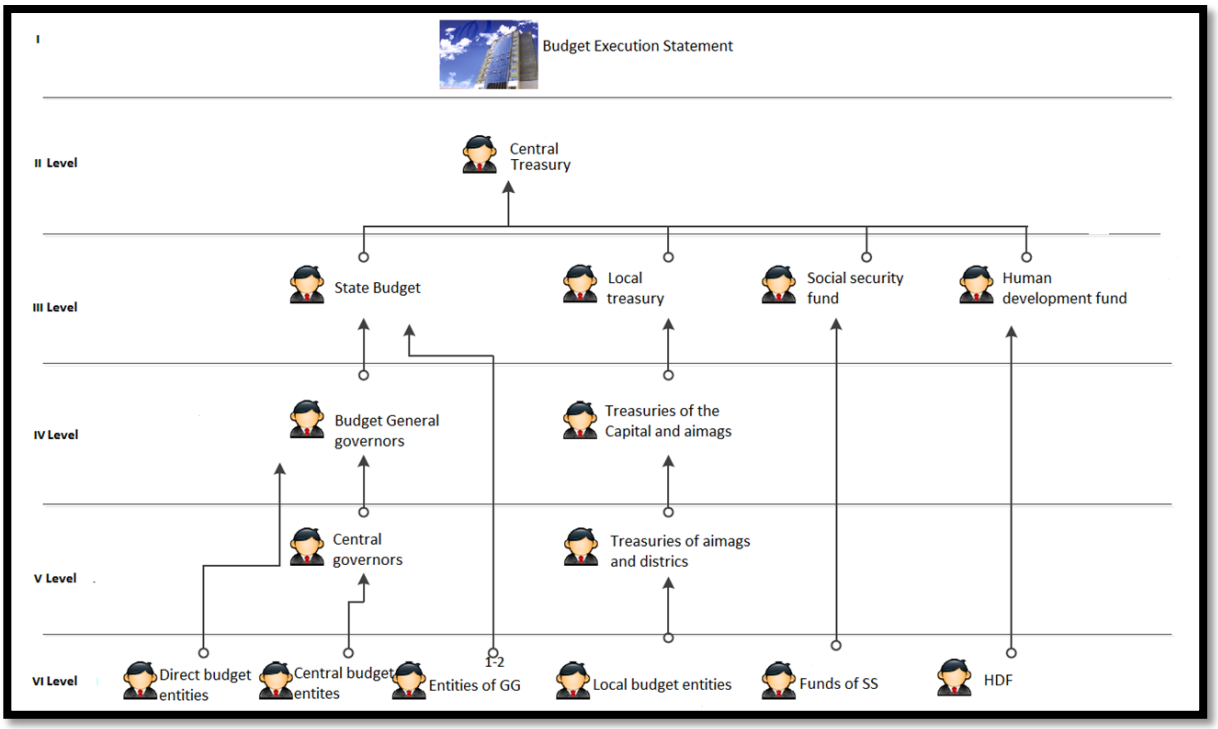

Fig. 4: Schematic view of the system of government finance statistics

485. According to the Ministry of Finance, the following reports are being produced:

a) Monthly:

- General, Central, Local government revenue;
- General, Central, Local government expenditure;
- General government expenditure by COFOG;
- Debt/liability of government;
- Social security fund's revenue and expenditure;
- Debt/liability of Social Security fund;
- Usage of foreign loan;
- Repayment for foreign loan;
- Loan from government budget;
- Saving of government treasury fund.

b) Annual/Quarterly:

- Balance sheet (Annual only);
- Statement of Income;
- Statement of net asset/equity;
- Statement of cash flow;
- Clarification of financial statement/notes to account.

486. The accounting principles applied varies across levels and bodies of the general government sector from full accrual at the local level to modified accrual at the regional and national levels.

487. According to the Ministry of Finance the GFS applies both the guidelines of the IMF GFS 1986 manual and the IMF GFS 2001 manual. The GFS statistics are disseminated by NSO.

Assessment:

488. GFS in Mongolia produced by the MoF is based on reports from the various data providers. Due to rather limited human resources at the ministry for the compilation of GFS as well as the very short time used for data checking and validation at the different steps of the process, the quality could be questioned. It is difficult to see how methodological aspects are being ensured within the current organisation of the work flow. More staff and/or time should be available to increase the quality of GFS in Mongolia.

489. The methodological knowledge could be improved. It was reported that one staff member will attend an IMF GFS course in 2014. This is a good initiative that could increase the methodological capacity. Measures should be taken in order to increase the methodological awareness at all steps in the production line. According to the Ministry of Finance, both 2001 and 1986 methodology is applied. Since these two methodologies are very different, it is not clear how consistent GFS statistics in

Mongolia are. This raises in addition a concern on the quality of the GFS input for the compilation of the General Government sector of the national accounts.

490. It was reported that a State Secretary checks the GFS reports before they are disseminated. This practice is not in line with the principle of official statistics (see Chapter 1 of this report), since official statistics should be compiled without any interferences from policy makers. This practice should be abolished. The data would be better transferred to NSOM for quality assessment and consistency check with other sources of economic and business statistics.

491. The GFS in the MoF is compiled in a structural unit that is not exclusively producing official statistics. To ensure the professional independency in the production of GFS a separate unit should be established to avoid putting the necessary professional independency at risk.

492. In conclusion, technical assistance seems necessary in order to help establishing a sound practise for the production of GFS and increased clarity and awareness about the internationally recommended methodologies. A working group with experts from national accountants (NSOM), balance of payments (BoM) and GFS (MoF) has been recently established. This is a good initiative from NSOM to ensure consistency between the overall macroeconomic statistical frameworks and should serve as a forum where methodological issues can be discussed and agreed upon; in particular in the framework of the implementation of the recently adopted 2014 version of the GFS manual.

5.2.4 Balance of payments statistics

493. The Balance of Payments (BoP) is compiled by a specific organisational unit within the International Economic Department of the Bank of Mongolia (BoM). The BoP of Mongolia broadly follows the methodological principles and classification system specified in the 5th edition of the IMF Balance of Payments Manual (BPM5). Thirteen staff members at BoM are responsible for developing the statistical methodology, reporting forms, data collection, verification, processing, compilation, dissemination and analysis of the BoP statistics. Once compiled, the BoP is also sent to NSOM for publication and dissemination. One person is dealing with the BoP in NSOM.

494. The BoM is compiling the BoP under the Law on Central Bank (see also Chapter 1 of this report) as well as the Joint degree No. 86/35/10 by the Central Bank of Mongolia, Ministry of Finance and the National Statistical Office from 1996). A calendar of quarterly and annual BoP releases, in Mongolian and English, is available on the website of the BoM. The BoM has made available a BoP compilation manual. The BoM is also in charge of BoP data transmission to international organisations and in particular to the IMF. Assessors noticed that methodological information concerning the BoP of Mongolia on the General Data Dissemination System (GDDS) website of the IMF did not reflect recent improvements.

495. The BoP is compiled from a large number of data sources, most of them directly available at or collected specifically by the BoM. The BoP covers all transactions of government, households, individuals, and enterprises resident in Mongolia with non-resident counterparts.

496. Data on exports and imports of goods (External Trade Statistics/ETS) from the Customs General Administration (CGA) is available monthly with commodity detail. Some adjustments are made by the BoM in order to complete missing information or to overcome methodological differences between the concepts and definitions of the BoP and the ETS. Import data from the ETS at CIF (Cost-Insurance Freight) valuation are converted into FOB (Free on Board) valuation based on some additional information communicated by the Customs General Administration. Customs data on exports do not include non-monetary gold sent abroad for processing at the time of shipment, and therefore, the BoM adjusts exports data to include sales of monetary gold to non-monetary authorities (demonetization). BoM does not adjust Customs data but informs CGA about sales of monetary gold to non-monetary authorities in order to include it on export data. For informal trade, smuggling, shuttle trade and gifts for Mongolian relatives, no adjustments are made.

497. The International Transactions Reporting System (ITRS) is a central data collection system used for compiling balance of payments statistics. It is based on detailed monthly transactions reported following the standard components of the BPM5 in United States Dollars (USD). The ITRS reports each cross-border transactions by the banks and some major non-banking financial institutions. The records show a code for type of transaction, the date, country of counterpart, as well as a description and names of parties. An important limitation of the ITRS is that transactions which are below USD 50,000 are recorded on a lump sum in a daily report. This implies that information such as the Sender's name, the Receiver's name and the transaction purpose is not recorded. However, there is no reporting threshold for the monthly report and thus BoM receives the detailed information on all transactions from the banks.

498. The transactions of foreign exchange bureaus are not recorded in the ITRS. Though potentially significant values of informal trade, remittances, and possibly other items, are conducted through these dealers.

499. The 96 largest enterprises in terms of international transactions report directly to the BoM using a form/survey developed specifically for balance of payments statistics purposes. The questionnaire covers a wide range of data including direct investment flows, bank accounts abroad and international investment position. Above mentioned 96 enterprises cover the major companies in mining sector, heavy equipment and petroleum sector, telecommunication, and foreign trade such as Oyu tolgoi, Energy resources, MIAT, the national railway, NIC, Shunkhlai, Tavan bogd and some other enterprises with significant transactions with the non-residents. For the data not covered in the direct report, BoM captures the information from the ITRS, specially the data of the newly established companies' transactions and existing companies with fast growing international transactions.

500. Other surveys are conducted and data sources used. For workers remittances, including both inflows from Mongolians working abroad and outflows from foreign employees (mainly from Russia and China) in Mongolia, data are estimated using the information obtained from commercial banks' records, non-banking financial institutions and specific surveys.

501. Some important primary data for the compilation of the BoP originates form government agencies (administrative data) as for example the Ministry of Finance providing data on official aid, government debt, budget report, and report on the expenditures of the embassies of Mongolia in foreign countries. For outward and inward tourism expenditures (export and import of goods and services) the methodology relies on information provided by the Border Guards Administration of Mongolia on the number of foreigners entering Mongolia and residents leaving Mongolia. The estimates on the average number of nights per visit and the average daily expenditures are made on the basis of information provided by the Ministry of Finance for residents traveling abroad and the information provided by hotels for non-resident visitors.

502. During the assessment missions NSOM and BoM mentioned some data gaps or incomplete data sources as for inflow and outflow of remittances. These gaps and issues need a continuous assessment and evaluation since the swift economic development of Mongolia will have a strong impact on economic transactions between resident and non-resident units. A marginal bias today might be a significant error tomorrow.

503. Another major issue for the BoM is that many primary data sources are compiled on cash principle and on cumulative basis. However 5th edition of the IMF Balance of Payments Manual requests to compile the BoP according to the accrual principle and on discrete basis (one intra-annual reference period distinctive from the previous and the next one).

504. The BoM publishes on monthly, quarterly and annual basis detailed information on (I) Current Account, (II) Capital and Financial Account, (III) Net Errors and Omissions, and (IV) Reserves and Related Items. Data are available on the website of the BoM one month after the end of the reference period for preliminary monthly data, one and a half month for preliminary quarterly data, and three months for annual data.

505. The revision policy is the following:

a) Final monthly data when the following quarterly report is produced;

b) Final quarterly data when final annual report produced.

506. Changes between the aggregation of the 4 quarters (provisional annual data) and the final annual BoP are, in absence of any specific information, attributed to the last quarter of the reference year. Quarterly data are presented on cumulative basis, monthly and annual on both: discrete and cumulative. BoM has started to compile Balance of Payments statistics since 1989 and long-time series are available on the BoM website. BoM compiles also seasonally adjusted time series but these are mainly used for internal analytical purposes and are not widely disseminated.

507. NSOM also publishes BoP data from the BoM in its monthly reports and on its website.

508. It was mentioned during the assessment that, based on an agreement signed between the Governor of the BoM and the Chairperson of NSOM, the BoP was about to be released according to the 6th edition of the IMF Balance of Payments Manual.

Surprisingly, the corresponding macroeconomic statistical system, the 2008 System of National Accounts (2008 SNA) will be implemented only in a couple of years (see also Chapter 5.2.1 of this report).

Assessment:

509. The BoM has done significant progress in term of accuracy and coverage in the compilation of the BoP statistics. The BoM is producing the BoP in broad compliance with the 5th edition of the Balance of Payments Manual and is about to implement its 6th edition. This report welcomes this development that was made possible thanks the contribution of the BoM staff members responsible for the BoP under the assistance of the IMF. The BoP of Mongolia is gradually approaching the SDDS requirements.

510. However, it is crucial that in the framework of the implementation of the 6th edition of the IMF Balance of Payments Manual (BPM6) and the 2008 System of National Accounts (2008 SNA), the BoM and NSOM work in a coordinated way. It would be important for users to get at the same time the new data series for these two important macroeconomic statistics. Explanatory notes on the main conceptual changes for the BPM6 and the 2008 SNA could be published jointly by the two partner organisations on their respective websites.

511. As mentioned earlier, it is neither the core business nor the domain of excellence of the BoM to maintain business registers and to conduct statistical surveys. This is the core activity of NSOM. It would be sensible for the reduction of the response burden, the non-duplication of statistical surveys, and eventually the improvement of the quality of the BoP to assess if some of the data collection conducted by the BoM should not be delegated to NSOM. A new request for primary data does not imply the establishment of a new survey. Indeed, data could be harvested through already existing data collection mechanism. Furthermore, NSOM hold a goldmine of statistical information about the population and the economy at micro and macro levels. Household surveys such as the Household Socio-economic Survey could provide important information about remittances. NSOM is maintaining an up-to-date comprehensive business register, conducting business surveys in a professional way, developing an internationally comparable tourism statistics and about to improve further migration statistics based on the results of the last population census. Cooperation and exchange of relevant data between the two institutions could benefit to the quality of statistical information and eventually to users.

512. Ideally, all primary data for the compilation of the BoP should be available on discrete basis and according to the accrual principle. This would also benefit to the production of the national accounts statistics by NSOM. This again speaks in favour of enhanced cooperation between the BoM and NSOM.

513. Long time series and seasonally adjusted datasets should be made available both, on www.1212.mn website of NSOM and the website of BoM.

5.2.5 Price statistics

514. The Macroeconomic Department of NSOM is responsible for the compilation of price indices in Mongolia, but the work also involves to a large extent statistical offices at territorial level. Currently the following indices are being produced: consumer price index; producer price index for manufacturing/industry and construction; foreign trade price index; housing price index; and purchasing power parity index. These last years, price statistics and have benefitted from the Monstat project.

Consumer Price Index (CPI)

515. Two staff members from NSOM are dealing with the CPI, 7 from the Capital-City Statistics Department and divisions and 21 from the aimags statistical divisions. Since 1991, NSOM has compiled the CPI based on the methodology of the ILO Consumer Price Index Manual and IMF recommendations. The CPI is calculated using a modified Laspeyres index formula, and goods and services are classified according to COICOP.

516. The CPI is compiled on a monthly and quarterly basis. The basket of products and the weights in the CPI are based on the Household Socio-Economic Survey (HSES). This survey is conducted on a quarterly base. Since January 2012, CPI has been estimated based on the results of the 2010 HSES and the basket consists currently of 329 items in the Capital-City and 214 items in the aimags. Since 1991 NSOM has updated the consumer basket and the weights 4 times.

517. The prices are collected at territorial level and sent to NSOM for the calculation of the CPI. A special software *CPI* is used for the compilation, while regional CPIs are calculated using Excel. Price data during the reference period is reviewed through comparisons with previous months, quarters and years. Any clarifications needed are made through inquiries with the local statistical offices. The *CPI* programme identifies outliers, and when such observations are detected NSOM contacts the aimags divisions, and Capital-City Department and divisions for further checking. Before sending the data to NSOM, the heads of the relevant units in the Capital-City and aimags also check and validate the data at the very basic level. In addition, NSOM experts also visit outlets to monitor prices in 6 districts of the Capital-City and the aimags. NSOM allocates a certain amount of the budget for monitoring the consumer price data every year. Within NSOM, the validation steps involve three department's directors and the Chairperson before the CPI is disseminated.

518. In addition to the CPI, weekly price data are collected and disseminated for 20 main products in the Capital-City and for 10 main products in the aimags. These data are also sent to NSOM that processes the data before dissemination.

519. Prices of the main commodities are disseminated through the website of NSOM. The monthly consumer price index is disseminated through the monthly bulletin and the monthly prices of the main commodities of the last 3 years. For the 21 aimags and the Capital-City, the data are presented as an attachment with a comparison of these prices with the base year prices for the last 4 years. In addition a comprehensive presentation is available in the yearbook. Furthermore, the www.1212.mn website of NSOM provides data on prices compared to the base year period. These data are updated on a monthly basis and disseminated to the users.

Assessment:

520. The CPI in Mongolia is broadly compiled according to the international standards and recommendations however there is room for improvements.

521. Currently the basket of goods and the weights used for the compilation of the CPI is based on the HSES household socio economic survey that is conducted on a quarterly base. By keeping the commodity basket unchanged over such a long time as 5 years, one runs a risk that changes in the consumer patterns are not captured in the CPI. It is recommended to update the weight of the CPI annually and produce a chain-weighted index.

522. Other recommendations are the following:

a) The consumption and shopping patterns are changing in Mongolia and therefore it would be recommended also to reconsider the choice of retailers for price collection;

b) The number of items (goods and services) in the basket, 329 for the Capital-City and 214 in the aimags, is relatively small and should be assessed. It is important to replace items as soon as they are no longer representative;

c) In the calculation of the CPI, arithmetic averages for prices collected are being used. One should consider using geometric averages;

d) Seasonally adjusted CPI should be calculated and disseminated.

Producer Price Index for manufacturing/industry (PPI)

523. NSOM has since 2010 produced PPI according to the recommendations set out in the IMF Producer Price Index Manual of 2004. The method for the index was developed in 2007, and during 2008-2009 a pilot exercise was conducted. Since 2010 the PPI has been in regular production and disseminated with base year 2010.

524. For the choice of respondents and products for which prices are to be collected two surveys have been carried out. Data are collected at the level of aimags and Capital-City districts and sent to NSOM. Currently the sample of respondents consists of 155 entities, which comprises about 70% of the total population. Prices are collected from these entities for 89 products. The nomenclatures being used is ISIC-3.1 and CPC-2.0.

525. At NSOM one staff member is involved in the production of the PPI, 8 from the Capital-City Department and divisions and 16 from the aimags. The PPI is calculated using Excel.

Assessment:

526. The quality of the index has been under evaluation of an IMF expert, and the outcome of the IMF report is in the pipeline. NSOM also stated that there is a need to improve the quality of the index and imputation methods for the index calculation are being considered.

527. Currently the index is based on producers of goods. It should be considered to include also producers of services such as food services, transportation and communications, and accommodation.

528. Further improvements could be obtained by using geometric averages, introduce seasonal adjustments and calculating chained price indices.

529. It is also recommended to change from ISIC-3.1 to ISIC-4.0 and to calculate backward series.

Construction Cost Index (CCI)

530. NSOM has, since 2008, produced CCI according to the OECD recommendations. The use of resources involves one employee from NSOM, 6 from the Capital-City Department and divisions, and 18 from aimags.

531. Monthly data are locally collected from 160 enterprises - 116 in the Capital-City and 44 in the aimags. Heads of the relevant statistical units make a quality check of the data before they are sent to NSOM. The latter calculates and disseminates quarterly indices. NSOM also arranges visits to the establishments to monitor prices.

532. In 2010 the basket of goods and weights were based on a study of three building projects. NSOM indicated that there is still a need to gain more experience for the CCI in order to improve its quality, e.g. a need to change imputation methods.

533. For the CCPI the ISIC-4.0 and CPC-2.0 are being used.

Foreign Trade Price Index (FTPI)

534. Based on a basket of 57 export and 237 import commodities, which comprises about 80% of all trade in goods, NSOM has since 2004 in cooperation with the customs services produced and disseminated quarterly price and volume indexes for foreign trade.

535. The current base year is 2005, but the base year will be changed in 2014. The sources for the indexes are foreign trade statistics and custom declarations. The indexes are calculated based on a Laspeyres formula for the price index and a Paasche formula for the volume index.

536. 21 commodity group indices are disseminated in addition to a general index and a so-called trade term index. There is no seasonal adjustment of the indexes.

Assessment:

537. In order to avoid volatility of annual weights it is suggested to use a moving average over a certain number of years and unit value based on homogeneous items.

538. For other items, PPI is an alternative for the estimate of export prices, and for imports, specific price collections could be envisaged.

Housing Price Index (HPI)

539. NSOM has since 2008 been compiling an HIP for the 6 main districts in the capital. The data used for the calculations is based on information collected from real estate agents in the capital. The very low number of observations indicates that the coverage of the market is insufficient to compile reliable price indices.

540. In order to take into account some of the differences in the attributes between the observations that can possibly explain price variations, such as size and location, one tries to stratify into comparable groups. Until recently, the results have been published.

541. In general, compilation of price indices for goods or services that varies considerably due to their variation in quality attributes is challenging from a methodological point. In addition the need for rather detailed information of the observed units is also challenging from a practical point of view. Moreover, the very low number of observations indicates that the coverage of the market is insufficient to compile reliable price indices.

Assessment:

542. The residential sector is significant and reliable price statistics for this sector of the economy are important for a number of monitoring and policy purposes. However, the current HPI in Mongolia seems to be on an experimental basis lacking the required quality for official statistics as concerns methodology and data sources.

543. Based on the work already done it is recommended to seek international expertise to further improve the HPI in order to obtain a quality level that qualifies the index for dissemination.

Purchasing Power Parity (PPP)

544. NSOM has since 1994 participated in the International Comparison Programme, and recently for the 2011 ICP round Mongolia joined the ICP for Asia and Pacific. The ICP is a worldwide statistical operation involving some 180 countries. It produces internationally comparable price and volume measures for GDP and its expenditure components. The measures are based on PPPs. To calculate the PPPs, the ICP holds surveys every five years to collect price and expenditure data for the whole range of final goods and services that comprise GDP including consumer goods and services, government services and capital goods.

545. In Mongolia, the PPP includes the Capital-City and 21 aimags. For the household sector, prices on 745 items (goods and services) were collected with a total of more than 85.000 quotations. For foodstuff there were monthly price collections, and for other household goods and services price were collected on a quarterly basis.

546. For the non-household sector, annual data were collected. For machinery and equipment 83 items, construction 50 items and rental items 12. GDP weights for 155 basic COICOP heading were calculated.

Assessment:

547. For future ICP rounds, PPP experts from NSOM mentioned their views about changing the ICP reference group for Mongolia from Asia and the Pacific to Central Asia. This has to be further analysed and assessed since the final consumption and production patterns are probably closer to Central Asia countries but on the other hand, China remains from far the biggest economic partner of Mongolia.

5.3 Business statistics

5.3.1 Overview and definitions

548. This Chapter assesses quality and compliance with international guidelines of business statistics according to the European (Eurostat) concepts of *short-term (business) statistics* and *structural business statistics*.

549. Short-term statistics (STS) describe the most recent developments of the productive economy. According to European guidelines, STS cover four major economic domains: industry, construction, retail trade and other services (e.g. transport, information and communication, business services but not financial services). In general, STS indicators are published on monthly, quarterly and annual bases as indices which show the changes of the indicator in comparison with a fixed reference year. The indicators do not represent absolute amounts or monetary values.

550. Structural business statistics (SBS) according to European guidelines cover the following economic sectors: industry, construction, trade and services. The SBS is presented by activities (ISIC-4.0 or NACE-2.0) and describe the structure, conduct and performance of businesses in a country.

551. The statistics can be broken down to a very detailed sectoral level (several hundred economic activities) and therefore the information contained in the SBS is more detailed than correspondent information provided in national accounts. The SBS indicators are generally collected and presented as monetary values, or as counts (for example, numbers of enterprises or persons employed); this is in contrast to STS, where the data are presented as indices. Generally SBS does not collect information on products but on activities.

552. In Mongolia, NSOM is in charge of processing, estimating, and disseminating business statistics, based on information collected through reports, surveys, censuses and administrative sources. The statistical divisions in the aimags and the Capital-City Statistics Department collect data from the primary statistical unit using approved questionnaires according to schedule and transmit them to NSOM. Staff members involved in the production of STS and SBS at territorial and central level are often dealing with more than one economic sector and the very timely production processes does not allow them to assess cautiously the quality of the data collected.

553. However, SBS and STS are produced by the same structural units and in most of the cases by the same people at Statistics Authority (NSOM and territorial statistical bodies). This is an excellent prerequisite to enhance the coherence and consistency of business economic statistics. But this may also explain why business statistics in

Mongolia do not follow strictly the delineation between short-term and structural as foreseen by Eurostat.

5.3.2 Short-term business statistics (STS)

554. Short-term business statistics is produced by the Economic Statistics Division of the Macro-economic Statistics Department (MESD) at NSOM where three staff members are involved in the area of short-term industry statistics, one staff member in the area of retail trade statistics, one staff member in the area of transport statistics, two staff members in the area of construction statistics and one staff member in the area of hotel and restaurants (accommodation and food service activities). 155 officers are involved in the production of these statistics at territorial level.

555. The scope of the STS as organised at NSOM covers industrial production indexes, fuel and energy balances and PPIs (see also respectively sections 5.4.2 and 5.2.5 of this report).

556. The method for estimating total output at constant prices follows the recommendations from the UNSD and other international organisations, and enforced by a NSOM Chairperson Order No 01/132 of 09 October 2008. The method for calculating the industrial production index is based on the United Nations manual *Index Numbers of Industrial Production 2008*, recommendations by the UN-ESCAP Regional Adviser in Statistics and best practises of other countries. The method for calculating the producer price index is pursuant to the International Producer Price Index Manual published by IMF in cooperation with organisations such as ILO, OECD, and WB (see also 5.2.5). The method for compiling fuel and energy balances is based on the UNSD method of energy balance and other international handbooks and materials.

557. For the estimation of the total production, a national adaptation of the CPC-2.0 is used and the ISIC-4.0 (sections B,C,D and E) for the calculation of total production at current and constant prices and indicators such as sales, number of employees, productivity, value added, and intermediate consumption. For territorial data a national administrative and territorial classification is used.

Industry

558. The main sources of the industrial sector statistics are the monthly surveys on enterprises in the industrial sector. The statistical divisions in aimags and districts and the Capital-City Statistics Department collect data according to the so-called AY-1 questionnaire. This questionnaire collects indicators for production, sales, and number of employees from active enterprises at the end of each month. Data are entered in the system, validated and processed between the 1st and the 4th day of the following month. The datasets are then transmitted to NSOM in an electronic form.

559. NSOM officers review the data coverage, cumulative amount, average prices, and product codes between the 4th and 8th day of the following month, and eventually disseminate the processed results.

560. Statistical divisions in bags and districts and the Statistics Department of the Capital-City collect producer price data for 511 products for the compilation of the PPI from

151 manufacturers and companies by the 15th and send them to NSOM in electronic form before the 21st of the month. Data are then processed by NSOM and released along with other production indicators.

561. The following indicators are produced monthly:

a) Sold production of industry, by divisions and sub-divisions;

b) Gross industrial output, by divisions and sub-divisions, at current prices;

c) Industrial production index, by divisions and sub-divisions;

d) Production of main commodities;

e) Stocks of some main commodities.

562. Due to the limited time allocated to collect the industrial statistical data from enterprises, provisional data are released in some cases. In case of unforeseen circumstances such as if a new product which accounts for a high share of the total output is manufactured, this product is incorporated into the index calculation and the data of the previous year is adjusted.

563. The statistics is disseminated in a monthly bulletin, in an annual review of the industrial sector and on NSOM website.

564. The production of short-term indicators for the mining and quarrying sectors is complicated by the fact that these important activities for the Mongolian economy are heavily affected by strong seasonal variations due to weather conditions. This can have a direct impact on the quality of the industrial production index and thereby makes it difficult to reflect the real situation of these sectors. UN-ESCAP is providing advisory services to NSOM in order to overcome these methodological issues.

565. According to NSOM, the STS needs further improvement in particular for the calculation of the industrial production index, to migrate from ISIC-3.1 to ISIC-4.0, and to completely incorporate CPC-2.0 coding into the industrial sector.

Construction

566. There are in total 33 staff members responsible for construction statistics: 22 at the aimags and the Capital-City, 9 in the districts and 2 in NSOM.

567. Construction statistics follows the provisions of the SNA 2008 which include new construction work and repairs in buildings and civil engineering. Equipment installation activities are compiled according to the International Standard Industrial Classification (ISIC-4.0).

568. Statistical divisions in aimags and districts and the Capital-City Statistics Department collect data according to the IB-1, IB1a, and IB2 questionnaires collecting indicators for output of construction and repair from 700-1000 construction enterprises between the 1st and 4th day of the last month of every quarter. The data are then validated and sent electronically to NSOM.

569. NSOM staff review and process the data between the 4th and 7th of the last month of each quarter and disseminate the processed information.

570. The following indicators are compiled based on the quarterly construction statistics survey:

a) Construction and capital repair outputs by entities, by building type;

b) Repaired road and bridge;

c) Capacity of building;

d) Estimated cost of the construction work;

e) Total construction cost since the beginning of construction work;

f) Total construction cost of reference year;

g) Construction site;

h) Capacity and total cost of built building, by each building.

571. The released quarterly statistics are stored both electronically and on printed forms and used for updating the statistical information service (www.1212.mn) on a regular basis.

Domestic trade (wholesale and retail trade)

572. Domestic trade statistics is based on a sample survey of enterprises. The sample size is between 1.500-2.000 entities on a quarterly basis. Only enterprises with a turnover of at least 50 million MNT are covered. The sample represents more than 90% of the total turnover of this economic sector.

573. The calculation of domestic trade statistics is based on *Methodology of compiling domestic trade statistics of NSOM*, which was approved in 2009 by NSOM Chairperson Order. ISIC-4.0 is used.

574. Following indicators are compiled based on the quarterly survey:

a) Gross revenue;

b) Value of goods sold in the period;

c) Number of employees;

d) Gross surface area of trade;

e) Number of cashier machine;

f) Opening hours.

575. One staff member at NSOM and 31 officers in the territorial Statistics Department and divisions are engaged in the production of domestic trade statistics.

576. Domestic trade statistics are disseminated 20 days after the end of the reference quarter.

577. The identified issues are the high number of sleeping wholesale and retail trade establishments in the business register but also the classification of trade establishment due to the fact that many of them have multiple activities (involved in more than one activity).

Hotel and Restaurant – Accommodation and Food Service

578. Hotel and restaurant statistics include all related activities according to industry I of the International Standard Industrial Classification (ISIC-4.0).

579. The hotel quarterly survey involves over 350 establishments totalling 70.0 per cent of all active enterprises and more than 80.0 per cent of the total income. The restaurant survey involves 750 establishments totalling 55.0 per cent of all active enterprises and more than 85.0 per cent of the total income.

580. The statistical divisions of the aimags and the Capital-City Statistics Department collect data on establishments using approved questionnaires and transmit them according to schedule to NSOM. NSOM is responsible for providing the statistical methodology and professional management and for carrying out data processing, compilation, analysis, and dissemination. The calculation of a service index will start in 2014 based on a methodology developed by NSOM.

581. The quarterly indicators are as follows:

a) Quarterly report of hotel:

- Income;
- Expenditure;
- Number of employees;
- Number of room;
- Number of bed;
- Number of nights;
- Number of guests;
- Number of days providing a service.

b) Quarterly report of restaurant:

- Income;
- Expenditure;
- Number of employees;
- Number of seats.

582. The total number of staff responsible for collecting, processing, and disseminating statistical data on hotels and restaurants is 32 of which 21 at aimags and 10 in the Capital-City and its 9 districts and one at NSOM.

583. The statistics are released according to the dissemination schedule and published in a monthly statistical bulletin and review. The released statistics are stored electronically

and on printed formats and are made available on NSOM website www.1212.mn on a regular basis.

Transport statistics

584. Transport statistics are produced with the involvement of 22 staff in aimags and the Capital-City and a part time official at NSOM.

585. NSOM is currently implementing the Methodology on Transportation Statistics, developed in accordance with Mongolian laws on transportation, road, railway transportation and civil aviation, and the 3rd edition of the *Glossary for Transport Statistics* (Inter-secretariat Working Group on Transport Statistics).

586. The following main indicators are produced on a monthly and quarterly basis for air, railway, road, and waterway transportation: freight carried; freight turnover; passenger carried; passenger turnover; and transportation revenue.

587. NSOM compiles monthly and quarterly statistics according to ISIC-3.1 section I. Air and railway main indicators are collected from eight airline companies and the Ulaanbaatar Railways. The road transportation indicators are collected quarterly from 250 entities and establishments that operate road transportation activities. The waterway transportation indicators are collected from one company that runs and operates a water transportation activity.

588. The monthly reports on air and railway transportation are full enumerations. The frame for road transportation activity is around 754 entities of which 250 entities are covered in quarterly reports. The sample represents more than 90% of the total turnover.

589. Quality check reviews of statistical data on transportation are made on every relevant establishment and producer. These include: (a) Current period report results are compared to the results from the previous year; (b) The amount of an accounted period completion must not be less than the amount from the previous period; (c) Annual statistical data are compared with those of the General Taxation Department and the Ministry of Finance.

Tourism statistics

590. NSOM compiles tourism statistics according to ISIC-4.0 section N, and CPC-2.0. The total population, including sleeping entities is about 1000 while the active part of the population is about 600. Sampling is not used due to the few active entities in the tourism sector. The average annual total sales of 98 million MNT covers around 500-700 entities.

591. The statistical divisions of the aimags and the Capital-City Statistics Department collect data on tourism establishments using approved questionnaires according to schedule and transmit them to NSOM.

592. The following indicators are collected on quarterly basis: gross revenue, including main activity's revenue and secondary activity's revenue; total expenditure, for visitors and other expenditure; number of employees and number of female

employees; number of served visitors, by travel type and by where they are from; number of organized travel; number of days served.

Assessment:

593. STS are tools for monitoring the overall short-term development of an economy and in particular allowing policy makers to detect economic turning points (dashboard). Therefore, in general, STS focus on a restricted set of relevant and timely economic indicators and not on *accounting* data. It is the main objective of SBS (annual accounting/financial information) to provide more detailed information for in-depth analysis of the long term economic development. For these reasons, but also in order to reduce the burden on respondents, it is recommended to review the set of indicators produced by NSOM under the STS. Each indicator should be carefully assessed against users demand. It is interesting to observe that to some extent, the European Union (Eurostat) is requesting less information than what is presently produced by NSOM every month and quarter.

594. It is also suggested to carefully consider if some of the indicators could be compiled from sample surveys. Sample surveys have the drawback to introduce some statistical bias but the advantage to limit the overall amount of data to be collected and processed. The time to be spent on quality and logical checks can be increased and thus reduce the systemic bias. So far, the production of STS indicators is made under huge pressure of time (short deadlines) and with limited human resources at the central office (NSOM). One could have doubts whether there are enough resources and time to carefully assess the quality of the indicators, to cross-check the results with other statistical and administrative data sources and to validate the information based on the prevailing economic situation. NSOM is already using sample surveys for some economic sectors/small size establishments but this practice could be extended.

595. It is important that to the extent possible STS results are based on establishments and not enterprises. This would facilitate the allocation of each observation (statistical unit) to a specific economic activity and enhance the homogeneity and stability of the indicators at a disaggregated level.

596. In the framework of the necessary translation from the ISIC-3.1 to the ISIC-4.0, it is recommended to change the base year and provide long time series for all indicators; if possible over a period of 10 years. Indicators should be provided on a discrete base (non-cumulative: one reference time period independent from the previous and following periods) and seasonally adjusted.

597. The assessors welcome the support provided by UN-ESCAP in developing sound STS according to international methodology. It is also recommended to gradually extend this assistance to other economic sectors than industry such as trade and services since they represent a large share of the total value added in the country.

598. Tourism and transport are treated under STS and SBS. But there is a need to compile comprehensive information systems for these two domains according to international guidelines. Tourism and transport statistics should cover in an integrated way all dimension of these economic activities: e.g. supply and demand, infrastructure, labour and impact on the environment.

5.3.3 Structural business statistics (SBS)

599. Structural business statistics is produced by MESD and Population and Social Statistics Department (PSSD), comprising 20 staff members in NSOM.

600. At present, there is a unified structural survey for non-financial and financial enterprises. All large and medium-sized enterprises are obliged to fill in the complete (full) form; 70-80 % of the turnover is covered through this survey. For small-size enterprises a sample is designed and these enterprises have to fill in a shorter questionnaire form only. The sample covers around 20-30 % of the enterprises but the coverage differs from sector to sector. The reporting unit of the structural survey is the enterprise or local unit.

601. The classification used is the International Standard Industrial Classification of All Economic Activities (ISIC), revision 3.1 and 4.0. In the future it will be based on ISIC-4.0 for all economic sectors.

602. Data sources comprise the structural survey itself, annual financial reports from the enterprises that are directly received from Ministry of Finance, and administrative data (revenues, expenditures, taxes, number of employees) from the General Taxation Department for individual entrepreneurs; not covered by the structural survey.

603. It is important to mention once again that there is no clear delineation in Mongolia between short-term economic statistics and structural business statistics. To some extent the same information is collected monthly, quarterly and annually. The frequency of data collection depends more from the size of the enterprise than the kind of information produced. However according to international guidelines and in particular European methodology these two statistics are different and serve different purposes. The observation unit is also different since the STS focuses on establishments while the SBS collect accounting information at the legal unit or enterprise level.

Industry

604. As for STS, the statistical divisions in aimags and districts and the Capital-City Statistics Department collect data and send them after routine quality checks to NSOM. Data collected annually are covering total output, value added and intermediate consumption of the industry sector. These data contain geographical location, economic type and the number of employees.

605. NSOM officers perform logical quality checks (data coverage, cumulative amount compared to previous month and previous year …). In addition, the annual statistical data are compared with information received from the General Taxation Department, the Ministry of Finance, and the Ministry of Industry and Agriculture.

606. The industrial statistics are validated and disseminated by NSOM through a long approval process starting with the directors of the relevant departments in charge of business statistics, the Chief of the Statistical Information, the Training and Advocacy Centre, the Policy implementation and Coordination Department and ending with the Chairperson of NSOM.

Table 5: Structural survey, survey type, sample size, and response rate, 2012

Divisions	Survey type	Sample size (n)	Response rate
Total		**26 560**	**95.4**
- Agriculture, forestry and fishing	full	2 279	99.3
- Industry	sample	1 697	99.8
- Construction	full	2 976	94.2
- Wholesale and retail trade; repair of motor vehicles and motorcycles	sample	6 064	96.5
- Transportation and storage	full	754	99.9
- Accommodation and food service activities	full	2 579	89.3
- Information and communication	full	928	99.9
- Financial and insurance activities	full	1 027	97.6
- Real estate activities	full	3 200	89.7
- Professional, scientific and technical activities	full	111	100.0
- Education	full	432	98.4
- Human health and social work activities	full	884	96.7
- Other service activities	NGO is sample	3 629	96.2

Domestic trade (wholesale and retail trade)

607. NSOM compiles wholesale and retail trade statistics according to ISIC-4.0 section G. The ISIC-4.0 and the CPC-2.0 are the nomenclatures used for the compilation of structural domestic trade statistics. The total population including sleeping entities is about 40.000 while the active part of the population is about 20.000. For SBS (annual statistics) on total sales, the sample based on a 50 million MNT cut off limit represents between 1.500 and 2.000 entities. These companies represent more than 90% of the total turnover of this economic activity.

608. The statistical divisions of the aimags and Capital-City Statistics Department collect data on establishments using approved questionnaires according to schedule and transmit them to NSOM. In addition, the Capital-City Statistics Department conduct a survey of outlets engaged in trade and services and forward the data collected to NSOM on an annual basis. NSOM is responsible for providing the statistical methodology and professional management and carrying out data processing, compilation, analysis, and dissemination. As for the STS, the calculation of the domestic trade is based on NSOM methodology from 2009. The General Taxation Department collects the annual reports of patent tax payers and transmits them to NSOM (individual entrepreneurs and small entities).

609. There are 2 officers at NSOM Headquarters and 31 in aimags statistics division and the Capital-City Statistics Department engaged in the production of the domestic trade statistics.

Hotel and Restaurant – Accommodation and Food Service

610. There are 22 staff members in aimags and the Capital-City, 9 in districts and 1 at NSOM responsible for the collection, processing, and dissemination of statistical data on hotels and restaurants.

611. Data are collected for ISIC-4.0, section I, by statistical divisions of aimags and district of the Capital-City and then sent to NSOM according to the approved methods and schedule decided by NSOM. In addition to the monthly, quarterly and annual surveys, the General Department of Taxation collects reports of those paying taxes and sends it to NSOM. The annual and quarterly data are checked with data from the previous periods.

612. The first survey was conducted in 2006/7 and in 2008 NSOM developed and approved a new *methodology of calculating statistical indicators of hotels and restaurants* following broadly the international recommendations.

613. The statistics are disseminated in a monthly bulletin and on NSOM website.

Assessment:

614. The main indicators within SBS are generally collected and presented as monetary values, or as counts (for example, numbers of enterprises or persons employed); this is in contrast to short-term business statistics, where the data are presented as indices (generally in relation to a base year of 2005=100). SBS and STS are complementary statistics but do not have the same purpose. SBS is not just the sum of the monthly or quarterly STS. In Mongolia, there is no clear distinction between these 2 statistics and some information that would be considered SBS (annual statistics) are collected monthly. This implies not only a high burden on respondents but also monopolize human and financial resources at the Statistics Authority (NSOM and territorial statistical bodies).

615. It is recommended to analyse jointly with main users but also according to internal needs (e.g. annual and quarterly national accounts) what are the indicators that must be collected at intra-annual rhythm and which one only at annual frequency. For the STS, information can often be collected only through surveys (exhaustive and sample surveys) when SBS can largely benefit from administrative data and registers produced and maintained by other authorities and agencies.

616. A new business statistics framework based on sound methodology, clearly defined scope and re-engineered data collection system would improve consistency and quality of the statistical output, enhance the efficiency of the production processes, reduce the amount of questionnaires and eventually free resources at all territorial levels for more systematic quality checks and data analysis. If, as mentioned during the assessment, NSOM want to approach the quality standards and deliveries of the European Statistical System (ESS), thus re-thinking of business statistics is needed.

617. As for the STS, SBS would benefit from a further improvement of the business register and regular business census operations. Business censuses should systematically include individual entrepreneurs in order to improve the coverage of the business register. It is essential for the further development of data collection

through sample surveys. National nomenclatures should be aligned to international classifications in a consistent way for all economic sectors; for the SBS as well as for the STS.

618. In order to save resources, one could consider developing electronic data collection method that could facilitate a direct transmission of information to NSOM, or even making data collection available through online questionnaires.

5.4 Multi-domain statistics

5.4.1 Statistics on information and communication technologies (ICT)

619. ICT statistics is currently managed by one person in the Macro-Economic Statistics Department (MESD) at NSOM. The same officer is also responsible for transport statistics. Data collection and data entry is performed at the statistical divisions of aimags and the Statistics Department of the Capital-City.

620. ICT statistics is produced using the Core List of ICT indicators adopted by the UNSC in 2009 for content and methodological guidance. Of the 48 indicators included in the Core List, 18 are produced and published by NSOM. ISIC-3.1 is applied.

621. Data on post, communication and internet service entities is extracted from the quarterly and annual establishment surveys. Administrative information is received from the Information Technology, Post and Telecommunications Authority (ITPTA) on mobile communication and internet service on an annual basis. Upon data aggregation, revision and processing within NSOM, ICT statistics is published in the quarterly bulletin and the annual statistical yearbook.

622. Currently, the ITPTA is reporting ICT statistics to the International Telecommunications Union (ITU), with no consultation taking place between NSOM and ITPTA on the reported data. The assessors were also informed that administrative data collected or reported to the ITPTA, which is currently not shared with NSOM, may include additional information of use for producing the Core List of ICT indicators.

Assessment:

623. Considering that increased uptake of ICT is a priority of the Government of Mongolia, more attention may be needed to this area of statistics. Initial steps towards improvement could include the following:

a) Study the most recent Core List of ICT indicators adopted by the UNSC in 2012, and explore options for its implementation at NSOM; including the addition of statistics on ICT for education and e-governance;

b) Consult ITPTA on the reports by Mongolia to the ITU to ensure consistency of internationally reported data with nationally disseminated statistics on ICT;

c) Explore options for strengthening collaboration with ITPTA to make maximum use of existing data, possibly expanding the current list of ICT indicators produced;

d) Clarify division of responsibilities between NSOM and ITPTA for producing, disseminating and reporting ICT statistics.

5.4.2 Energy and environment statistics

624. Managing Mongolia's natural resources in an economically, socially and environmentally sustainable manner is an area of high political priority. The integration of supporting statistics was pointed out by the Parliament Working Group as a key input to finding the best possible balance to political dilemmas that emerge from managing the wealth and social and environmental implications of natural resource exploitation. In this regard, the Parliamentary Working Group, under the Economic Standing Committee, pointed out the need to improve the quality of statistical analysis to support economic policy decisions such as those related to the green economy and the natural resources economy, combining increased employment opportunities with lower emissions.

625. Mongolia, jointly with the Australian Bureau of Statistics, has taken the lead in developing international statistical standards for supporting this policy priority, servicing, providing direction and organizing activities of the Ulaanbaatar City Group on Statistics for Economies Based on Natural Resources, which was established at the 43rd session of the UNSC.

Energy balances

626. The annual energy balance is produced from separate annual balances of electric power, thermal power and coal, combined with data on export and import, distribution and transmission losses and data on final consumption. NSOM receives monthly data on generation and distribution from the Ministry of Energy and data on diesel plants from aimags and the Statistics Department of the Capital-City. Balance reviews for individual energy producers are conducted by NSOM. The energy balances are published in the statistical yearbook. One person at NSOM is dedicated to this area of work.

627. NSOM and the Ministry of Energy (MoE) have formalized their collaboration on the production of annual energy balances for Mongolia. A working group involving these two entities as well as the Energy Agency and the Foundation on Energy Regulatory Commission has been established to advise on related methodological issues. Work is underway to produce and publish annual balances for individual fuel types.

Environment statistics

628. Annual data on the environment is collected primarily by the Ministry of Environment and Green Development (MEGD) in accordance with the Law on Statistics (LS) and the Environmental Protection Law. MEGD receives data via online submissions from aimags. The Capital-City municipality compiles data from its districts before submitting to MEGD. MEGD receives data on air quality from the Agency for Air Quality which has monitoring stations in soums and districts. Monthly data for 3 indicators on natural disasters are collected by the National Emergency Management Agency and for seven indicators on climate by the National Agency for Meteorology (NAM). Indicators are published in the annual yearbook and the monthly bulletin.

629. A joint working group of MEGD and NSOM in 2010 developed the methodology used for estimating environmental indicators; the list of indicators, developed by MEGD in 2008 (when the ministry was named the Ministry of Nature, Environment and Tourism) was approved by NSOM. All indicators in this list are produced or estimated by MEGD, which maintains its own statistical database at the Environmental Information Centre. Ten staff is assigned to statistics within the MEGD; in addition the maintenance of the Environmental Information Centre is supported by the Ministry's database management division.

630. Within NSOM, one person is involved in environment statistics and two staff members focus on environmental-economic accounting. Meanwhile at NSOM, the SEEA is being translated into Mongolian.

631. Comparing with the core list of indicators included in the revised Framework for the Development of Environment Statistics adopted by the UNSC (FDES 2012), 60 of 130 indicators are produced by NSOM.

632. Assessors were informed that in January 2014 NSO signed a memorandum with MEGD to improve the data quality and develop the methodology for environment statistics. The scope and possible impact of this memorandum was not further evaluated by the assessors.

Assessment:

633. The collaboration with MEGD and MoE is assessed as being good with frequent exchanges of information and clarity of division of responsibilities. The formalization and regularization of collaboration through agreements and establishment of working groups is a good practice.

634. The role taken up by NSOM in the context of the UBCG is commendable and the assessors appreciates the work streams identified, which clearly links mining to economic, social and environmental issues, thus supporting the development of integrated statistics. Considering the division of responsibilities between MEGD, MoE and NSOM, the assessors also supports the decision by NSOM to focus on the work of the UBCG and on improving internal capacity of the Statistics Authority on environmental-economic accounting, including strengthening energy and other natural resource accounts. In this process, NSOM should:

a) Continue to engage with MEGD and MoE to build NSOM capacity on issues related to environment indicators and statistics supporting the implementation of the System of Environmental-Economic Accounting (SEEA), and providing statistics support to the MEGD and other involved agencies to streamline collection and strengthen quality of environmental statistical systems.

b) Continue to play a leadership role in the UBCG, reaching out all producers of relevant official statistics and international development partners to accelerate and strengthen its work.

c) Continue the efforts of NSOM to establish environmental-economic accounts in accordance with the SEEA in support of more integrated environmental and economic statistics.

ANNEX 1: LAW ON STATISTICS

/Amended Version / Unofficial Translation/

CHAPTER ONE

GENERAL PROVISIONS

Article 1. Purpose of the law

The purpose of this law is to establish a unified statistical data system of Mongolia and action principles, determine the full rights of statistical organisations and respondents and regulate the relations that arise between them and during the process of providing the users with statistical information.

Article 2. Legislation on statistics

The legislation on statistics shall consist of the Constitution of Mongolia, this law, and other relevant legislative acts in conformity with them.

Article 3. Definitions

For the purposes of this Law, these terms have the following meaning:

1. "Statistical data" means data related to the society, economy and environment, which is collected and processed by applying uniform programmes and methodologies.
2. "Statistical activities" means the activities as recording, producing, transferring, collecting, processing and aggregating statistical data, conducting censuses and surveys, tabulating and evaluating results, disseminating the results of statistical data analysis to users, publishing, ensuring reliability of and creating and storing statistical databases.
3. "Statistical respondents" means those that are covered by censuses and surveys including legal parties of all kinds of ownership running activities in the territory of Mongolia, legal parties of Mongolia running activities outside Mongolia, Mongolian citizens, foreign citizens and stateless persons.
4. “Users of statistical data" means legal parties, Mongolian citizens, foreign citizens and stateless persons who use statistical information for their activities.
5. "Official statistics" means statistical data on economy, population, society, and environment specified Article 6 of this Law which are produced by means of methodologies and indicators adopted and approved by the National Statistical Office of Mongolia and data which are articulated in the Statistical Programme.
   /As revised by the Law of April 23, 2004/
   /As amended by the Law of January 3, 2008/
6. */This paragraph was revoked by the Law of April 23, 2004/*
7. */This paragraph was revoked by the Law of April 23, 2004/*
8. "Administrative statistical data" means data collected for the use of ministries, government agencies, other state institutions, and local governments by means of

methodologies and indicators adopted and approved by the National Statistical Office of Mongolia.
/As amended by the Law of April 23, 2004/
/As amended by the Law of January 3, 2008/

Article 4. The principles of statistical activities

Statistical activities shall be conducted in accordance to the following principles:

1. Official statistical activities should be independent.
2. Use scientifically justified comprehensive methodology.
3. Ensure accuracy and objectivity of statistical data.
4. Ensure timeliness of statistical data.
5. Statistical information must be publicly accessible and transparent within the legal framework.
6. Indicators and methodologies of statistical data shall be consistent with international standards and methodologies.
7. Statistical data shall be collected at minimum cost and through methods and means of less burden on respondents.
   /As added by the Law of April 23, 2004/

CHAPTER TWO

THE SYSTEM OF STATISTICAL DATA

Article 5. Types of statistical data

1. Statistical data shall have official and administrative types.
   /As amended by the Law of April 23, 2004/
2. /This paragraph was revoked by the Law of April 23, 2004/
3. Official statistics shall be produced by the National Statistical Office, ministries and other state organisations and Governors of all levels.
   /As amended by the Law of January 3, 2008/
4. /This paragraph was revoked by the Law of April 23, 2004/

Article 6. Indicators of official statistics and justifications for their production

1. Official statistics includes the following indicators:
   1) Macro-economic statistical indicators:
      a) gross domestic product;
      b) inflation rates and consumer price;
      c) investment;
      d) savings;
      e) balance of payment;
      f) number of unemployed;

g) monetary, loans and stock exchange;
h) state and local budget revenue and expenditure;
i) indicators of productivity;
/As added by the Law of April 23, 2004/

2) Population and social statistics:
a) total population, age and sex structure;
b) fertility, mortality, natural increase, marriage and divorces;
c) economically active population and number of employed;
d) household and population income, expenditure and consumption;
e) population nutrition, sufficiency, calorie, nutrition indicators, quality indicators and hygienic indicators;
/As added by the Law of December 20, 2012/
f) living standards and poverty;
g) average wages and income;
h) educational level of population, number of schools, teachers, pupils and students;
i) health of population, number of hospitals, physicians and patients;
j) housing fund and number of houses put into operation;
k) number of receivers of pensions and allowances, its amount;
l) number of museums, libraries and their stock;
m) number of newspapers, magazines and cinemas;
n) working time;
/As added by the Law of May 14, 1999/
/As amended by the Law of April 23, 2004/
o) industrial accident, occupational disease, and acute poisoning;
/This paragraph was added by the Law of April 23, 2004/
p) labour disputes.
/As added by the Law of April 23, 2004/

3) Industry, science and technology statistics:
a) number of livestock and other domestic animals;
b) number of livestock fence and wells;
c) output of principal agricultural products;
d) sown areas of crops, harvest, hay, fodder;
e) industrial production and sales;
f) output of main industrial commodities;
g) construction and installation work;
h) primary transport indicators - carried freight, number of passengers, freight turnover, passenger turnover;
i) communication services revenue, number of telephones and radio;
j) main export and import commodities and their quantities;
k) income from tourism and number of tourists;
l) number of licenses and new products;
m) expenditure on scientific research, experiments and inventions.

4) Legal statistics:
   a) number of crimes, by type;
   b) number of criminal offenders, by age and sex;
   c) damage amount resulting from crimes;
   d) number of bankruptcy of business entities;
   e) indicators of administrative and civil criminals.
5) Environmental statistics;
   a) soil conservation and damage;
   b) stock of clean water, use of water, water pollution, water cleaning and water waste;
   c) air pollution;
   d) forest protection and reforestation;
   e) number of protected wild animals and hunting.

2. The relevant ministries and agencies are responsible for the production of statistical data such as money, loan, finance, custom; tax, environment, art, culture, education, science and technology, health, social welfare, food security and justice statistics and for submitting them to the National Statistical Office.
/As amended by the Law of January 3, 2008/
/As amended by the Law of December 20, 2012/

Article 7. Conducting censuses and surveys

1. The National Statistical Office is responsible for conducting the following censuses and surveys:
/As amended by the Law of January 3, 2008/
   a) National population and housing census every 10 years and inter-census population survey every 5 years;
   /As amended by the Law of January 3, 2008/
   b) Input and Output table and Supply and Use Table every 5 years;
   c) Livestock and domestic animal census every year;
   d) Household socio-economic survey every quarter;
   /As amended by the Law of December 1, 2011/
   e) /This paragraph was annulled by the Law of December 1, 2011/;
   f) Social indicators survey every 5 years;
   /As amended by the Law of July 3, 2013/
   g) Labour force survey every quarter;
   /As revoked by the Law of July 3, 2013/
   h) Establishment census every 5 years
   i) Livestock fence, wells, and fodder census every 3 year
   j) Time use survey every 4 years
   k) Agricultural census every 10 years and inter-census survey for every 5 years;
   /As amended by the Law of December 1, 2011/

2. If the period of censuses and surveys indicated in the paragraph 1 of this Article to be conducted in the period other than that mentioned in this paragraph of the Article and the surveys and censuses other than those indicated in the paragraph 1 of this

Article are required to be carried out, the State Great Khural shall make a decision based on recommendations by the Government or the National Statistical Office.
/As amended by the Law of January 3, 2008/

3. The required funding for censuses and surveys shall be included in the annual budget of the National Statistical Office for the particular year.
/As amended by the Law of January 3, 2008/

4. The National Statistical Office shall include scheduled surveys and censuses in the Main directions of economic and social development.
/As amended by the Law of January 3, 2008/

5. The schedule of censuses and surveys stated in the paragraph 1 of this Article except "a" shall be determined by the Government and the schedule of sample or complete surveys shall be defined by the National Statistical Office.
/As amended by the Law of January 3, 2008/

6. Relations related to conducting population and housing census shall be regulated by a special law.
/As added by the Law of January 3, 2008/

Article 8. Unofficial statistical activity

/This article was revoked by the Law of April 23, 2004/

CHAPTER THREE

THE RIGHTS AND OBLIGATIONS OF STATISTICAL RESPONDENTS AND USERS

Article 9. The rights and obligations of statistical respondents

Statistical respondents shall exercise the following rights and obligations:

1. to make a proposal to improve indicators and methodologies of reports and surveys to a statistical organisation;
2. unless otherwise provided in the law, to refuse to provide statistical information or respond to surveys if the indicators and methodologies were not approved and adopted by the institutions engaged in producing official statistics;
/As amended by the Law of April 23, 2004/
3. to require from legal parties and individuals to ensure information confidentiality;
4. to receive and get familiar with final results of surveys and statistical data;
5. to keep the primary information recording used for statistics and surveys;
6. to provide an accurate statistical data and information in due time by using approved and adopted indicators and methodologies;
7. to be covered by national censuses;
8. business entities and institutions, to obtain registration numbers in accordance with the applicable rules and regulations;

9. to provide official statistical data at own costs to the organisations engaged in producing official statistics.

Article 10. Rights and obligations of users of statistical data

Statistical users shall exercise the following rights and obligations:

1. to be provided with the indicators listed in paragraph 1 of Article 6 of this law and with the information, processed by the indicators, which are approved by the organisations engaged in producing official statistics, in accordance with this and other relevant legal regulations;
2. to provide sources of information when using and publishing official statistical data;
3. not to require statistical data other than those approved and adopted by the official statistical organisations.

CHAPTER FOUR

THE STRUCTURE AND MANDATES OF STATISTICS AUTHORITY OF MONGOLIA

Article 11. The structure of statistics authority

1. The statistics authority is defined as a state institution which provides the state, citizens and enterprises with economic, social and environmental statistical data on equal basis at national, regional, provincial and the capital city levels.
2. The statistics authority of Mongolia shall consist of the National Statistical Office and statistical departments and divisions at the Governors Offices of the capital city, aimags and districts which coordinate and organize independently all official statistical activities in Mongolia. At soum level officers of Governors' offices of soums and at bag level the Governors of bags and khoroos are responsible for statistical activities.
   /As amended by the Law of January 3, 2008/
3. Officers in charge of statistics at the National Statistical Office, provinces, capital city, district statistical departments and divisions and in soums shall be civil servants.
   /As amended by the Law of January 3, 2008/
4. The National Statistical Office, the capital city statistical department, and statistical divisions of aimags and districts shall be financed by the central government budget. The budget shall be adequate to meet requirements to implement statistical activities independently. Statistical activities at the soums, bags and khoroos shall be financed from the respective local budget.
   /As amended by the Law of January 3, 2008/
5. The National Statistical Office shall report its annual activities and performance to the State Great Khural.
   /As amended by the Law of January 3, 2008/

6. Ministries, agencies, other government and local administration organisations shall be responsible for producing relevant statistics. Ministries shall have a unit responsible for sectoral statistics in their structures.
   /As added by the Law of January 3, 2008/
   /As amended by the Law of April 23, 2004/

Article 12. The National Statistical Office of Mongolia and its mandates

/The title of this article was amended by the Law of January 3, 2008/

1. The National Statistical Office shall ensure integrated management and co-ordination of official statistical activities.
   /As amended by the Law of January 3, 2008/
2. The National Statistical Office may have a unit responsible for improving methodologies and their scientific justifications, conducting statistical data analysis, determining development forecasting, providing fee-based data provision service and publishing and printing statistical yearbooks, bulletins and other documents. The organisational structure and procedures for functions of this unit shall be approved jointly with the central state administration organisation responsible for finance.
   /As amended by the Law of April 23, 2004/
3. The National Statistical Office shall have the following rights:
   /As amended by the Law of January 3, 2008/
   1) to provide statistical activities with professional and centralized management and take measures for improvement;
   2) to develop short term programme on official statistical indicators, censuses and surveys to be conducted and have it endorsed by the State Great Khural;
      /As added by the Law of April 23, 2004/
   3) to approve and adopt indicators, methodologies and instructions of official statistics, censuses and surveys and set the timing of their dissemination;
      /As amended by the Law of April 23, 2004/
   4) to authorize and approve indicators, methodologies and instructions of administrative statistics, assess data coverage and accuracy in order to eradicate duplication of administrative and official statistics and ensure comprehensiveness of methodologies;
      /As added by the Law of April 23, 2004/
   5) to provide the organisations engaged in producing official statistics and respondents with guidelines and instructions for conducting population, social and economic censuses and sample and full surveys on special topics and monitor implementation;
   6) to collect official statistical data from relevant ministries and other government organisations in due time;
   7) to develop indicators and methodologies in accordance with international classifications, methodologies and standards and ensure their applications;
   8) to reflect needs and requests of the government and agencies for statistical data indicators and provide them with data and information in an agreed time;
   9) to prepare and provide the government and other agencies with special official statistical information necessary for specific policy formulation, planning, management and monitoring;

10) not to collect, process and produce the indicators which are not covered in paragraph 1 of Article 6 of this Law and not approved by the statistical organisation responsible for organisation of official statistical activities;
11) to disseminate results of official statistical data and surveys to users and ensure transparency of statistical data;
12) to carry out short, medium and long term forecasting, models, research and analysis on society and economy of the country;
13) to promote capacities of professional staff in the system and of techniques, technologies and software programmes through implementation of integrated policy and planning;
/As amended by the Law of April 23, 2004 /
14) to collect official statistical data from respondents in due time;
15) to provide government and government agencies with official statistical data free of charge;
16) to ensure accuracy and objectivity of statistical data by checking the official statistical data of legal parties and taking measures to remove errors and variances;
17) By agreeing with respective enterprises and organisations, to involve professionals and officers in the national censuses conducted nationwide and surveys to be carried out which are subjected to the orders by the State Great Khural, President and the Government;
18) to inform the relevant higher authorities and take measures to repeal the decisions made by members of the Government, heads of other state organisations, Governors of aimags and the capital city and by the management of business entities if their decisions are inconsistent with the laws and regulations on statistics;
19) to provide guidance and directions for heads of statistical departments and divisions at the capital city, aimags and districts, relevant officers at soums and Governors of bags and khoroos and oversee their statistical functions;
/As amended by the Law of April 23, 2004/
20) to actively participate in the activities of international statistical organisations and other specialized organisations in statistical areas, to co-operate with them within the framework of laws and regulations of Mongolia and the framework of international rules and provide them with socio-economic statistical data of the country;
21) to explain to the public and take corrective actions when users of statistics change and misinterpret results of official statistics;
/As added by the Law of April 23, 2004/
22) to approve constant prices of official statistical indicators;
/As added by the Law of April 23, 2004/
23) to produce statistics on socio-economic situation of the country with relevant ministries and inform the State Great Khural no less than one month before announcement of parliament election;
/This paragraph was added by the Law of January 3, 2008/
/As amended by the Law of December 23, 2012/

24) jointly with relevant organisations, to formulate and enforce universal methodologies for national registration and data;
/As added by the Law of January 3, 2008/

25) to register every millionth citizen when population of the country increases by million and report to the President.
/As added by the Law of January 3, 2008/

4. The National Statistical Office can set up a Statistical Development Fund in its structure.
/As added by the Law of January 3, 2008/

Article 13. The management of the National Statistical Office

/The title of this article was amended by the Law of January 3, 2008/

1. The Chairperson of the National Statistical Office shall be appointed by the State Great Khural upon nomination by the Speaker of the State Great Khural with tenure of 6 years.
/As amended by the Law of January 3, 2008/

2. The Chairperson of National Statistical Office shall report his/her activities to the State Great Khural.
/As amended by the Law of January 3, 2008/

3. The National Statistical Office shall have a Senior Vice-Chairperson and Vice-Chairperson. The Senior Vice-chairman and Vice-chairman shall be appointed by the Chairperson of the National Statistical Office.
/As amended by the Law of January 3, 2008/

4. In appointing of the Senior Vice-Chairperson and Vice-Chairperson, the chairman of the National Statistical Office shall consider the candidate's knowledge on economics, statistics, management, his/ her professional skills, ethics and work experience.
/As amended by the Law of January 3, 2008/

5. The salary of the Chairperson of the National Statistical Office is subject to determination by the State Great Khural.
/As amended by the Law of January 3, 2008/

6. The powers of the Chairperson of the National Statistical Office shall be terminated due to the following reasons:
   1) when the legal tenure of appointment is terminated;
   2) if he/ she cannot carry out his/ her functions due to health and other considerable reasons;
   3) if he/ she asks for resignation;
   4) if his/her performance is considered unsatisfactory;
   5) if the Court determines that he/ she has committed a crime and the decision has entered into force;

Article 14. The Council of the National Statistical Office

1. The Council, whose membership consists of representatives of the members of State Great Khural, Government, research organisations and other users, shall function at

the National Statistical Office to support official statistical activities and provide advice to ensure comprehensiveness of methodologies.
/As amended by the Law of April 23, 200 /
/As amended by the Law of January 3, 2008/

2. The Chair of the Council shall be the Chairperson of the National Statistical Office of Mongolia.
/As amended by the Law of January 3, 2008/

3. The Council shall compose of seven members. The relevant standing committee of State Great Khural shall appoint three members and the Government proposes other 3 members and all the members shall be appointed by the State Great Khural. The members of the Council of the National Statistical Office shall be as adjunct members.
/As amended by the Law of April 23, 2004/
/As amended by the Law of January 3, 2008/

4. The Council shall make recommendations in relation to decisions of the issues discussed.

5. The members of the Council may receive compensation depending on their participation in the activities of the Council. The issue of providing compensation will be decided in accordance with the Procedure on functions of the Council.

Article 15. The powers of the Chairperson of the National Statistical Office and the guarantee for realizing the powers

/The title of this article was amended by the Law of January 3, 2008/

1. The Chairperson of the National Statistical Office shall exercise the following powers:
   1) to issue a decree on authorizing and approving management and organisation of official statistical activities, statistical indicators, methodologies and instructions;
   2) to appoint the heads of statistical departments and divisions of the capital city, aimags and districts by consulting with Governors at respective levels;
   /As amended by the Law of April 23, 2004/
   /As amended by the Law of January 3, 2008/
   3) to directly communicate with the Parliamentary standing committee, Government, and other relevant organisations and participate in the sessions of State Great Khural, meetings of standing committees and regular Cabinet sessions in his advisory capacity;
   /As amended by the Law of April 23, 2004/
   4) to approve the Procedure on functions of the Council of the National Statistical Office;
   /As amended by the Law of January 3, 2008/
   5) to represent the National Statistical Office;
   /As amended by the Law of January 3, 2008/
   6) */This provision was revoked by the Law of January 1, 2003/*
   7) to exercise any other rights provided by relevant laws and regulations.

2. The Chairperson of the National Statistical Office shall have the following guarantees to exercise his/ her powers:
   /As amended by the Law of January 3, 2008/
   1) to receive a salary commensurate to the ranks of high level civil servants, and other necessary benefits;
   2) to be provided with a vehicle and means of communication;
   3) to exercise other guarantees determined in the law.

Article 15bis.The powers of the General Manager of the National Statistical Office
/The title of this article was amended by the Law of January 3, 2008/

1. The General Manager of the National Statistical Office shall exercise the following powers:
   /as amended by the Law of January 3, 2008/
   1) to set job vacancies and salary fund of the institution, appoint and designate, dismiss, reward and take disciplinary measures;
   2) to dispose approved budget for its original purposes;
   3) other rights stipulated in the law.
   /As added by the Law of January 3, 2003/

Article 16. Statistical inspectors and their powers

1. The Chairperson shall exercise rights for designation and dismissal of a title of statistical inspector to an officer in the Statistics Authority upon consideration of his/her professional skills and work experience.
   /As amended by the Law of January 3, 2008/
2. A statistician engaged in the activities of producing official statistics at the ministries and other government agencies can be entitled a title of the statistical inspector by the decision of the Chairperson of the National Statistical Office;
   /As amended by the Law of January 3, 2008/
3. The statistical inspectors shall exercise the following powers:
   1) to monitor the enforcement of laws and regulations on statistics;
   2) to control the coverage and ensure the accuracy and timeliness of statistical data;
   3) to prohibit collection and duplication of data and surveys from establishments, organisations and individuals without approval of the National Statistical Office as well as giving data;
   4) to provide recommendation in relation to producing documents required for surveys and official statistical data, compiling primary records and ensuring accurate research analysis and dissemination of results;
   5) to have necessary documents, explanations and inquiries needed for monitoring which are prepared by relevant officers;
   6) to inform and report monitoring results, require relevant officers take corrective measures to remedy drawbacks and faults;
   7) to impose administrative penalties in accordance with relevant laws and regulations on persons who violated law on statistics

8) In a case of incomplete reporting or reporting with errors by enterprises of all ownership and organisations, to make them provide explanations, compare with primary records and registration and verify.
/As added by the law of 23 April 2004/

4. A relevant officer, enterprise, organisation, and citizen are obliged to comply with tasks and requirements given by the statistical inspector within his/her authority stipulated in the law.

5. The statistical inspector shall carry identification card with official and personal numbers and a badge issued by the appointing authority and use note sheet and fine slips.
/As added by the Law of April 23, 2004/

6. The Statistical inspector shall be provided with the following guarantees in addition to those specified in the Law on Civil Service:
/As added by the Law on 23 April 2004/

1) to reimburse transport cost paid on his/her own according to the statutory procedure in case of traveling within city or town by public transport /except taxi/ while fulfilling his/her rights to ensure accuracy and objectivity of statistical data;

2) in a case of temporary loss of work ability while fulfilling duties, to receive allowances and difference in a salary for the period of temporary loss of work ability; in a case of becoming disabled while fulfilling duties to receive disability pension and the difference in a salary for the entire period of receiving disability pension.

CHAPTER FIVE

MANDATES OF THE STATE EXECUTIVE INSTITUTIONS ON STATISTICAL FUNCTIONS

Article 17. The Powers of the Government with respect to official statistical activities

The government has the following powers with respect to official statistical activities:

1. to take necessary organisational measures for conducting censuses that are stated in paragraph 1 of Article 7 of this Law and to provide organisations engaged in producing official statistics with necessary capacities for implementing their powers related to official statistics;

2. to reflect in the detailed indicators of official statistics the needs of Government and governmental organisations and request results free of charge;

3. to take measures towards preparing, training and retraining of human resources specialized in statistics;

4. to implement projects of international organisations and countries improve human resource and data processing capacities of official statistics.

Article 18. Common powers of ministries, Bank of Mongolia and other government institutions, and Governors of all administrative levels with respect to official statistics

/The title of this article was amended by the Law of April 23, 2004/

Ministries and other government organisations and Governors of all administrative levels shall exercise the following powers with respect to official statistics:

1. to monitor the accuracy of official statistics regularly and ensure objectivity of official statistics;
2. in case of non-responses and not reporting of statistical data in due time to visit and make statistical data provided and get incurred expenses compensated by a guilty person;
3. to disseminate results of statistical reports, censuses and surveys to the public through media;
4. to collect statistical data from respondents through the questionnaire approved by the National Statistical Office.
   /As added by the Law of April 23, 2004/
   /As amended by the Law of January 3, 2008/

Article 19. The powers of ministries and other government organisations with respect to official statistics

Ministries and other government organisations shall exercise the following powers in addition to the common powers provided in the Article 18:

1. to submit official statistical data to the National Statistical Office in due time;
   /As amended by the Law of April 23, 2004/
   /As amended by the Law of January 3, 2008/
2. to obtain the necessary official statistical data from the National Statistical Office and use;
   /As amended by the Law of January 3, 2008/
3. to collect administrative statistical data and establish databases for management functions of a relevant sector;
   /As amended by the Law of April 23, 2004/
4. in order to avoid duplications at the national level, to adopt the administrative statistics indicators, methodologies and instructions as authorized by National Statistical Office;
   /As amended by the Law of April 23, 2004/
   /As amended by the Law of January 3, 2008/
5. to produce data on state registration of immovable assets as a total sum;
6. to ensure that an authority responsible for registration of legal parties report necessary information and changes in the recording of state registration of legal bodies to the National Statistical Office.
   /As added by the Law of April 23, 2004/
   /As amended by the Law of January 3, 2008/

Article 20. The powers of Governors of capital city, aimags, soums and districts with respect to official statistics

The Governors of the capital city, aimags, soums and districts shall exercise the following powers in addition to the common powers provided in paragraph 18 of this law:

1. to collect data from statistical respondents in their territory, compile and process, analyse and use them, and transmit official statistical data to higher authority in due time;
2. to organize and conduct censuses and sample surveys in accordance with the directions and guidance provided by the National Statistical Office;
   /As amended by the Law of January 3, 2008/
3. upon authorization of the statistical unit, to collect data and create databases for administrative and management purposes of a local government by avoiding duplication of administrative statistical data with other data.

Article 21. The powers of Governors of bags and khoroos with respect to statistical data

Governors of bags and khoroos shall exercise the following powers in addition to the common powers provided in Article 18 of this law:

1. to record population and household registration;
2. to conduct population living standard survey;
3. to conduct livestock and domestic animal censuses and asset records;
4. to conduct land censuses and maintain register on land use;
5. to collect data and conduct surveys on production and services and produce results;
6. to organize and conduct censuses and sample surveys in compliance with given guidance;
7. to present official statistical data to the relevant Governor in due time.

CHAPTER SIX

MISCELLANEOUS

Article 22. Illegal use of statistical data and confidentiality of information

1. The use of statistical data for illegal profit making purposes by statistical respondents, users and any other relevant bodies is prohibited.
2. The alteration or adjustment of the results of official statistical data and surveys by users is prohibited.
3. The publication or dissemination of data under processing and information identified by the relevant legal authorities as information concerning national interests or confidential information about individuals, business entities or other organisations is prohibited.

4. The sale and transmission of official statistical data by users without permission of the statistical organisation are prohibited.
5. Transmission, sale and deletion of raw data from censuses and surveys stored in computer processors and servers before the permitted date of are prohibited.
6. Central and local statistical offices shall strictly ensure confidentiality of data on individuals and legal parties and use the data and information for producing outputs and estimating indicators at national, regional, aimag, capital city, soum and district levels and by sectors.
   /As added by the Law of April 23, 2007/
7. The raw data of the individuals and legal parties covered in censuses and sample surveys shall be utilized after data processing. The Chairperson of the National Statistical Office shall approve a procedure for processing raw data and utilization by users in conformity with the laws on confidentiality.
   /As added by the Law of April 23, 2004/
   /As amended by the Law a/January 3, 2008/

Article 23. Liabilities for breach of law

1. Unless the infringement is dealt with by the criminal law, any person who breaches the law on statistics shall be liable to an administrative sanction.
2. The court shall make a decision about complaints filed by a citizen and an official in regard to an administrative sanction imposed by statistical inspectors.
3. Actions to influence business reputation through mass media can be applied to any business entity and institution, which has failed to submit its statistical report in due time, repeatedly delayed data submission and deliberately provided incorrect data or information.
   /Ad added by the Law of April 23, 2004/

Signed: R. Gonchigdorj, Speaker of State Great Khural of Mongolia

Published in the Issue No 28, 2002, " Төрийн мэдээлэл" book, Civil Service.

ANNEX 2: MONGOLIA STATISTICS CODE OF PRACTICE

THE STANDARDS FOR THE QUALITY MANAGEMENT OF THE MONGOLIAN OFFICAL STATISTICS

A. COORDINATION OF THE NATIONAL STATISTICAL SYSTEM

The foundation for ensuring the effectiveness and quality of the management system for statistical activities shall be its legal framework. The national statistical system shall adhere to the following principles:

- Independent official statistical activities
- Mandate for data collection
- Adequacy of staff and financial resources
- Commitment to quality
- Statistical confidentiality
- Impartiality and objectivity

Principle 1: Independent official statistical activities
The professional independence of the Mongolian Statistical Authority ensures the credibility of the Mongolian national statistics.

Indicator 1.1: The mandate of the Statistical Authority to collect, produce and disseminate data is secured by the provisions of the laws and regulations which are implemented free from any pressures from public administration organisations, public officials, private sector, individuals and enterprises and without having no conflict of interests with them.

Indicator 1.2: A legal framework to appoint the head of the Statistical Authority based on professional competence and free from any political interference is established.

Indicator 1.3: Short and medium term programmes for development of the official statistics of Mongolia are produced and approved.

Indicator 1.4: The activities of the Statistical Authority are assessed in a systematic, transparent manner when necessary or at a particular time.

Indicator 1.5: The Statistical Authority comments officially and publicly on every erroneous interpretation and misuse of official statistics published.

Principle 2: Mandate for data collection

The Mongolian Statistical Authority has a legal mandate to collect information for statistical purposes. Legal bodies of all kinds of ownership that runs businesses in the territory of Mongolia, legal bodies of Mongolia which operate outside of Mongolia, and

Mongolian and foreign citizens should be involved in statistical surveys and censuses and compelled to provide accurate statistical data and information in due time when studies are carried out using accepted and approved indicators and methods.

Indicator 2.1: The Statistical Authority has a legal mandate to collect information for statistical purposes.

Indicator 2.2: The Headquarters of the Statistical Authority is allowed to collect official statistical information from the central public administrative organisations and other governmental agencies at a scheduled time.

Indicator 2.3: The Statistical Authority has a legal mandate to use administrative statistics.

Indicator 2.4: The Statistical Authority is committed to avoiding duplication of administrative and official statistics and ensures uniform methodologies.

Principle 3: Adequacy of staff and financial resources

The Mongolian Statistical Authority has adequate staff and financial resources necessary to carry out its activities.

Indicator 3.1: Human resources, budgets, financial and investment resources adequate to meet current statistical needs are available.

Indicator 3.2: The scope, detail and cost of statistics are commensurate with social needs.

Indicator 3.3: The needs for all statistics are identified based on an assessment of users' use of statistical information.

Principle 4: Commitment to quality

The Mongolian Statistical Authority is committed to quality of its products and services. It systematically and regularly identifies its strengths and weaknesses to continuously improve process and product quality.

Indicator 4.1: Statistical quality policy shall be defined and made available to the public.

Indicator 4.2: The quality of the statistical production and standards shall be collected and followed up them.

Indicator 4.3: Product quality shall be regularly monitored, assessed and reported according to the quality criteria for Mongolian Statistics

Indicator 4.4: The external monitoring and evaluation for the implementation of statistical quality policy shall be conducted by the Public administration organisation for Standard and Quality and Technical Control.

Principle 5: Statistical confidentiality

The privacy of statistical providers (individual, households, legal person) is protected by the law and relevant procedures and the confidentiality of the information they provide and its use only for statistical purposes are absolutely guaranteed to compile statistics at the country, region, aimag, capital, soum and district levels as well as to calculate statistical indicators.

Indicator 5.1: There shall be created a legal environment for the Illegal use of statistical information and leakage of the confidentiality of raw data.

Indicator 5.2: Statistical authorities shall have a rule of professional ethics for statistical staff

Indicator 5.3: In case of the breaches of statistical confidentiality shall be liable to law sanction**.**

Indicator 5.4: Special procedure and condition of contract for the protection of statistical confidentiality to ensure security shall be developed and followed up them.

Indicator 5.5: Special procedure for processing raw data and its utilization by users shall be developed and followed up them.

Principle 6: Impartiality and objectivity

Statistical authorities shall conduct statistical activities respecting scientific feasibility, independence and in an objective, professional, and transparent manner in which all users are treated equitably.

Indicator 6.1: Statistics shall be processed on an objective and scientific basis.

Indicator 6.2: Choices of sources and statistical methods as well as the dissemination of statistics shall be informed to users by statistical authorities on a regular basis.

Indicator 6.3: Technical and editorial errors discovered in statistical production shall be corrected at the earliest possible date and informed to the public.

Indicator 6.4: Information on statistical methods shall be available to the public and the changes in the methodologies shall be informed for every occasion.

Indicator 6.5: Statistical release dates and times shall be pre-announced to users.

Indicator 6.6: Statistical releases shall be accessed to all users at the same time.

B. STATISTICAL PROCESSES

Statistical authorities of Mongolia shall introduce common international standard methodologies, guidelines and good practices in the processes to collect, develop and disseminate statistics. The relevant aspects are:

- Sound methodology
- Appropriate statistical procedures
- Non- excessive burden on respondents
- Cost effectiveness

Principle 7: Sound methodology

Sound methodology underpins quality statistics. This requires adequate tools, procedures and expertise.

Indicator 7.1: All methodologies used for Mongolian National Statistical System shall be based on scientifically feasible and international standards, guidelines and good practices.

Indicator 7.2: The National Statistical Office shall develop standard concepts, definitions and classifications and follow up them.

Indicator 7.3: The business register and the frame for population surveys shall be regularly evaluated and adjusted if necessary.

Indicator 7.4: Qualified staff above the bachelor degree shall be recruited for statistical authorities.

Indicator 7.5: Statistical authorities shall implement a policy of continuous vocational training for their staff

Indicator 7.6: The statistical authorities shall cooperate with scientific institutions and universities to improve methodology and the effectiveness of the methods.

Principle 8: Appropriate statistical procedures

To implement appropriate procedures for every statistical process from data collection to data validation ensures quality statistics.

Indicator 8.1: The methods for administrative statistics shall meet statistical purposes.

Indicator 8.2: Questionnaires for sample survey of statistics shall be necessarily tested prior to the data collection.

Indicator 8.3: Survey designs, sampling and estimation methods are well based and regularly reviewed and revised as required.

Indicator 8.4: Data collection, data entry, and coding are routinely monitored and revised as required.

Principle 9: Non-excessive burden on respondents

The statistics shall meet users' needs and is not excessive for respondents. The statistical authorities shall monitor the response burden and set targets for its reduction over time.

Indicator 9.1: The information sought from businesses shall be, as far as possible, readily available from their accounts and electronic means shall be used in order to facilitate its return.

Indicator 9.2: Administrative sources shall be used whenever possible to avoid duplication of information.

Indicator 9.3: The e-linking of data sources shall be created and will be used to reduce response burden.

Principle 10: Cost effectiveness

Resources are used effectively.

Indicator 10.1: Internal and external monitoring shall be made for the statistical authority's use of resources.

Indicator 10.2: The advanced information and communication technology (ICT) shall be introduced in statistical process of data collection, processing and dissemination.

Indicator 10.3: Proactive efforts shall be made to increase effectiveness and efficiency of administrative statistics and reduce cost for direct data collection.

Indicator 10.4: Statistical authorities shall implement statistical standardized solutions that increase effectiveness and efficiency.

C. STATISTICAL OUTPUT AND SERVICE

Available statistics shall have to meet users' needs. Mongolian Statistical authorities shall serve and provide the Government, research institutions, business organisations and general public with statistical information that meet quality standards ensuring their needs. The relevant issues are as follows:

- Relevance
- Accuracy and reliability
- Timeliness and Punctuality
- Coherence and Comparability
- Accessibility and Clarity

Principle 11: Relevance

Statistical information shall meet the needs of users.

Indicator 11.1: The measures shall be taken for identifying emerging and priority needs based on regular consultation with users, and monitoring the relevance and utility of existing statistics in meeting their needs.

Indicator 11.2: Priority needs shall be met and reflected in the work programme.

Indicator 11.3: User satisfaction is monitored on a regular basis and systematically followed up.

Indicator 11.4: The Statistical authorities shall have a contact and cooperate with permanent statistical users and target groups.

Principle 12: Accuracy and reliability

Mongolian statistics shall be accurately and reliably portray reality.

Indicator 12.1: Source data, intermediate results and statistical outputs shall be regularly monitored and assessed.

Indicator 12.2: Sampling errors and non-sampling errors shall be measured and systematically documented according to the relevant standards.

Indicator 12.3: Revisions shall be regularly analysed in order to improve statistical process.

Principle 13: Timeliness and punctuality

Mongolian statistics hall be released in a timely and punctual manner.

Indicator 13.1: Timeliness shall be ensured by way of following up the relevant release standards.

Indicator 13.2: The date of Statistical release shall be available to the public.

Indicator 13.3: The periodicity of statistics shall be identified by user requirements.

Indicator 13.4: Divergences from the dissemination time schedule shall be publicized in advance, the reasons shall be explained, and a new releases time shall be announced.

Principle 14: Coherence and comparability

Mongolian statistics shall be internally consistent and coherent, and comparable between regions and countries; and it is possible to combine and make joint use of related data from different sources.

Indicator 14.1: Statistics shall be coherent and consistent.

Indicator 14.2: Statistics shall be comparable over a reasonable period of time.

Indicator 14.3: Statistics shall be compiled on the basis of common standards with respect to scope, definitions, units and classifications in the different surveys and sources

Indicator 14.4: Statistics from the different sources and of different periodicity are compared and reconciled.

Indicator 14.5: Statistics shall be ensured the possibility of comparability at international organisations and countries level.

Principle 15: Accessibility and clarity

Mongolian statistics shall be disseminated in a clear and understandable form, released in a suitable and convenient manner, available and accessible basis with supporting metadata and guidance.

Indicator 15.1: Statistics and its metadata shall be disseminated in a form of proper interpretation and archived.

Indicator 15.2: Statistics data is disseminated by using modern information and communication technology.

Indicator 15.3: Access to microdata for census and survey shall be allowed for research purposes in accordance with Special procedure.

Indicator 15.4: Metadata shall be documented according to standardised metadata systems.

Indicator 15.5: Users shall be kept informed about the methodology of statistical processes including the use of administrative data.

Indicator 15.6: Users shall be kept informed about the statistical outputs and service if they ensure the quality criteria.

ANNEX 3: PRODUCERS OF OFFICIAL STATISTICS AND DATA PROVIDERS

List of producers of official statistics and providers of statistical data in Mongolia:

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
			Macro-economic statistics:		
1			**National Accounts**		
	1		**GDP**		
		1	GDP, by production approach	NSO	
		2	Annual changes of GDP	NSO	
		3	Industrial composition of GDP	NSO	
		4	Share of value added from private sector	NSO	
		5	GDP, by expenditure approach	NSO	
		6	GDP, by income approach	NSO	
		7	GDP per capita /USD/ by World Bank Atlas approach	NSO	
		8	GDP per capita /MNT/	NSO	
	2		**GNI**		
		9	Gross National Income	NSO	
		10	GNI per capita /MNT/	NSO	
		11	GNI per capita /USD/ by World Bank Atlas approach	NSO	
2			**Inflation rate and consumer price**		
	3		**Price**		
		12	Inflation rate, at the end of the year, annual average	NSO	
		13	National consumer price index, by subgroups and groups	NSO	
			a/ base period 2010-XII=100%	NSO	
			b/ from the beginning of the year	NSO	
			c/ monthly per cent changes	NSO	
			d/ annual per cent changes	NSO	
		14	Consumer price index, by regions, the capital, and aimags, and goods and service groups	NSO	
			a/ base period 2010-XII=100%	NSO	
			b/ from the beginning of the year	NSO	
			c/ monthly per cent changes	NSO	
			d/ annual per cent changes	NSO	
		15	Annual average prices of some commodities, by aimags and the capital	NSO	
	4		**Price index**		
		16	Construction cost index	NSO	
		17	Industrial producer price index	NSO	
3			**Investment**		
	5		**Investment**		
		18	Investment, by financial sources	NSO	
		19	Investment, by asset classification	NSO	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
4			**Capital formation**		
	6		**Capital formation**		
		20	Capital formation, by asset classification	NSO	
		21	Capital formation, by industrial classification	NSO	
5			**Balance of Payments**		
	7		**Balance of Payments**		
		22	Current account	BoM	
		23	Capital and financial account	BoM	
		24	Net errors and omissions	BoM	
		25	Reserves and related items	BoM	
6			**Money, loans, and stock market**		
	8		**Money, loans**		
		26	Money supply	BoM	
		27	Deposits, domestic and foreign currencies	BoM	
		28	Balance sheet of other depository corporations	BoM	
		29	Net international reserves, reserves in weeks of goods imports	BoM	
		30	Exchange rates, monthly average	BoM	
		31	Exchange rates, end-of-month	BoM	
		32	Loan rate /MNT, foreign currency/	BoM	
		33	Loans outstanding, by the length, end-of-month	BoM	
		34	Loans outstanding, end-of-year	BoM	
		35	Outstanding individual deposits, end-of-year	BoM	
	9		**Stock market**		
		36	Main indicators for the stock market	MSE	
	10		**Insurance, non-bank financial institutions, and saving and credit cooperatives**		
		37	Main indicators for insurance activities	FRC	
		38	Main indicators for non-bank financial institutions, end-of-year	FRC	
		39	Main indicators for saving and credit cooperatives, end-of-year	FRC	
7			**Revenue and expenditure of central and local government budget**		
	11		**General government budget**		
		40	Revenue of general government budget, by economic classification	MoF	
		41	Revenue of central government budget, by economic classification	MoF	
		42	Expenditure of general government budget, by economic classification	MoF	
		43	Expenditure of central government budget, by economic classification	MoF	
		44	Grants from central government to local government	MoF	
		45	Expenditure of general government budget, by portfolio of ministers	MoF	
	12		**Local government budget**		

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		46	Local government revenue, by economic classification	MoF	
		47	Local government expenditure, by economic classification	MoF	
		48	Revenue of local government	MoF	
		49	Expenditure of local government	MoF	
		50	Grants from local government to central government	MoF	
	13		**Human Development Fund and Social Insurance**		
		51	Revenue and expenditure of the Human Development Fund, by economic classification	MoF	
		52	Revenue of the Social Insurance Fund, by economic classification	MoF	
8			**Productivity indicators**		
	14		**Productivity**		
		53	Total productivity	NSO	
		54	Total factor productivity	NSO	
		55	Labour productivity	NSO	
			Population and social statistics:		
9			**Number of unemployed**		
	15		**Unemployed**		
		56	Registered unemployed	MoL	
		57	Unemployed, 1000 persons	NSO	
		58	Unemployment rate, percentage	NSO	
10			**Number, age and sex of population**		
	16		**Population**		
		59	Population, by sex and age groups	NSO	
		60	Population, by soums and districts, and aimags	NSO	
		61	Population, by aimags and the capital, and location	NSO	
		62	Population, annual average	NSO	
		63	Population density	NSO	
		64	Age dependency ratio	NSO	
	17		**Households**		
		65	Number of households, by rural and urban residence	NSO	
11			**Births, deaths, net growth, marriages, and divorces**		
	18		**Births**		
		66	Births and deaths, by sex	MoH, GASR	
		67	Births, by mothers' age groups	MoH, GASR	
		68	Birth rates	NSO	GASR
			a/ Crude birth rate	NSO	GASR
			b/ Total fertility rate	NSO	GASR
			c/ General fertility rate	NSO	GASR
			g/ Age specific fertility rate	NSO	GASR
		69	Sex ratio at birth	NSO	
		70	Women giving births, by educational levels	GASR	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		71	Women giving births, by marital status	GASR	
	19		**Deaths**		
		72	Deaths, by sex and age groups	MoH, GASR	
		73	Crude death rate	NSO	GASR
	20		**Life expectancy**		
		74	Life expectancy, by sex	NSO	GASR
	21		**Marriages and divorces**		
		75	Marriages and divorces	GASR	
		76	Registered marriages, by age groups and sex	GASR	
		77	Marriages and divorces, per 1000 population	NSO	GASR
	22		**Adoption**		
		78	Adoption	GASR	
12			**Economically active population and employed**		
	23		**Employment**		
		79	Population aged 15 and over, 1000 persons	NSO	
		80	Economically active population, 1000 persons	NSO	
		81	Employed, 1000 persons	NSO	
		82	Economically inactive population, 1000 persons	NSO	
		83	Labour force participation rate, %	NSO	
		84	Employment rate, %	NSO	
13			**Household, population income, expenditure and consumption**		
	24		**Household income, expenditure**		
		85	Monthly average income per household, by income composition	NSO	
		86	Monthly average income per household, by income sources, MNT	NSO	
		87	Monthly average expenditure per household, by expenditure composition	NSO	
		88	Monthly average expenditure per household, by expenditure sources, MNT	NSO	
14			**Indicators for foodstuff supply of population and availability, calories, nutrition and quality, and hygiene**		
	25		**Foodstuff supply of population and availability**		
		89	Monthly average per capita consumption of some foodstuff, by per adult equivalent	NSO	
	26		**Foodstuff calories, nutrition and quality**		
		90	Composition of daily foodstuff consumption and calories per person, by per adult equivalent	NSO	
	27		**Foodstuff hygiene**		
		91	Foodstuff hygiene condition	NSO	
15			**Population subsistence level, poverty**		
	28		**Population subsistence level**		
		92	Minimum subsistence level of population, per capita per month	NSO	
		93	Monthly consumption per person	NSO	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
	29		**Poverty**		
		94	Poverty headcount, percentage	NSO	
		95	Poverty gap, percentage	NSO	
		96	Poverty severity, percentage	NSO	
		97	Composition of consumption, by household quintiles and deciles	NSO	
		98	Gini coefficient	NSO	
	30		**Development indicators**		
		99	Human Development Index	NSO	
		100	Gender Index	NSO	
		101	Gender Empowerment Measure	NSO	
16			**Average wages and salaries**		
	31		**Average wages and salaries**		
		102	Monthly average wages and salaries, by economic divisions	SIGO	
		103	Monthly average wage and salaries, by occupations	SIGO	
		104	Monthly average wage and salaries, by legal status of establishments	SIGO	
17			**Education levels, schools, teachers, and students**		
	32		**Literacy**		
		105	Literacy rate among the population aged 15 and above	NSO	
		106	Literacy rate among 15-24 age group	NSO	
	33		**Education of all levels**		
		107	Educational institutions of all levels, by the end of academic years	MES	
		108	Teachers of educational institutions of all levels, as of the beginning of academic years	MES	
		109	Pupils and students at educational institutions of all levels, as of the beginning of academic years	MES	
		110	Graduates from educational institutions of all levels, at the beginning of the academic years	MES	
		111	Percentage of children in pre-school institutions among pupils enrolled in the 1st grade	NSO	MES
		112	New entrants in the 1st grade of general educational schools, 1000 children	MES	
		113	Proportion of pupils starting 1st grade who reach 5th grade	NSO	MES
		114	Pupils living in a dormitory	MES	
		115	Pupils with disabilities	MES	
		116	Gross and net enrolment ratio	NSO	MES
		117	Number of bad performers	MES	
		118	Proportion of pupils finishing a grade successfully	NSO	MES
		119	Proportion of bad performers	NSO	MES
		120	Dropout rates	NSO	MES
		121	Pupil-teacher ratio	NSO	MES
		122	Percentage of professional teachers	NSO	MES
		123	Sex ratio of graduates attaining primary, secondary and higher education	NSO	MES

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		124	The number of students, by professional fields	MES	
		125	The number of graduates, by professional fields	MES	
		126	Share of education expenditure in GDP	NSO	MES
		127	Share of education expenditure in the expenditure of central government budget	NSO	MES
18			**Health and hospitals, physicians, and patients**		
	34		**Population health**		
		128	Number of mothers giving birth	MoH	
		129	Maternal mortality rate (per 100 000 live births)	NSO	MoH
		130	Infant mortality rate (per 1,000 live births)	NSO	MoH
		131	Under 5 mortality rate (per 1,000 live births)	NSO	MoH
		132	Deaths, by classification of the leading causes of morbidity and sex	MoH	
		133	Incidence of communicable diseases, by classification of diseases	MoH	
		134	Incidence of communicable diseases, per 10 000 population	NSO	MoH
		135	Inpatients	MoH	
		136	Inpatients, per 10 000 population, by leading causes of morbidity	NSO	MoH
		137	Deaths, by the leading causes of morbidity and sex	MoH	
		138	Prevalence and deaths of malignant neoplasms, per 10 000 population	NSO	MoH
		139	Abortions	MoH	
		140	Percentage of pregnant women who attended to ANC in the first 3 months of pregnancy	MoH	
		141	Pregnant women who attended to ANC for 6 more times	MoH	
		142	Immunization coverage of infants, by type of immunization	MoH	
		143	Incidence, prevalence and death rates associated with tuberculosis, per 100 000 population	NSO	MoH
		144	Percentage of tuberculosis cases diagnosed and treated with international standard diagnostic and treatment methods	NSO	MoH
		145	The proportion of children aged under one year covered by immunization against measles	NSO	MoH
		146	Proportion of births attended by health professionals	NSO	MoH
		147	Prevalence of HIV infection among young people aged 15-24	NSO	MoH
		148	Prevalence of HIV infection among pregnant women	NSO	MoH
	35		**Health institutions of all levels**		
		149	Employees of health institutions, by specialization categories	MoH	
		150	Physicians	MoH	
		151	Pharmacists	MOH	
		152	Mid-level medical personnel, by professions	MoH	
		153	Persons per physician, nurse	NSO	MoH
		154	Health institutions	MoH	
		155	Hospital beds, by type	MoH	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		156	Expenditure on health sector	NSO	
	36		**Physical culture**		
		157	Some indicators for physical culture and sports, at the end of the year	MCST	
		158	Athletes, coaches and referees with a title, at the end of the year	MCST	
19			**Housing stock, new construction**		
	37		**Housing stock**		
		159	Living quarters put into operation, by type of ownership	NSO	
	38		**Public services and amenities**		
		160	Some indicators for facilities for public services and amenities	NSO	
20			**Beneficiaries of social welfare pensions, allowances and benefits**		
	39		**Social Insurance Fund**		
		161	Pensioners receiving pensions from the Social Insurance Fund, by types of pensions	SIGO	
		162	Amount of pensions allocated from the Social Insurance Fund, by type	SIGO	
		163	The number of insurers, by types	SIGO	
		164	Revenue of Social Insurance Fund, by types	SIGO	
	40		**Social welfare**		
		165	Social welfare revenue, by types	SWSGO	
		166	Social welfare expenditure, by types	SWSGO	
		167	Beneficiaries of social welfare pensions, allowances, benefits and concessions, by types	SWSGO	
21			**Museums and libraries, and their treasures**		
	41		**Libraries**		
		168	Libraries	MCST	
		169	Library book stock	MCST	
		170	Number of books per 10 000 population	NSO	MCST
		171	Permanent readers	MCST	
		172	Seats of libraries	MCST	
	42		**Museums**		
		173	Museum exhibits	MCST	
		174	Visitors of museum	MCST	
	43		**Culture and Arts**		
		175	Employees of culture and art institutions	MCST	
		176	Spectators of professional art organisations	MCST	
		177	Performances of professional art organisations	MCST	
		178	Cultural centres	MCST	
		179	Seats of cultural centres	MCST	
	44		**Temples and churches**		
		180	Temples and churches, by religion types, at the end of the year	NSO	
		181	Monks, clergymen and missionaries	NSO	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
22			**Newspapers, magazines, and films produced**		
	45		**Films and cinemas**		
		182	Produced films	MCST	
		183	Cinemas	MCST	
	46		**Publications**		
		184	Published newspapers	NSO	
		185	Published books	NSO	
23			**Working hour continuation**		
	47		**Working hour continuation**		
		186	Hours actually worked	NSO	
		187	Hours unworked	NSO	
		188	Total hours worked a week	NSO	
24			**Industrial accidents, occupational diseases and acute poisoning**		
	48		**Industrial accidents, occupational diseases and acute poisoning**		
		189	Loss of working ability due to common illnesses, household accidents and industrial accidents, occupational diseases	SIGO	
		190	Patients suffering from common illnesses and household accidents	SIGO	
		191	Patients suffering from industrial accidents, occupational diseases	SIGO	
25			**Labour disputes**		
	49		**Labour disputes**		
		192	Labour dispute cases resolved by the court	JGC	
			Industry, science and technology statistics		
26			**Livestock and household animals**		
	50		**Livestock and household animals**		
		193	Livestock, by type of livestock	NSO	
		194	Changes in number of livestock, by type of livestock	NSO	
		195	Delivery and rearing of young animals, by type	NSO	
		196	Losses of adult animals, by type	NSO	
		197	Changes in number of breeding stock, by type	NSO	
		198	Changes in number of young animals, by type	NSO	
		199	Fresh bred, crossbred, thoroughbred and improved bred livestock, by type	NSO	
		200	Household animals, by type	NSO	
	51		**Herder households**		
		201	Herder households	NSO	
		202	Herdsmen	NSO	
		203	Selected indicators for herder households	NSO	
27			**Livestock fences, wells, and water supply stations**		
	52		**Livestock fences, wells, and water supply stations**		
		204	Wells, water tanks, and water supple stations, by type	NSO	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		205	Livestock fences, by type	NSO	
		206	Wells, by utilization status	NSO	
28			**Output of major agricultural products**		
	53		**Output of major agricultural products**		
		207	Prices of agricultural products, by type	NSO	
		208	Output and sales of household animals products, by type	NSO	
		209	Fodder, by type	NSO	
29			**Sown areas**		
	54		**Sown areas, crops**		
		210	Sown areas, by types	NSO	
		211	Used seedlings, by type	NSO	
		212	Sown areas by establishments, by type	NSO	
		213	Total crops, by type	NSO	
		214	Total crops and hay, by type	NSO	
		215	Total crops and hay by establishments, by type	NSO	
		216	Total crops and hay by households, by type	NSO	
		217	Fruits sown areas, by type	NSO	
		218	Total trees and bushes of fruits, by type	NSO	
		219	Fruits crops, by type	NSO	
30			**Output and sales of industrial products**		
	55		**Production and sales of industrial products**		
		220	Gross industrial output	NSO	
	56		**Sales of industrial products**		
		221	Sales of industry	NSO	
31			**Output of major industrial commodities**		
	57		**Output of major industrial commodities**		
		222	Output of major industrial commodities, by type	NSO	
32			**Construction and capital repairs**		
	58		**Construction and capital repairs**		
		223	Construction and capital repairs	NSO	
		224	Construction put into operation and capital repairs	NSO	
		225	Local construction and capital repairs	NSO	
33			**Carried freight, passengers and freight turnover and passenger turnover of transportation industry**		
	59		**Road transport**		
		226	Carried freight, by sub-industry	NSO	
		227	Freight turnover, by sub-industry	NSO	
		228	Converted t.km, by sub-industry	NSO	
		229	Revenue from transportation, by sub-industry	NSO	
		230	Main indicators for railway transport	NSO	
		231	Main indicators for air transport	NSO	
		232	Main indicators for road transport	NSO	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		233	Total improved road length, by type	MRT	
		234	Vehicles passed the technical inspection, by type, used year	VISRS	
	60		**Passengers**		
		235	Passengers, by sub-industry	NSO	
		236	Passengers turnover, by sub-industry	NSO	
34			**Revenue from telecommunication, number of radio and fixed line stations**		
	61		**Telecommunication**		
		237	Revenue from telecommunication services, by type	NSO	
		238	Revenue from population	NSO	
		239	Telephone lines	NSO	
		240	Cellular phone users	ITPTA	
		241	Wireless telephone (WLL) subscribers	NSO	
		242	Cable television subscribers	NSO	
		243	Internet service providers (ISP)	NSO	
		244	Internet cafes	ITPTA	
		245	Permanent internet users, 100 persons	ITPTA	
		246	Computers	NSO	
	62		**Postal Service**		
		247	Postal Service Indicators, by type	NSO	
35			**Exports and imports, and main export and import products**		
	63		**Exports and imports**		
		248	Total turnover, by countries	CGA	
		249	Exports, by countries	CGA	
		250	Imports, by countries	CGA	
		251	Main export products	CGA	
		252	Main import products	CGA	
		253	Composition of exports, by groups of commodities	CGA	
		254	Composition of imports, by groups of commodities	CGA	
		255	Exports and imports, by some groups of commodities, according to the Standard International Trade Classification	CGA	
	64		**External trade**		
		256	Main indicators for external trade statistics, by negotiation type	CGA	
		257	External trade price index, by groups of main commodities, percentage	NSO	
		258	Indexes of foreign trade and terms of trade, by percentage	NSO	
	65		**Domestic trade**		
		259	Total sales of domestic trade	NSO	
36			**Income from tourism, number of tourists**		
	66		**Tourism**		

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		260	Total revenue of establishments operating in the tourism industry, by type of revenue	NSO	
		261	Total expenditure of establishments operating in the tourism industry, by type of expenditure	NSO	
		262	Number of establishments operating in tourism industry and their employees	NSO	
	67		**Tourists**		
		263	Inbound and outbound passengers, by immigration posts	GACI	
		264	Foreign passengers crossed the border of Mongolia, by citizenship and sex	GACI	
		265	Inbound foreign passengers, by posts and purpose of trip	GACI	
		266	Inbound tourists, by citizenship	GACI	
		267	Incoming cross-border transportation means, by posts and means of transportation	GACI	
		268	Outgoing cross-border transportation means, by posts and means of transportation	GACI	
		269	Outbound domestic passengers, by immigration posts and purpose of trip	GACI	
		270	Outbound domestic passengers, by countries of trip and purpose of trip	GACI	
	68		**Hotels and Restaurants**		
		271	Total output of hotel and restaurant sector	NSO	
37			**Licenses and new products**		
	69		**Licenses and new products**		
		272	Number of licenses	MES	
		273	Number of published work	MES	
38			**Expenditure on scientific research, experiments and inventions**		
	70		**Scientific research, experiments and inventions**		
		274	Number of scientific organisations	MES	
		275	Number of employees in scientific organisations, of which female	MES	
		276	Total expenditure of scientific sector	MES	
		277	Number of research work funded by state general government budget	MES	
		278	Number of scientific work, experiments and inventions	MES	
D			**Crime statistics**		
39			**Criminal offences, by type**		
	71		**Criminal offences**		
		279	Crimes against human life and health	GPD	
		280	Crime against individual's reputation and dignity	GPD	
		281	Crimes against children, family and social morals	GPD	
		282	Offences against national security	GPD	
		283	Economic crimes	GPD	
		284	Offences against public security	GPD	
		285	Crime against right of ownership	GPD	
		286	Livestock theft	GPD	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		287	Crime against the rules of safety of traffic and use of motor vehicles	GPD	
		288	Crime caused by domestic violence	GPD	
40			**Persons convicted by court, by age and sex**		
	72		**Persons convicted by court**		
		289	Number of persons convicted by court, of which:	JGC	
			a/ Female	JGC	
			b/ Children aged below 18 years old	JGC	
41			**Damage proportion as a result of crime offences**		
	73		**Damage as a result of crimes**		
		290	Total amount of damage, of which to state property and to private ownership	GPD	
		291	Amount of resituated damage	GPD	
		292	Number of victims, of which:	GPD	
			a/ Female	GPD	
			b/ Children aged below 18 years old	GPD	
		293	Victims, by social status	GPD	
		294	Victims, by age groups	GPD	
42			**Establishment that went into bankruptcy**		
	74		**Establishments that went into bankruptcy**		
		295	Number of establishments that went into bankruptcy	JGC	
43			**Administrative and civic criminal indicators**		
	75		**Administrative crime**		
		296	Administrative criminal offences, by sex	GPD, JGC	
	76		**Civic criminal offences**		
		297	Civic criminal offences, by sex	JGC	
			Environmental statistics:		
44			**Soil conservation and damage**		
	77		**Unified land territory**		
		298	Unified land territory of Mongolia, by main types	ALAGC	
		299	Land for special needs	ALAGC	
		300	Damage to land, by types	ALAGC	
45			**Clean water resources, water use, pollution, treatment, and waste**		
	78		**Clean water resources, water use, pollution, treatment and waste**		
		301	Main indicators for clean water resources and shortage	MEGD	
		302	Main indicators for clean water use	MEGD	
		303	Main indicators for waste water treatment facilities	MEGD	
46			**Air pollution**		
	79		**Climate**		
		304	Annual average temperature (c°), by aimag centres and the capital	MEGD	
		305	Days with precipitation, sum of precipitation	MEGD	

Set of indicators	Core indicators	Indicators	Social/environment/economic indicators according to the Law on Statistics	Producers of Official Statistics	Providers of statistical data
		306	Multiyear average of climate, by aimag centres and the capital	MEGD	
	80		**Air pollution, disasters**		
		307	Annual average concentration of pollutants in the air	MEGD	
		308	Daily average concentration of pollutants in the air of Ulaanbaatar	MEGD	
		309	Acceptable level of air quality standards	MEGD	
47			**Forest protection and reforestation**		
	81		**Forest resources, protection and forest management**		
		310	Forest coordination	MEGD	
		311	Forest resources, protection and forest management	MEGD	
		312	Forest use, by purpose	MEGD	
		313	Damage to forest resources and expenses incurred, by sources	MEGD	
		314	Forest land	MEGD	
48			**Protected wild animals and hunting**		
	82		**Special purpose hunting and sports fishing**		
		315	Number of rare animals allowed to be hunted and caught for special purpose hunting and sports fishing, by aimags and animals	MEGD	

List of ministries and agencies collecting official <u>and</u> administrative data for official statistical purposes:

Ministries	
1.	Ministry of Education and Science (MES)
2.	Ministry of Industry and Agriculture (MIA)
3.	Ministry of Justice (MoJ)
	3.1 General Police Department (GPD)
	3.2 General Authority for Border Protection
	3.3 General Authority for Implementing Court Decisions
4.	Ministry of Energy (MoE)
5.	Ministry of Health (MoH)
Agencies	
6.	Independent Authority Against Corruption
7.	General Authority for Citizenship and Immigration (GACI)
8.	Financial Regulatory Commission (FRC)
9.	State Property Committee
10.	Mongolian Stock Exchange (MSE)

ANNEX 4: LIST OF ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ALAGC	Agency for Land Affairs, Geodesy and Cartography
ARC	Advanced Release Calendar
BoM	Bank of Mongolia (Central/National Bank of Mongolia)
BoP	Balance of Payments Statistics
BPM	Balance of Payments Manual
BR	Business Register
CCI	Construction Cost Index
CES	Conference of European Statisticians
CGA	Customs General Administration
CIF	Cost, Insurance and Freight
CLM	Customs Law of Mongolia
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
Comecon	Council for Mutual Economic Assistance
COPNI	Classification of the Purposes of Non-Profit Institutions Serving Households
CPA	Classification of Product by Activity (Eurostat)
CPC	Central Product Classification
CPI	Consumer Price Index
CSPro	Census and Survey Processing System
Destatis	Federal Statistical Office of Germany / *Statistisches Bundesamt*
DHS	Demographic Health Survey
DPTD	Data Processing and Technology Department
EECCA	Eastern Europe, Caucasus and Central Asia
EFTA	European Free Trade Association
ESS	European Statistical System
ES-CoP	European Statistics Code of Practice
ETS	External Trade Statistics
EU	European Union
EURO	Currency of the Eurozone
Eurostat	Statistical Office of the European Union
FAO	United Nations Food and Agriculture Organisation
FDES	Framework for the Development of Environment Statistics
FOB	Free On Board
FRC	Financial Regulatory Commission
ftp	File Transfer Protocol
FTPI	Foreign Trade Price Index
GACI	General Authority for Citizenship and Immigration
GASR	General Authority for State Registration
GDDS	General Data Dissemination Standard
GDP	Gross Domestic Product
GFS	Government Finance Statistics (from the Ministry of Finance)
GFSM	Government Finance Statistics Manual

GIS	Geographic Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNI	Gross National Income
GPD	General Police Department
GSBPM	Generic Statistical Business Process Model
HBS	Household Budget Survey
HIES	Household Income and Expenditure Survey
HPI	Housing Price Index
HR	Human Resources
HS	Harmonized Commodity Description and Coding System (Harmonized System)
HSES	Household Socio-Economic Survey
HUEMS	Household Unincorporated Enterprises with some Market Production
ICD	International Classification of Diseases
ICF	International Classification on Functioning and Disability and Health
ICP	International Comparison Programme
ICSE	International Classification by Status in Employment
ICT	Information and Communication Technologies
ILO	International Labour Organisation
IMF	International Monetary Fund
IOT	Input-Output Tables
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupation
ISIC	International Standard Industrial Classification of All Economic Activities
ISO	International Organisation for Standardization
ISWGNA	Inter-Secretariat Working Group on National Accounts
IT	Information Technology
ITPTA	Information Technology, Post and Telecommunication Authority
ITRS	International Transactions Reporting System
ITU	International Telecommunication Union
JGC	Judicial General Council
LCS	Labour Cost Survey
LFS	Labour Force Survey
LMCB	Law of Mongolia on the Central Bank (Law on Bank of Mongolia)
LPHC	Law on Population and Housing Census
LS	Law on Statistics of Mongolia
LSMS	Living Standards Measurement Survey
MCST	Ministry of Culture, Sports and Tourism
MDG(s)	Millennium Development Goals
MEGD	Ministry of Environment and Green Development
MES	Ministry of Education and Science
MES	Ministry of Education and Science
MESD	Macro-Economic Statistics Department
MIAT	Mongolian Airlines
MICS	Multiple Indicator Cluster Surveys
MNT	Mongolian Tögrög or Tugrik (national currency)
MoE	Ministry of Energy

MoF	Ministry of Finance
MoH	Ministry of Health
MoL	Ministry of Labour
Monstat	World Bank capacity building programme for Mongolian statistics
MRT	Ministry of Road and Transportation
MS-CoP	Mongolia Statistics Code of Practice
MSE	Mongolian Stock Exchange
NACE	Nomenclature of Economic Activities (Eurostat)
NAM	National Agency for Meteorology
NASS/USDA	National Agricultural Statistics Service/US Department of Agriculture
NGO	Non-Governmental Organisation
NIC	Neft Import Concern
NPDS	National Programme for Development of Statistics
NSO	National Statistical Office
NSOM	National Statistical Office of Mongolia (Central Statistical Office)
NSS	National Statistical System (National System of Official Statistics)
OECD	Organisation for Economic Co-operation and Development
PHC	Population and Housing Census
PHR	Population and Household Register
PPI	Producer Price Index
PPP	Purchasing Power Parity
PSSD	Department of Population and Social Statistics
QPMOS	Quality Policy for Mongolian Official Statistics
RGDP	Regional Gross Domestic Product
RHS	Reproductive Health Survey
SAM	Statistics Authority of Mongolia (Statistics Authority)
SBS	Structural Business Statistics
SDDS	Special Data Dissemination Standard
SEEA	System of Environmental-Economic Accounting
SIAP	Statistical Institute for Asia and the Pacific
SIGO	Social Insurance General Office
SITC	Standard International Trade Classification
SNA	System of National Accounts
SNEB	System of National Economic Balance of COMECON countries
STS	Short-Term (business) Statistics
SUT	Supply-Use Tables
SWSGO	Social Welfare and Service General Office
TACIS	Technical Assistance to the Commonwealth of Independent States (Eurostat)
UN	United Nations
UN-DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UN-ECE	United Nations Economic Commission for Europe
UN-ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UN-FPs	United Nations Fundamental Principles of Official Statistics

UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
USD	United States Dollars
VISRS	Vehicle Inspection, Supervision and Regulatory Service
VPN	Virtual Private Network
WB	World Bank

ANNEX 5: PEOPLE MET DURING THE 2 ASSESSMENT MISSIONS

In Latin alphabetical order

Central Statistics Authority **National Statistical Office of Mongolia (NSOM)**	
Altantsetseg, S.	Coordinator, Monstat Project, NSOM
Altantulkhuur, N.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Amarbal, A.	Director, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Amarjargal, Ts.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Ankhzaya, B.	Senior Officer, Macro-Economic Statistics Department, NSOM
Ariunaa, Kh.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Ariunbold, Sh.	Senior Officer, Policy Implementation and Coordination Department, NSOM
Ariunchimeg, E.	Officer, Population and Social Statistics Department, NSOM
Ariunchimeg, L.	Officer, Population and Social Statistics Department, NSOM
Ariuntuya, Kh.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Ariyasuren, N.	Officer, Public Administration and Management Department, NSOM
Baasanjav, M.	Officer, Public Administration and Management Department, NSOM
Badamtsetseg, B.	Director, Macro-Economic Statistics Department, NSOM
Batbuyan, G.	Officer, Information, Training and Advocacy Centre, NSOM
Batjargal, E.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Batsukh, D.	Officer, Macro-Economic Statistics Department, NSOM
Bayarmaa, B.	Statistician, Macro-Economic Statistics Department, NSOM
Bayartsetseg, T.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Bolorchimeg, N.	Officer, Population and Social Statistics Department , NSOM
Bolormaa, E.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM

Bolormaa, S.	Senior Officer, Population and Social Statistics Department, NSOM
Bolortsetseg, L.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Bulganchimeg, Ts.	Officer, Public Administration and Management Department, NSOM
Darimaa, S.	Officer, Population and Social Statistics Department, NSOM
Davaajargal, D.	Officer, Population and Social Statistics Department, NSOM
Davaakhuu, B.	Officer, Population and Social Statistics Department, NSOM
Demberel, A	Director, Information, Training and Advocacy Centre, NSOM
Doljinsuren, N.	Senior Officer, Population and Social Statistics Department, NSOM
Dulmaa, Ts.	Officer, Population and Social Statistics Department, NSOM
Elbegsaikhan, L.	Officer, Information, Training and Advocacy Centre, NSOM
Enkh- Amgalan, R.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Enkhbaatar, I.	Officer, Population and Social Statistics Department, NSOM
Enkhbaatar, I.	Officer, Public Administration and Management Department, NSOM
Enkhjavkhlan, B.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Enkhtuvshin, B.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Enkhzaya, D.	Statistician, Policy Implementation and Coordination Department, NSOM
Enkhzorig, L.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Erdenemunkh, Ts.	Senior Officer, Data Processing and Technology Department, NSOM
Erdenesan, E.	Deputy Director, Macro-Economic Statistics Department, NSOM
Erdenesuren, B.	Vice Chairperson, NSOM
Erdenetsetseg, Sh.	Statistician, Information, Training and Advocacy Centre, NSOM
Ganbat, B.	Director, Policy Implementation and Coordination Department, NSOM
Ganchimeg, M.	Director, Foreign Relations and Cooperation Department, NSOM
Gantumur, T.	Director, Public Administration and Management Department , NSOM

Gantuya, E.	Officer, Population and Social Statistics Department, NSOM
Gerel, O.	Officer, Policy Implementation and Coordination Department, NSOM
Ishkhand, Z.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Jambachoindon, E.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Jargalsaikhan, T.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Jigjidsuren, T.	Officer, Economic Statistics Division, Macro- Economic Statistics Department, NSOM
Khenbish, N.	Officer, Population and Social Statistics Department, NSOM
Khurelbaatar, Ch.	Chief Accountant, NSOM
Lkhagvadulam, Ch.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Lkhagvasuren, S.	Senior Officer, Data Processing and Technology Department, NSOM
Mandakhzorig, O.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Mendsaikhan, S.	Chairperson, NSOM
Munkhtsetseg, A.	Officer, Policy Implementation and Coordination Department, NSOM
Munkhtsetseg, L.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Munkhtsetseg, M.	Officer, Macro-Economic Statistics Department, NSOM
Munkhtuul, Ch.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Munkhzul, G.	Officer, Information, Training and Advocacy Centre, NSOM
Myagmarkhatan, B.	Officer, Information, Training and Advocacy Centre, NSOM
Myagmarsuren, L.	Director, Data Processing and Technology Department, NSOM
Nyamsuren, D.	Officer, Public Administration and Management Department, NSOM
Oyun, M.	Officer, Population and Social Statistics Department, NSOM
Oyun, M.	Senior Officer, Policy Implementation and Coordination Department, NSOM
Oyunbileg, D.	Acting Chief, Economic Statistics Division, Macro-Economic Statistics Department, NSOM

Oyunchimeg, D.	Director, Population and Social Statistics Department, NSOM
Oyundelger, B.	Officer, Public Administration and Management Department, NSOM
Oyungerel, Sh.	Officer, Public Administration and Management Department, NSOM
Oyunmaam, E.	Statistician, Public Administration and Management Department, NSOM
Oyuntsetseg, M.	Senior Officer, Population and Social Statistics Department, NSOM
Saranchimeg, B.	Deputy Director, Population and Social Statistics Department, NSOM
Sarangerel, B.	Statistician, Macro-Economic Statistics Department, NSOM
Sarantuya, J.	Procurement specialist, Monstat project, NSOM
Tegshjargal, Ts.	Senior Officer, Macro-Economic Statistics Department, NSOM
Terbish, J.	Statistician, Macro-Economic Statistics Department, NSOM
Tserendulam, I.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Tserenkhand, J.	Officer, Macro-Economic Statistics Department, NSOM
Tsetsegdavaa, D.	Officer, Population and Social Statistics Department, NSOM
Tsevelmaa, G.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Tsogzolmaa, J.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Tungalag, Ch.	Officer, Population and Social Statistics Department, NSOM
Ulambadrakh, B.	Officer, Population and Social Statistics Department, NSOM
Undral, L.	Officer, Population and Social Statistics Department, NSOM
Urangoo, G.	Officer, Population and Housing Census Bureau, Population and Social Statistics Department, NSOM
Uurtsaikh, E.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Uyangaa, B.	Officer, Economic Statistics Division, Macro-Economic Statistics Department, NSOM
Territorial Statistics Authority	
Altanchimeg, N.	Governor Secretariat, Erdene Soum, Tuv Aimag
Altangerel, B.	Chief of Statistics Division, Songinokhairkhan District
Altansukh, T.	Officer, Capital-City Statistics Department

Baasandorj, D.	Chief of Statistics Division, Khuvsgul Aimag
Baigalmaa, N.	Officer, Capital-City Statistics Department
Bakhyt, Kh.	Chief of Statistics Division, Bayan-Ulgii Aimag
Batbayar, B.	Senior Officer, Capital-City Statistics Department
Batbayar, S.	Officer, Statistics Division, Tuv Aimag
Batdelger, D.	Statistician, Statistics Division, Bagakhangai District
Bayanchimeg, Ch.	Director, Capital-City Statistics Department
Bayasgalan, G.	Acting Chief of Statistics Division, Dundgovi Aimag
Boldbaatar, B.	Chief of Statistics Division, Khentii Aimag
Bold-Erdene, B.	Officer, Capital-City Statistics Department
Byambabaatar, S.	Chief of Statistics Division, Umnugovi, Aimag
Davaasambuu, D.	Chief of Statistics Division, Khovd Aimag
Delgertsetseg, D.	Officer, Capital-City Statistics Department
Demid-ochir, B.	Chief of Statistics Division, Darkhan-Uul Aimag
Doljin, Ts.	Chief of Statistics Division, Uvurkhangai Aimag
Enkhbaatar, D.	Chief of Statistics Division, Dornod Aimag
Enkhbold, B.	Officer, Capital-City Statistics Department
Enkh-oyun, Ts.	Senior Officer, Statistics Division, Khan-Uul District
Enkhtuya, N.	Chief of Statistics Division, Bayanzurkh District
Erdenebat, T.	Chief of Statistics Division, Sukhbaatar Aimag
Erdenebayar, L.	4th Governor of Bag
Erdenechimeg, D.	Chief of Statistics Division, Orkhon Aimag
Erdenesuren, J.	Chief of Statistics Division, Uvs Aimag
Ganpurev, D.	Officer, Capital-City Statistics Department
Gansukh, D.	Officer, Capital-City Statistics Department
Ganzorig, A.	Director, Department of Livestock Reproduction, Tuv Aimag
Gongorsuren, B.	Chief of Statistics Division, Nalaikh District
Jargalmaa, D.	Chief of Statistics Division, Baganuur District
Khash-erdene, T.	Acting Chief of Statistics Division, Chingeltei District
Mungunbayar, A.	2nd Governor of Bag
Munkhbat, N.	1st Governor of Bag
Munkhbayar, N.	Officer, Capital-City Statistics Department

Munkhtuya, D.	Chief of Statistics Division, Dornogobi Aimag
Myagmarsuren, D.	Chief of Statistics Division, Selenge, Aimag
Nandintsetseg, U.	Senior Officer, Statistics Division, Bayangol District
Narantuya, D.	Senior Officer, Statistics Division, Sukhbaatar District
Narantuya, Ts.	Chief of Statistics Division, Sukhbaatar District
Nerzedgaram, Ts.	Chief of Statistics Division, Gobi-Altai Aimag
Odsaikhan, J.	5th Governor of Bag
Otgonbayar, Ya.	Chief of Statistics Division, Govisumber Aimag
Otgonchuluun, J.	Chief of Statistics Division, Tuv Aimag
Oyungerel, D.	Chief of Statistics Division, Zavkhan Aimag
Polooj, D.	Chief of Statistics Division, Bayankhongor Aimag
Samdan, Ts.	Chief of Statistics Division, Arkhangai Aimag
Tserendulam, O.	Regional Advisor to Chairperson, Statistics Division, Sukhbaatar Aimag
Tsetsegdulam, A.	Officer, statistics of Erdene Soum, Tuv Aimag
Tsolmonbayar, B.	Chief of Statistics Division, Bulgan Aimag
Tuvshinjargal, N.	Senior Officer, Statistics Division, Dundgovi, Aimag
Zorigbat, E.	Officer, Capital-City Statistics Department
Members of the Council of NSOM	
Batshugar, E.	Vice President, Bank of Mongolia
Gantsogt, Kh.	State Secretary, Ministry of Finance
Oyunchimeg, M.	Vice Chairperson, Mongolian National Chamber of Commerce and Industry
Parliament / Court / Bank of Mongolia / Ministries / Agencies	
Altanbagana, Ch.	Officer, Treasury Department, Ministry of Finance
Amartugs, Ts.	Head, Employment Support of Labour Market, Ministry of Labour
Amgalan, T.	Executive Director, Gender Centre for Sustainable Development
Ariunbold, N.	Researcher, Court Research and Information Centre
Ayush, B.	Desk Officer and Sociologist, Court Research and Information Centre, General Council of Court, State Supreme Court
Badamkhand, D.	Senior Officer, Information Technology Department, General Authority for State Registration

Batbaatar, P.	Lieutenant Colonel, Head of Information, Training and Research Centre, General Police Department
Batkhishig, D.	Officer, Environmental Database Unit, Ministry of Environment and Green Development
Batkhuyag, D.	Senior Officer, Evaluation and Internal Audit, Department of Monitoring, Ministry of Industry and Agriculture
Bolormaa, Ts.	Statistician and Desk Officer, Information, Training and Research Centre
Dashdondog, Ts.	Director, Coordination of Policy Implementation, Social Insurance General Office
Dashnyam, Ch.	Senior Officer, Government Regulatory Agency, General Authority of Border Protection
Davaasuren, Ts.	Officer, Centre for Employment Service
Dorjderem, S.	Officer, Social Protection and Policy Implementation Coordination Department, Ministry of Population Development and Social Protection
Dulmaa, G.	Senior Economist, International Economic Department, Bank of Mongolia
Enkh-Amgalan, L.	Officer, Treasury Department, Ministry of Finance
Erdenebayar, L.	Scientist, National Development Institute
Garamgaibaatar, B.	Member of the Parliament, Chair of the Economic Standing Committee
Gereltsetseg, Sh.	Senior Officer, Monitoring, Evaluation and Internal Auditing Department, Ministry of Labour
Gonchigdorj, R.	Vice Speaker of the Parliament
Ichinkhorloo, G.	Officer, Information, Monitoring and Evaluation Department, Ministry of Culture, Sport and Tourism
Idshinrenjin, O.	Senior Officer, Integrated Planning Division, Policy Development, Strategy Planning and Coordination Department, Ministry of Economic Development
Javzmaa, B.	Officer, Monitoring, Evaluation and Internal Auditing Department, Ministry of Labour
Khosbayar, L.	Primary School Manager
Lkhagvasuren, I.	Director, Social Welfare Service Department, Social Welfare Service General Office
Munkhorgil, B.	Officer, Working group of the Parliament
Munkhzul, L.	Director, Social Protection and Policy Implementation Coordination Department, Ministry of Population Development and Social Protection

Namsrai, B.	Senior Police Officer, General Police Department
Narantuya, Kh.	Officer, Statistics Unit, Centre of Health Development, Ministry of Health
Nyamjav, G.	Officer, Analysis Section, Immigration Office
Otgonbat, D.	Officer, Labour Exchange Central Office
Otgonbileg, Yu.	Officer, Coordination of Social Welfare Policy Implementation Department, Ministry of Population Development and Social Protection
Otgonkhuu, S.	Deputy Director, Career, Training and Service Centre
Oyunchimeg, Ts.	Data Recorder, Health Centre, Erdene Soum
Oyunbileg, Ts.	Head, Statistics and Analyses Division, Customs General Administration
Oyuntsetseg, Ts.	Officer and statistician, Statistics and Analyses Division, Customs General Administration
Purevjal, A.	Senior Officer, Evaluation and Internal Audit, Department of Monitoring, Ministry of Education and Science
Tseveendulam, D.	Director, Information, Training and Research Centre, General Police Department
Tsevelmaa, D.	Director, Information, Monitoring and Evaluation Department, Ministry of Culture, Sport and Tourism
Tuvshin, B.	Officer, Information, Monitoring and Evaluation Department, Ministry of Education and Science
Tuvshingerel, N.	Senior Economist, International Economic Department, Bank of Mongolia
Tuvshingerel, T.	Economist, International Economic Department, Bank of Mongolia
Tuvshinjargal, B.	Officer, Monitoring, Evaluation and Internal Auditing Department, Ministry of Economic Development
Usukhbayar, G.	Economist, International Economic Department, Bank of Mongolia
Usukhbayar, N.	Senior Economist, International Economic Department, Bank of Mongolia
Zolboo, T.	Officer, Fiscal Policy Department, Ministry of Finance
International Organisations and Bilateral Partners	
Erdenechimeg, E.	Technical Officer, Health Systems and Financing, World Health Organisation
Erdenechimeg, U.	National Programme Officer, UNFPA

Fall, M.	Resident Representative, UNICEF
Gevers, C.	Country Manager, World Bank
Khurelmaa, D.	Officer, UNICEF
Oyuntsetseg, Ch.	Deputy Permanent Representative, UNFPA
Sinha, S.	Senior Economist, UNDP
Sugar, O.	Officer, European Union Technical Office
Theis, J.	Expert, IMRI Project, GTZ
Scientific institutions and universities	
Enkh-Amgalan, G.	Lecturer, Statistics Department, School of Economics and Business, State University of Agriculture
Khandsuren, S.	Lecturer, Statistics Department, School of Economics, National University of Mongolia
Selenge, Ts.	Head, Economic and Statistics Department, School of Mathematics and Statistics, National University of Education
Business organisations	
Badrakh, G.	Economist, MRTS Corporation
Bilguun, B.	Accountant, APU
Davaasuren, Ch.	Director, Mongolian Marketing Consulting Group (MCG)
Dolgorsuren, B.	Accountant, Monnis
Dulguun, T.	Officer, Mobicom Corporation
Dungarmaa, N.	Accountant, Setunari
Enkhbayar, B.	Accountant, Garid Tour
Enkhtuya	Commercial Director, Gungervaa
Erdenebulag, B.	Director, Bayartgerel
Gandolgor, Ch.	General accountant, Ikh Mongol Shuvuu
Ikhbayar, L.	Accountant, Erdenes Tavad Tolgoi
Khulan, N.	Accountant, Bodi-Electronics
Myagmarsuren, N.	Accountant, Odosnamnan
Nyamdorj, Sh.	Accountant, Capital Bank
Purevsuren	Director, Khashpurev
Tsetsegmaa, G.	Accountant, Ankhai International
Uranchimeg, S.	Economist, Lut Chuluu

Media	
Oyunerdene, E.	Correspondent, Eagle TV