Adapted Global Assessment of the National Statistical System of Azerbaijan

Final version

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PREFACE

The Global Assessment of the National System of Official Statistics of the Republic of Azerbaijan was jointly undertaken by the European Commission (Eurostat), European Free Trade Association (EFTA), and United Nations Economic Commission for Europe (UNECE). ICON-INSTITUT Public Sector GmbH, under contract with Eurostat¹, was responsible for organising all activities and tasks relating to the AGA. The assessment process was initiated in response to a request made by the State Statistical Committee of the Republic of Azerbaijan (SSC) to Eurostat in December 2009.

The assessment is based on an extensive review performed during the two assessment missions. The first mission took place during 14 – 18 June 2010. The assessing team included Ms Hana Šlégrová (director in Czech Statistical Office) as the leading expert and Mr. Peter Hackl (former Director General of Statistics Austria) as well as Ms Rosemary Montgomery (Eurostat), Ms Rima Gerdziunaite (Eurostat), Mr. Carsten Boldsen Hansen (UNECE) and Mr. Jan Byfuglien (Statistics Norway/EFTA). Many internal and external partners were met, partly in parallel meetings. Some written material was also made available by the SSC in advance or during and after the visit. The second mission took place on 2-3 December 2010 in order to complete the final assessment report and draw conclusions. Ms Hana Šlégrová, Mr. Peter Hackl and Ms Rima Gerdziunaite participated in this mission.

Major written inputs to this evaluation were the Law on State Statistics of the Republic of Azerbaijan and Azerbaijan Compliance Monitoring Report prepared by the SSC. The first assessment mission was also prepared through replies to the questionnaire sent out in advance to the SSC.

The assessment team very much appreciates the communication both with the staff of the SSC and with the representatives from other partners and stakeholders. We hope that the assessment will be of benefit to the further development of the National System of Official Statistics of the Republic of Azerbaijan.

¹ Within the framework of the project 'Global assessments of statistical systems of candidate and potential candidate countries as well as ENP countries'.

EXECUTIVE SUMMARY

The goal of the Adapted Global Assessment (AGA) of the National System of Official Statistics of Azerbaijan is to evaluate the level of conformity vis-à-vis European standards, incorporating the UN Fundamental Principles of Official Statistics, the European Statistics Code of Practice, as well as the Eurostat Statistical Requirements Compendium. The AGA aims at supporting the improvement of the State Statistical Committee of Republic of Azerbaijan (SSC of Azerbaijan) and the alignment of Azerbaijan's statistical system with international recommendations, standards and best practices.

Detailed **objectives** of the AGA were the following:

- To assess the compliance of the SSC of Azerbaijan with European standards, norms and recommendations, as well as the administrative capacity of the country in the field of statistics;
- To assess the institutional aspects of the SSC of Azerbaijan and its technical and organisational capacity to produce and disseminate official statistics in all relevant areas;
- To assess the compliance level of the NSS with the European statistical requirements in selected statistical domains;
- To prepare recommendations regarding the prospective fields of co-operation within future technical assistance programmes of international organisations and other cooperation partners.

The **main conclusions** on the institutional environment are the following:

- (1) The professional independence of the NSS, the principles of objectivity and impartiality are recognized in the Law on Official Statistics.
- (2) The SSC has a strong and clear mandate for data collection, including the data from natural persons and administrative sources.
- (3) Statistical confidentiality is defined well in the Law on State Statistics; procedures and measures are in place to ensure the application of the confidentiality principle.
- (4) The SSC has a central role as a producer of official statistics and coordinator of the national statistical system of Azerbaijan. It produces (in cooperation with regional offices) around 80% of the official statistics. The coordinating role is reflected in the Programme of Statistical Work as well as in the State Programme on Improvement of the Official Statistics for 2008-2012.
- (5) In total, the SSC and regional offices have sufficient capacities and means to cover the statistical work programme and the projects planned in the State Programme on Improvement of the Official Statistics for 2008-2012. However, a permanent development and renewal of the IT equipment and infrastructure will be needed, which would support more efficient production and dissemination of statistics. In addition, international support is important in order to improve and adapt several subject areas in relation to international standards and requirements.

- (6) The SSC is committed to ensure a high quality of statistics; procedures for supervision during the production process (including its preparatory phases) are in place. A more systematic and comprehensive quality management and control, as well as an evaluation are planned in the near future.
- (7) The obligation of the SSC to meet the needs of users is realized mainly via statistical publications. The presentation of statistics on the Internet has recently significantly increased; however, a more pro-active and widespread dissemination policy including user-friendly electronic dissemination of the statistics needs to be further developed.

The assessments concerning the coverage and quality of the main statistical subject areas are the following:

- (8) The SSC has a large and timely production of statistics based on statistical surveys; registers based on administrative data sources are used as survey (sampling) frames.
- (9) The classification system is in line with international standards; further activities are foreseen for improved and more efficient use of classifications.
- (10) Initial steps leading to a higher efficiency in statistical production have been made in the field of methodology, such as survey design, sampling, estimations, and integration of statistical production; in business statistics, the continuation of these efforts is needed.
- (11) The 2009 Population Census, whose results are being prepared for publishing, will be a valuable source for updating of the sampling basis as well as for an extensive analysis of the Azerbaijan community.
- (12) Many key demographic indicators are being produced and disseminated. Improvements are necessary, in particular regarding the quality of data on births, migration statistics and the modernization of the production system.
- (13) Labour market statistics is based on enterprise reporting and quarterly labour force surveys, which are a rich source for statistics on employment and unemployment.
- (14) Household surveys are mapping the income, living conditions and expenditures of households; key indicators are used for an assessment of the social situation in the country as well as for national accounts and price statistics. Further developments will concentrate on the SILC implementation.
- (15) A three years action plan for implementation of 1993 SNA and 2008 SNA was initiated in 2009. NACE Rev 2 is planned to be implemented for SNA indicators in stages during 2011-2012
- (16) Price statistics is in line with good practices and international standards. The development of a price index for owner occupied housing that includes also an estimate of the rental value of owner occupied housing should be considered to further improve the measurement of price changes; the same applies for producer price indices for services.
- (17) Business statistics provides a comprehensive set of indicators for business activities; business statistics on services is being developed. The main future

- challenges are: further integration of business statistics and development of electronic questionnaires.
- (18) Transport statistics is developed quite well; significant efforts have been undertaken to cover road transport including private entrepreneurs.
- (19) Agricultural statistics is covered well; the quality of the data could be further improved on the basis of administrative data such as a farm register.
- (20) Environmental indicators are produced and disseminated with very limited resources, partly in cooperation with the Ministry of the Environment and other partners. Some consolidation and strengthening of this area should be considered, possibly with some reorganisation.

The **main challenges** that should be further addressed through development actions are the following:

- There is some ambiguity concerning the difference between official statistics, administrative statistics and administrative data. Therefore, the borderline between the national statistical system and administrative systems for data collections is not clear. This issue should be addressed in the future revisions of the Law on Official Statistics and in the practical implementation of long-term and annual planning (annual programs are agreed with all producers of official statistical information).
- The access to the administrative data sources should be always ensured.
 Continuation of the activities devoted to the use of administrative data sources as replacement for the surveys, to the establishment of comprehensive statistical registers, and to the improvement of quality of statistical registers should be ensured in cooperation with relevant administrative bodies.
- The collection of data for non-statistical purposes should be based on administrative legal acts and not on the Law on Official Statistics. However, the access to the administrative data sources should be always ensured. Continuation of the activities devoted to the use of administrative data sources as replacement for the surveys or for the increase of quality of statistical registers should be ensured in cooperation with relevant administrative bodies.
- A rather dense regional structure serves mainly data collection and the
 dissemination of statistics on the regional level. In a long-term perspective, the
 balance of resources and the division of labour between the central office and the
 regional offices should be further reviewed in order to improve efficiency, taking
 into account the technological development.
- There is a clear need for elaborating a proactive and transparent dissemination policy oriented to all groups of users and covering the main principles, rules, and also the tools for data dissemination (e.g. a public database on the website, including improved metadata and user-oriented services, clear rules for transparent pre-access before release).
- In order to increase trust in official statistics and to promote prospective use of statistics in decision-making processes, activities leading to an improvement of national statistical literacy should be developed.

- There is a need to establish a quality management system with the aim to improve the quality of statistical products and the efficiency of the entire statistical production process. Comprehensive quality management will serve as an investment for the further strengthening the position and credibility of SSC in the country.
- An extensive use of sample surveys and administrative data sources and further integration of the production process could reduce the burden on respondents and statistical bodies; it would avoid overlaps and would lead to higher productivity and efficiency in statistical production.
- Multi-source funding of statistical activities will continue to be important mainly for the financing of new challenges in statistical developments.
- It is also recommended to improve English language skills of the SSC staff enabling them to benefit from international contacts and as a basis for an efficient development.
- The availability of documentation on definitions, principles, etc. translated into English language and applied within the different subject areas would enable the assessment of the degree of compliance with international definitions, rules and regulations. It is important in general to improve the availability of such information in order to ease future assessment work and harmonization efforts.

1 FINDINGS

1.1 LEGAL BASIS

1. The Law on Official Statistics of the Republic of Azerbaijan adopted in 1994 (and amended several times since, for the last time in 2009) creates a legal framework for the performance of the mission of the state statistical bodies in the country. The recognition of the UN Fundamental Principles of Official Statistics, definition of the statistical bodies in the country, their roles, powers and responsibilities, as well as relations to other actors and aspects in the statistical law are the necessary prerequisites for the appropriate functioning of a modern statistical system serving the development of democracy and market economy.

1.1.1 Principles

- 2. In accordance with the UN Fundamental Principles of Official Statistics and the appropriate parts of the European Statistics Code of Practice, and in order to ensure the quality and to retain the trust of the public, the principles of reliability, objectivity, relevance, statistical confidentiality and transparency are specifically mentioned in the law, specifically in its Article 9 (Principles).
- 3. In accordance with Article 10 (Autonomy/Independence of Official Statistics), the statistical bodies (central and local) are autonomous/independent and shall not seek or take any instructions from state or local bodies notably in the selection of data sources, statistical methods, forms and time of dissemination. Their obligation to guarantee the reliability and objectivity of statistical information is mentioned in Article 6 (Duties of the state statistical bodies in Item 7).
- 4. For reasons of clarity and transparency the provisions covering statistical confidentiality in the law include the definitions of confidential data (in Article 1 main definitions), direct and indirect identifications (in Article 16 statistical confidentiality), and even the rules related to the confidentiality of aggregated data (in Article 22).
- 5. The key provision related to the confidentiality principle is the use of confidential data for the production of official statistics only (Article 15). The law specifies the exceptions like the unambiguous consent of respondents in case confidential data are to be used for any other purpose (Article 17). Data taken from publicly available sources are not considered confidential (Article 16) and the use for the scientific research is available under specific conditions (Article 18). Protection measures are in place to ensure data confidentiality. Staff that are able to access confidential data must sign a data confidentiality commitment and are subject to the provisions of this law even after the cessation of their position (according to the Article 28). The "Administrative Offences Code" stipulates a fine to be imposed in case of violation of statistical confidentiality.

- 6. Statistical units also have the right to access the information, with the assurance that the confidentiality of the data is guaranteed (according to Article 11). The standard text informing about this obligation is included in statistical questionnaires.
- 7. Primary data are collected for statistical purposes, except data given on the base of court decisions, and may not be used for other purposes (Article 15). The exception to submit confidential data on the basis of court decisions is quite general the courts might resolve cases related to various obligations of respondents (such as financial, administrative, tax etc.). This approach does not fully correspond to the confidentiality principle and should be improved by specifying the only acceptable reasons, which are the court decisions in the case of breaking statistical confidentiality.
- 8. According to the definition of official and administrative statistics in Article 1, the law and the principles included do not apply to administrative statistics based on specific legal acts.

1.1.2 Mandate for Data Collection

- 9. In accordance with Article 7, the state statistical bodies have a strong and clear mandate for data collection. They have the right to receive reliable statistical data from legal entities located within the territory of the country, legal entities of the Republic located outside the country, and from the foreign legal entities acting within the territory of the Republic. They have also the right to collect data from the citizens and natural persons according to legislative acts approved by the SSC (e.g. economic or population censuses, as mentioned in Article 11).
- 10. Provisions in Article 7.3 are related to the rights to get timely and correct information from respondents; penalties in case of distortions and non-response can be applied.
- 11. The "Administrative offences code" stipulates a fine to be imposed in case of nonsubmission or unpunctual submission of required data.
- 12. In practice, the sanctions to legal entities are sparingly granted as good connections with the units usually prevent the need for such measures to be taken. In general, the readiness to respond to statistical surveys is very positive and the response rate is very high.
- 13. Despite this approach, e.g. during the second half of the year 2009, 51 respondents were fined; and the total amount of fines was 2172 Manats (AZN).
- 14. Access to administrative statistical information is also reflected in the law. All state and local bodies are obliged to provide the SSC with access to all administrative statistical information collected, processed and stored in the domain of their respective competencies, notably to registers and other files, to the extent that is necessary for the production of statistics, by established deadline and in the form according to the Programme of Statistical Works (Article 13).
- 15. The SSC also has the right to access administrative statistics and producers of administrative statistics are obliged to transmit data on demand to the state statistical bodies (Article 14).
- 16. Access to administrative data reduces the burden on respondents and avoids parallel work by state and local bodies, which is in line with modern trends and needs.

However, the difference between administrative statistical information and administrative statistics needs further clarification.

1.2 CONCEPT OF OFFICIAL STATISTICS

- 17. Article 1 defines the official statistics that is limited by the Programme of Statistical Works. The Programme covers the statistical surveys organized by the SSC and also by other producers and specifies the necessary characteristics. This Programme is agreed with the Cabinet of Ministers.
- 18. In accordance to this Article 1, in the framework of the official statistics, the administrative statistics is defined as statistics produced by state bodies on the base of corresponding normative legal acts. According to Article 14, the Law on Official Statistics does not provide the legal basis for the production of administrative statistics.
- 19. This specific legal construction might lead to difficulties in understanding the rules governing the production of official and administrative statistics for respondents, data users, and even for producers of statistics. A misunderstanding of these concepts might lead to the use of the data collected for non-statistical purposes (for budgetary or other needs). Therefore a clear definition of the boundary between official statistics and administrative data collection is necessary.
- 20. Moreover, the difference between administrative statistics and administrative statistical information is also unclear. Article 13 stipulates that the administrative statistical information shall be submitted to the SSC by established deadline and form according to the Programme of Statistical Works. In the case of administrative statistics (as a part of official statistics covered by the Programme of Statistical Works) as defined in Article 14, the producers of administrative statistics are obliged to transmit the said statistics on demand to the state statistical bodies.
- 21. For statistical purposes (and mainly in relation to statistical registers), the importance of individual data from administrative sources is unquestionable. As statistics is usually understood as aggregated information, the use of the wording "access to administrative data sources" instead of "access to statistical information" is recommended in order to gain access to all the information (including individual data) available from the state administration.

1.3 STATISTICAL BODIES

- 22. According to Article 3, the system of official statistics is defined as a single, centralized countrywide system. The organisation of the system is the role of the State Statistical Committee (SSC) and the local statistical bodies subordinated to SSC.
- 23. The normative legal act "Statute of the State Statistical Committee", confirmed by the Decree of the President of the Republic, further specifies the rights and duties of the SSC, and organization of the activities of the SSC.
- 24. The procedure for the nomination of the Chairman of the SSC and the duration of his employment are not mentioned in the Law on Official Statistics. According to the Constitution of the Republic of Azerbaijan and of the Statute of the SSC, the Chairman

- of the SSC is appointed and dismissed by the President of the Republic of Azerbaijan. The Terms of Appointment and possible reasons for demission are not defined. The same procedure is (according to the Statute) in place for the Deputy Chairmen. The Chairman personally carries responsibility for the implementation of duties entrusted to the SSC of Azerbaijan; the Deputy Chairmen also carries the responsibility for the implementation of duties assigned to him by the Chairman. The position of the Chairman of the SSC is comparable to the one of a minister.
- 25. The Statistical Council is established by the law (Article 8) as an advisory body. The law defines its tasks and composition.
- 26. The Statute of the SSC determines the composition of the Board, which consists of the Chairman of the SSC of Azerbaijan (Chairman of the Board), the Deputy Chairmen, as well as representatives of its sub hierarchical organisations; scientists and specialists may be invited for membership in the Board. The Cabinet of Ministers of the Republic of Azerbaijan determines the number of members of the Board of the SSC of Azerbaijan, as well as those persons who obtain membership. The role of the Board is to discuss the issues concerning the activity of the SSC of Azerbaijan, implement the tasks assigned by the SSC, organize and develop statistics in the country and make the necessary decisions.
- 27. According to the Statute, the scientific methodological council reserves the right to appoint a group of consultants, consisting of highly experienced scientists, in order to improve the system of statistical indicators, related programmes and methodology. The Chairman of the SSC approves its Statute.

- 28. The Law on Official Statistics can be assessed as a sound legal basis for the fulfilment of the tasks of the statistical bodies in the conditions of the market economy and democratic society.
- 29. Professional independence as well as the principles of objectivity and impartiality are recognized by the Law on Official Statistics.
- 30. In order to further strengthen the independence of Official Statistics; in agreement with international best practices (codes of practices), it is advisable to define the rules for the appointment of the Chairman and possible reasons for dismissal as well as the fixed term of his office.
- 31. The rules pertaining to statistical confidentiality should be more in line with the confidentiality principle. For example the statistical law needs to be improved by mentioning that the only reasons for court decisions are the cases of breaching the statistical confidentiality principle.
- 32. The NSS has a strong and well-defined mandate for data collection established by the Law on Official Statistics, including data from natural persons and administrative data.
- 33. Concepts involving official statistics, administrative statistics and administrative statistical information deserve further improvement to avoid confusing producers, users and respondents, mainly as far as the application of statistical principles (e.g. confidentiality) and other rules related to the production of official statistics are concerned.

- 34. The collection of data for non-statistical purposes should be based on non-statistical legislation but on administrative legal acts, even if data should also serve for the production of statistics (the access to administrative data sources should be always ensured).
- 35. The term "access to administrative data sources" is to be used in the law to allow access to data on individual units, instead of "access to administrative statistical information".
- 36. The rules specifying who the chair of the Statistical Council is (traditionally the Chairman of the office) should be also included in the appropriate legal framework.

2 NATIONAL SYSTEM OF OFFICIAL STATISTICS

2.1 STRUCTURE OF THE NATIONAL STATISTICAL SYSTEM

- 37. The Law on Official Statistics of the Republic of Azerbaijan states in Article 3 that 'the system of Official Statistics shall be a single, centralised, country wide system'. Furthermore, it states that 'the organisation of the system of official statistics and providing its activities in the Republic of Azerbaijan shall be the task of the State Statistical Committee of the Republic of Azerbaijan (referred after to as the SSC of Azerbaijan) and the local statistical bodies within its hierarchy such as the State Statistical Committee of the Nakhchivan Autonomous Republic, and the district and municipal statistical administrations'.
- 38. The law does not mention any other authority than SSC as producer for official statistics and thus one should assume that the system of official statistics in Azerbaijan is highly centralised. Answers to the global assessment questionnaire only mention regional statistical bodies as other providers of official statistics. No reference is made to other public authorities. However, the real situation is not so clear. In the questionnaire it is said that about 80 per cent of official statistics of Azerbaijan is produced by the SSC of Azerbaijan. For the remaining 20 percent other data producers (ministries, committees and etc.) are responsible.
- 39. Obviously, at least the Central Bank of Azerbaijan and the Ministry of Finance can be considered as producers of official statistics. According to IMF's GDDS the Central Bank is responsible for Balance of payments and statistics on the financial sector, whereas the Ministry of Finance is responsible for central government aggregates and debt. In the meetings with the Central Bank and the Ministry of Finance it was confirmed that they considered themselves to be producers of official statistics. Additionally, the representative of the Ministry of Health maintained that the ministry produces official statistics.
- 40. One reason for the lack of clarity concerning the structure of the national statistical system may be the distinction drawn between official statistics and administrative statistics as defined in Article 1: *Official Statistics shall mean* information obtained by processing data in order to characterise processes in a considered population in the framework of the "Programme of Statistical Works" (hereinafter referred to as the Programme) by the competent authorities. *Administrative statistics shall mean* the Official Statistics produced in relation to the fulfilment of duties by state bodies on the base of corresponding normative-law acts. Thus part of which is referred to as Official Statistics can be considered to be separate from the 'Programme of Statistical Works', and based on some specific administrative laws, and apparently the system of official statistics is in principle only covering the part included in the 'Programme'. It is not clear in practice what is classified as 'Administrative statistics' and which are the bodies producing administrative statistics.

Assessment

The Law on Official Statistics gives the SSC a central role as producer of official 41. statistics and as coordinator of the national statistical system of Azerbaijan. The law is somewhat ambiguous concerning the borderline between the concept 'administrative statistics', which also is part of official statistics and other 'official statistics' and the law is not clear whether there are other producers of official statistics in addition to SSC. Apparently 'administrative statistics' is not based on the Law on official statistics (Article 14) and the principles of the law are not applicable to this type of statistics, still being part of 'official statistics'. Thus there is a need to review this part of the statistical law and to identify in a more clear way the borderline of 'official statistics' based on some fundamental principles related to quality, impartiality, independence. It would be better to use 'administrative data' (not part of official statistics) instead of 'administrative statistics' (Article 14) or 'administrative statistical information' (Article 13). Furthermore, it is necessary to clarify under what conditions other authorities can be considered as producers of official statistics. Based on the discussions it appeared that the Central Bank of Azerbaijan, the Ministry Finance and the Ministry of Health considered themselves as producers of official statistics.

2.2 NATIONAL STATISTICAL PROGRAMMING AND SYSTEM COORDINATION MECHANISMS

- 42. The Law on Official Statistics states Article 3 that: The SSC of Azerbaijan shall function in the system of the central executive bodies of the Republic of Azerbaijan and organise Official Statistics within the "Programme of Statistical Works" adopted by the Cabinet of Ministers in the republic. Thus the SSC through the programme has a strong coordination role for official statistics – not considered as administrative statistics. However, it is important to note that according to Article 14, the law the law does not provide the legal basis for the production of administrative statistics. In order to avoid the duplication of work, and to facilitate the use of unified classification and methods, and the correspondence of obtained results to Official Statistics, their reports are approved by the SSC of Azerbaijan. The SSC of Azerbaijan has the legal authority to implement administrative statistics and shall provide report to the power involved in Official Statistics in defined time and volume. The coordination role is thus extended to 'administrative statistics'. In addition, the same article obliges the producers of administrative statistics to transmit these data to the state statistical bodies (except data on protection of the environment and labour, commercial and state confidentiality).
- 43. According to the State Programme on Improvement of the Official Statistics in the Republic of Azerbaijan in 2008 2012, adopted by decree of the President of Azerbaijan, there are a number of actions involving both the SSC and a number of ministries and/or state committees. There seems to be very few cases where a ministry or a state committee alone is the singular executing organization. They always work in close cooperation with the SSC.
- 44. Article 8 of the Law on Official Statistics stipulates the role of the statistical council: The Statistical Council of the Republic of Azerbaijan (hereinafter referred to as the

Council) is hereby established to give advice on the preparation and implementation of the Programme of Statistical Works and on the development, organising and functioning of statistics and is connective between statistics and users. The Council acts on social base under the SSC of Azerbaijan. The Council performs the following functions:

- to give an opinion and to make recommendations on the preparation of the Programme of Statistical Works;
- to give advice on the implementation of the Programme;
- to prepare recommendations for the systematic development of the system of Official Statistics in the Republic of Azerbaijan;
- to give appropriate recommendation to the SSC of Azerbaijan taking into consideration remarks, comments and purposes by user;
- 45. The work of the Council is public. It may address its opinions to the public.
- 46. The Council shall be composed of the representatives of the SSC of Azerbaijan, Ministries of Finance, Economic Development, Taxes, State Committee of Customs, National Bank, Trade Unions, private enterprises, academic society, and users.
- 47. The members of the Council shall be approved by a decision of the Cabinet of Ministers for a term of 5 years.

- 48. As already mentioned, the Law on Official Statistics gives the SSC a strong coordination role for the whole statistical system. The SSC is supported by a Statistical Council which has, according to the law, an important function regarding the development of the national statistical system, in particular the Programme of Statistical Works. Besides the annual Programme of Statistical Works, a State Programme on Improvement of the Official Statistics sets ambitious targets for the development of the statistical system and the infrastructure of the SSC.
- 49. The Council appears to have a relatively important role as a forum for discussion and dialog with partners. However, in order to improve the systematic dialog with users/producers of administrative data related to specific subject areas a recommendation is to establish working groups in some important subject areas.
- 50. The Law also provides a basis for the coordination of the production of 'administrative statistics' (Article 14) as the SSC shall approve the reports on administrative statistics, receive full access to these statistics and reserve the right to disseminate the material. There is an interesting exception: statistical data pertaining to the protection of the environment and labour, commercial and state confidentiality. It would be interesting to get clarified the reason for this exception and what it means in practice.

3 NATIONAL STATISTICAL SERVICE

3.1 ORGANISATION OF THE NATIONAL STATISTICAL SERVICE

- 51. The organizational chart shows the chairman, three deputy chairmen and a chief of the administration. The President of the Republic of Azerbaijan appoints the chairman and approves the nomination of the deputy chairmen.
- 52. The structure of the SSC of Azerbaijan is composed of: the Central Office (174 employees) and 83 regional statistical offices (1.040 employees). Altogether, the SSC has 1.214 employees.
- 53. The Central Office has some 13 subject matter divisions and seven administrative divisions: for personnel, , for regime and confidential clerical work; for finances; for statistical information, for the coordination of statistical work, the general division and the head of the Central Office.
- 54. The chairman and each of the deputy chairmen are the responsible manager for a number of divisions. The mean number of staff members of the divisions is 8.3. A rather small number of staff members might be a problem if a unit is dealing with a wider range of subject matters. For example, in the Environment and Health Statistic sector within the Demographic and Social Statistics Division, nine staff members deal with health statistics, environmental statistics, social protection statistics and sport statistics.
- 55. The largest part of the organization are the 83 district or regional statistical offices with 1.040 staff members, more than 70% of the whole staff of the SSC. Each of the district (city) statistical offices typically employs between 7 and 12 people; according to the information received during the meeting with regional offices the highest number of employees in an office was 25. The regional offices are responsible for data collection in the provinces, and for dissemination and analysis of data at regional level. The collection of data for the price and household budget surveys, interviewers are engaged who are paid from the state budget.
- 56. Scientific—Research and Design Technological Center of the Statistical Information (SRDTCSI, 21 employees) is an organization functioning under the authority of the SSC of Azerbaijan and has legal entity status. The Center carries out orders of the SSC in the field of statistical development and methodology including sampling for surveys.
- 57. The Main Computing Centre (MCC, 246 employees) is a separate legal entity subordinated to the SSC, which works for the SSC on the base of orders. The MMC plays a central role in the statistical process: It is responsible for processing and checking data, for the data transfer from the regional offices to the Central Office; for the publication of statistical bulletins; for computer maintenance, for software development, and maintenance, and for web technologies.

- 58. The balance in resources and the division of labour between the Central Office and the regional statistical offices should be subject to further review in order to improve efficiency and quality management, and as a response to the technological development.
- 59. The affiliation of the departments to groups could be stronger related to their subject-orientation. The evaluation of the present organizational structure with the aim of stronger relating the units according to subject matters would be useful in terms of improved knowledge transfer, increased efficiency of the production process, and increased adaptability of the organisation to new challenges.
- 60. Due to interrelations and the common intellectual requirements, responsibility for registers, methodological issues, and sampling should ideally be equal in the hierarchical structure. Such a concentration would improve the communication and cooperation between of the involved experts and would contribute to the improvement of the quality of the statistical production.
- 61. The interaction between the subject matter units the data collecting regional offices needs a close cooperation of all individuals who work on a certain statistical product and a clearly responsible person.
- 62. The future organization of the statistical process needs modern IT-tools for data collection and data processing; important improvements of work efficiency and of quality of statistical products can be attained. IT-tools in question are internet-based questionnaires which allow for online plausibility checks, standardized tools for data editing, and tools for statistical analysis of the data. In such an organization, the responsibility for the statistical process is given to the subject matter unit, whereas the Main Computing Centre has a supporting function and responsibility for the development of IT-tools and other aspects beyond the routine wise operating of the statistical process.
- 63. The rather dense regional structure obviously has historical reasons and serves its purpose in data collections and communication with local respondents. However, it must be expected that the development of new administrative and comprehensive databases and a modern data management (electronic questionnaires, data collection via internet, use of administrative data, integrated editing process, and dissemination mainly via internet) will result in a simplification of the regional structure of the SSC within the next 10 years. The medium and long range planning should take this fact into account.

3.2 RESOURCE MANAGEMENT

3.2.1 Finance and Budgeting

- 64. The financial resources of the SSC are provided by the state budget of the Republic of Azerbaijan. Assistance has been received from foreign and international donors such as EU, Sweden, USA, UN and ILO, among others.
- 65. The 2008 total budget was 9,189.796 AZN (EUR 9,547.279); about 50.0% of the budget is spent for personnel costs and about 50.0% are needed for operational costs (electricity, heating, telephones, printing forms, etc.).

Assessment

66. The SSC seems to be provided with sufficient means to cover the statistical work programme and also the projects planned in the State Programme on Improvement of the Official Statistics.

3.2.2 Staff, Recruitment, and Training

- 67. In 2009, the SSC employs 1.214 people, of whom 174 are working in the Central Office; in addition, 246 persons are employed in the MCC and 21 persons in the Scientific-Research and Design Technological Center of the Statistical Information. About 65.1% of all staff members have higher education, including 5 scientists; 53.6% are female. About 124 interviewers are collecting prices and HBS data; they are financed by the state budget.
- 68. The SSC has not a free access to the labour market to recruit graduates from specific academic disciplines. Recruitment for the public service is carried out centralized by a state authority according to the Law on Civil Service on a competitive basis.
- 69. The SSC runs an internal training programme to improve the expertise of the staff. The SSC of Azerbaijan has developed a training plan for the whole staff consisting of seminars, workshops, courses, ad hoc meetings, and consultations held by international organizations. Training is an essential component of all co-operation projects. They include lectures and discussions allowing the sharing of knowledge, skills, experience, know-how, and information.
- 70. So-called zone seminars on special issues covering numerous statistical aspects are organized with local statistical offices every year. Special attention has been given to the preparation of specialists-multiplier in the various areas of statistics. 18 specialists have been active in 2007-2008. Five experts were selected to take part in a professional development course at the State Economics University in 2007-2008.
- 71. The foreign languages capabilities of most staff members are rather limited. Relatively few employees speak English at a working level; more employees have a passive understanding of English. Most of the staff speak Russian as their second language.

72. The Law on Official Statistics gives staff members of the SSC of Azerbaijan the right to give lectures at the Faculty of Statistics at Azerbaijan State Economics University and at other higher educational institutions and to undertake research.

Assessment

- 73. Competent staff is a critical factor for the production of statistics of good quality in an efficient way. The administrative framework of the SSC as part of the public administration does not allow an independent hiring of staff. Although the centralized recruitment of staff members avoids the risk of biased selection, it has also some negative aspects: A statistical office needs specialised expertise which is not necessarily the same as for other public administrations; a personal contact with candidates helps to identify those who are most appropriate; even if the system in practise results in the recruiting of excellent people, the system has extra costs in terms of higher needs for training of new employees. Therefore, the SSC should have a stronger influence on the profile of those being recruited, based on an analysis of internal needs.
- 74. Extensive measures for the promotion of staff have been implemented, in particular in providing targeted staff training. However, the SSC might benefit from developing some strategic guidelines for staff policies and staff development and training, taking into account especially the needs of new employees. The training should also be supplemented by non-technical competences such as project management, quality management and communication skills etc., possibly by external lecturers.
- 75. Better knowledge of English will be essential for profiting from international contacts and for an efficient development.
- 76. The role of staff members of the SSC in the academic system is an asset, which is not available for many NSIs. It is an excellent possibility for the strong networking of the SSC with the academic world, aiming at easier access to scientific developments in statistics, empirical economics, IT and other disciplines, enabling the academic world to access data and related research fields, which would also be of benefit to official statistics.

3.2.3 Information Technology

- 77. The Main Computing Centre (MCC) has 246 employees; it has the status of separate legal unit. It is concerned on one hand with activities within the statistical processes for generating the statistical products such as collecting, processing and controlling data, with transferring them from regional offices to the central office, and with the publication of statistical bulletins. On the other hand, the MCC is concerned with software development. Obviously, software development refers to individual statistical products but also new software tools. In the meetings with the SSC it turned out the MCC plays a much stronger role in the statistical processes as is the case with IT units in other NSIs. A closer review on the MCC will be part of the talks in the future meeting.
- 78. During the last three years, the information technology environment was significantly improved. A unified local network has been set up in the Central Office. All employees of the SSC of Azerbaijan have access to the local network. The local network serves

- about 400 users. The capacity of the computing system and the efficiency of services have substantially been increased.
- 79. In 2009, the volume of computing resources contains 1.178 units, including 820 computers, 286 printers, 72 copier units. In 2009 altogether 207 computers and 80 printers were purchased.
- 80. The State Programme on Improvement of the Official Statistics for the period 2008-2012 obliges the SSC to improve the processes of data collection, data storage and dissemination of statistical results by applying modern ICT, to increase the quality of the official statistical data, to reduce the response burden, to improve the methods for guaranteeing statistical confidentiality, to give the users access to information on the applied statistical methods, and others. All these tasks fall under the umbrella of the IT unit and therefore require their input.

- 81. The IT equipment and its use for internal communication and for communication with users have been given high priority, and good progress can be seen.
- 82. However, new challenges have to be answered in the near future. Databases or registers of administrative data will play an increasing role, integrated and standardized tools for the statistical processes, the provision of more metadata for internal and external users, and the establishment of a quality management system are examples of such challenges.
- 83. For all these projects, MCC experts will have to collaborate with experts from subject matter units and probably also with experts from outside. However, the MCC experts will play a crucial role as IT technology is the key element for the corresponding technical solutions. Although in all these cases, subject matter people will have the responsibility for the project and also the technical solution, IT experts will have to contribute the main input in the design and implementation phases and carry responsibility for maintenance of the system during its whole life time. Also the State Programme on Improvement of the Official Statistics for the period 2008-2012 will urge the input of the MCC.

3.3 INTERNAL AND EXTERNAL MONITORING OF QUALITY AND PERFORMANCE

- 84. The internal monitoring seems to be the responsibility of the heads of the subject matter units.
- 85. Procedures or methods to monitor the quality of the stages in the statistical production process (survey planning, survey design, data collection, data processing, data analysis, and dissemination) are routinely applied. For all surveys, the field operations, the data entry, and the coding are routinely supervised. Revisions of the results are made when required.
- 86. For some areas, internal handbooks, guidelines, or recommendations for the statistical production process are available so far; a handbook for interviewers is available for household surveys. A comprehensive quality management and quality training for staff members is not yet available.
- 87. The calendar of releases of statistical information is available for the public and can be examined on the SSC website. For the statistics listed in the annual program, information on punctuality and timeliness is collected systematically.
- 88. An external monitoring of quality is provided by the International Monetary Fund (IMF). Azerbaijan is participating in the General Data Dissemination System (GDDS) of the IMF since 2001. For the corresponding macroeconomic statistics, detailed metadata, assessments of the data quality based on the IMF's Data Quality Assessment Framework (DQAF), and suggestions for improvements including plans for their implementation are publicly available.
- 89. The SSC has prepared the implementation of a quality management system and the development of standard documentations for the statistical products. Standard documentations are intended to provide better metadata to external users; the generation process of a standard documentation is very helpful for revealing weaknesses and potentials for improvement of a statistical products and their consistency.
- 90. The State Programme on Improvement of the Official Statistics for the period 2008-2012 obliges the SSC to increase the quality of official statistics.

- 91. Currently, internal monitoring of quality aspects within the SSC is done via basic hierarchy channels and there is no centralized internal monitoring system. External monitoring is implemented as far as the SSC contributes to the participation of Azerbaijan in the GDDS.
- 92. The establishment of a quality management is planned; such a unit has a high potential for improvements of the quality of the statistical products and the efficiency of the whole statistical process. A comprehensive quality management with a defined quality policy, strategic goals, organizational measures, staff training, and in particular a strong user orientation will serve as an investment to further strengthening the SSC position and its credibility. The necessary prerequisite for the successful implementation of quality management is the steady interest and the unanimous support by the chairman and the top management.

- 93. Within the future quality management system, incorporating the use of systematic indicators of quality and quality development as well as an internal and systematic review of the quality of all stages of statistical processes and products including their consistency, the activities should be strengthened and cover the whole organization. Standard documentations for the statistical products are planned and are intended to provide better metadata to external users; the generation process of a standard documentation will certainly help to reveal weaknesses and potential for improvement of statistical products.
- 94. For the future, administrative data will be used increasingly instead of data collected directly from the respondents and for various purposes within the statistical process; and corresponding statistical databases or registers will be established. The assessment and control of the quality of administrative data will be another challenge for the SSC. In this context, measures for better updating register which are used for sampling is to be mentioned.

3.4 DISSEMINATION

- 95. The Law on Official Statistics of the Republic of Azerbaijan includes the definition of dissemination in its Article 1:"Dissemination shall mean giving to users, regardless of the form and means used access to Official Statistics not subject to statistical confidentiality". According to Article 2, the reliability and objectivity of statistical information must be ensured. "The SSC of Azerbaijan shall ensure that statistics are disseminated in such a way, that all users have simultaneous access to the disseminated information in the framework of unified rules, legal regulation and time..." Among the duties of the state statistical bodies (Article 6), the guarantee of the reliability and objectivity of statistical information is also underlined.
- 96. The SSC is responsible (Article 6, item 5), amongst others, "for preparing statistical yearbooks, bulletins, reviews, press releases and other statistical materials, disseminating them among the users, publication of statistical data, which are of interest of the public in the media." The responsibility for "organizing explanation of importance of Official Statistics to general public" is also included in the Law (Article 6, item 8).
- 97. According to the Article 21 "In supplying the users with the statistical information all possible forms of information sources, including special publications of the state statistical bodies and of mass media and other means are used."
- 98. The basic duties of statistical bodies in this field and rules are incorporated not only in the Law on Official Statistics, but also in the Statute of the State Statistical Committee, in the Statute on the Regional and City Statistical Department (Division) of the SSC of Azerbaijan.
- 99. Among the tasks of the regional bodies (defined in the Statute), dissemination tasks are also included, mainly publishing of statistics on the economic and social situation of the region, providing local executive authorities with statistical materials characterising social-economic and demographic condition of the territory.

3.4.1 Organization of Dissemination

- 100. The dissemination activities in the SSC are concentrated in the Statistical Information Division, in which 9 persons are working in two sections responsible for publications and data transfer to international organizations. The Statistical Information Division also manages the content of the website of the SSC, while the technical aspects are in the hands of the Main Computing Centre. The Statistical Information Division prepares the standards for dissemination, such as the unified design of publications, including the templates for regional publications. They also conduct other tasks, such as preparing press releases and providing answers to questions asked by data users.
- 101. Subject matter divisions bear the responsibility for the statistics that are disseminated, they prepare the content of the publications, press releases etc., they also answer questions posed by data users.
- 102. Regional offices are also involved in these activities; various types and forms of disseminations are applied, and contact with data users is made, partly on the basis of the specific conditions in the regions (e.g. regional TV, regional office own website etc.).

3.4.2 Users Involvement

- 103. The involvement of users in the preparation of the content of statistical outputs in the framework of the Programme of Statistical Works is ensured mainly via written consultations with key users such as the state authorities (ministries, National Bank etc.) before its submission to the Cabinet of Ministers for approval.
- 104. Ad hoc or occasional comments of users are taken into account when preparing new surveys, including the dissemination phase. They are usually received by phone; no formal procedure is in place to follow the treatment of their proposals as it is considered that the users can check the follow-up in the next round of the publications.
- 105. For the communication with the main data users the database of users was established, which serves partly for the dissemination of statistics as well as for related activities such as the newly established user satisfaction survey.
- 106. A TACIS project with Statistics Finland in 2000 contributed significantly to the organization of the communication with users of statistics, and also in the field of the design, structure, and content of the publications. The first user satisfaction survey was carried out at this period as a pilot exercise.
- 107. Taking into account the experiences made and also the need to formalize the reactions and summarize opinions of data users, the first real user satisfaction survey was organized in 2009. Responses were collected from 2151 respondents, which represented public authorities, research institutions, mass media, marketing, consulting and advertising agencies, financial institutions, enterprises in different activities etc. The questions covered mainly evaluation of data quality (completeness, periodicity, timeliness, reliability, comparability etc.), quality of data presentation, and satisfaction with activities of the SSC and its employees. The results of the survey were analysed, presented in newspapers and published for data users, and proposals obtained are now

- used in dissemination activities (e.g. press conferences). The extension of surveys, even to the general public (e.g. via web satisfaction survey) would certainly bring new ideas.
- 108. In the framework of the user satisfaction survey, special attention should be paid to universities, scientific institutions and high schools where teachers and students are very often using statistics for their work and studies. They would come with proposals for improvements and contribute to a more modern way of dissemination of statistics.
- 109. The user satisfaction survey will be repeated annually, the next round is planned for 2010, which will allow making comparisons with the previous results, and it will serve for further developments in this field. Adding questions on the use of various dissemination channels (web etc.) and their quality would be also beneficial.
- 110. The website allows also a very short and brief assessment of users related to the website itself. Each reader can express his opinion and get the summary of responses to this "satisfaction" question.

3.4.3 Products and Dissemination Channels

- 111. The SSC uses a catalogue of publications, a calendar of data availability and a calendar of press releases.
- 112. The catalogue of publications describes the main products of the SSC 30 publications in total (including the Statistical Yearbook and Classifications). They are published yearly and are available in Azerbaijan and English languages. The catalogue, which is available on the website, defines the content, publication dates, and prices of the publications. Statistical Bulletins are also included in the catalogue as an additional type of publications, having yearly, quarterly or monthly periodicity. They are available in the Azerbaijan language only.
- 113. Among the publications, the Statistical Yearbook can be considered as the key product of the SSC. It is distributed in the form of a paper publication and on the CD. 800 printed copies were produced (with certain decrease in the last period), of which about one third is distributed free of charge. Other publications have similar numbers of printed and free copies.
- 114. The calendar of release of statistical information informs about the availability of statistics for 27 fields (main indicators of the national accounts, indicators of transport, communication and ICT, population income etc.), the majority of them are released monthly. The dates of the data availability are decided by the Board of the SSC on a quarterly basis, the calendar is available on the website (also in English). Preliminary access to the statistics occurs in some cases, even if the rules for the pre-access have not been formalized.
- 115. The calendar of the press releases is available on the website (in June 2010 only in Azerbaijan language). The Board of the SSC on a quarterly basis decides the dates of the data availability.
- 116. The press releases are published at usual daytime (until 11 am), e.g. CPI index is published at 9:30 am. The pre-announced dates are generally respected. Prior to the publication a multiple verification of the content is conducted internally.

- 117. The content of the press releases is the responsibility of the SSC; press releases do not include any political statements. The interventions of governmental and non-governmental institutions are considered as unacceptable. Preliminary access to statistical releases occurs in some cases, such as GDP, CPI, and wages. The rules for the pre-access to press releases have not been formalized.
- 118. A wide range of statistics is disseminated in the form of statistical publications, which are considered as the main form for dissemination of statistics. Great attention of the SSC and regional offices is paid to the structure, content and presentation of statistics in this form.
- 119. In the recent period the amount of statistics disseminated on the website has been increased significantly. The website of the office is covering approximately 90 percent of the statistical outputs. Press releases are available on the website as well as the Statistical Yearbook and information related to statistical fields. The website includes also some information on the SSC of Azerbaijan, including legal framework, news etc.
- 120. Statistical data on the website are presented in the PDF format and in recent time also in the EXCEL format; the latter allows the users immediate further work with the statistical data including calculations and data analyses.
- 121. The target should be an on-line public database as a modern tool for dissemination of statistics. In corresponding software products like PC-axis, the user can define on-line their needs (indicators, regions, reference period, breakdowns etc.) and they receive data from the database immediately. To build the database and fill it with data and metadata will certainly need investments in human capacities and IT.
- 122. The presentation of statistics on the website should be more attractive; further efforts are needed for more interesting, illustrative and explanatory presentation of data on the website that would better draw attention of users and will contribute to more extensive use of official statistics.
- 123. The staff involved in the production of statistics and dissemination activities provides comments and interviews to the media (TV channels, press conferences etc.). Press conferences are organized approximately once in three months. Specific training for the staff on presentation in the media has not been arranged as the contacts with the representatives of the media are considered as working well.
- 124. Besides the press releases, meetings with data users are organized in the form of training seminars, such as in April 2009 on Foreign and Domestic Trade. These activities are planned to continue after the holiday period.
- 125. Regional bodies are preparing their own paper publications; some of them have their own website. They submit statistics and communicate with the regional administration, answer the questions of the data users, including students and teachers; some of them can use regional TV channels as well.

3.4.4 Equal access to Statistics

126. Statistics is disseminated free of charge. The price of the publications covers only printing costs, paper etc., therefore it is quite low. The income from the sale of the publications is transferred to the state budget.

- 127. Only in the case of specific needs beyond the Programme of Statistical Works, the SSC has the right to sell statistical information to users (except executive, legislative and court authorities and the mass-media). According to the Law on Official Statistics, the work performed additionally has to be paid for by the user and shall be transferred to the state budget. In practice, the SSC is rarely asked to complete this type of work, the price of this work only includes the paper and printing costs. The income is transferred to the state budget. The practice is therefore similar to the usual preparation of data publications.
- 128. State administration such as ministries receive the data as soon as they are produced, in some cases the pre-access to press releases has been given to some important data users. According to the law it is important that access is assured for all the users at the same time. However, for the moment there is no clear policy concerning release time, when there is no press release or data are not included in the calendar of release of statistical information, and how to handle pre-access. Therefore the general availability of statistics should be based on the complete availability calendar with strict rules that have to be respected. For advanced statistical offices, the website is by far the prime channel for providing external users with information on statistical products therefore to ensure the practical implementation of equal access, the website could serve as an ideal tool for the dissemination of statistics at one specific moment determined in advance.

3.4.5 Metadata, Clarity of Statistics

- 129. Statistical tables are supplemented by comments when the explanation is considered necessary (e.g. in case of methodological changes or modifications of classifications). Methodological information is concentrated e.g. in a specific part of the website (English version not accessible).
- 130. Some sectoral statistical data published on the website include satisfactory methodological notes while the others as well as the Statistical Yearbook on the website do not include definitions of variables or any other explanations and comments.
- 131. Standardised information on the methods and procedures used is thus not generally available for the public. Definition of variables, information concerning data quality/data production, explanation and comparison with similar variables should be added.
- 132. In case of some misinterpretation of the official statistics the SSC is obliged to intervene, the reactions are ensured via the same media that raised the problem. A proactive approach of the SSC is used in the cases of unreasonable criticism of statistics; the reactions are initiated and authorized by the SSC.
- 133. In rare cases the data already disseminated had to be corrected afterwards. The corrections were explained when final data were presented in the new version of the publication.
- 134. Preliminary results are disseminated in some publications. The users usually understand the difference and reasons for the difference between preliminary information and final data as they already have some experience with statistics.

- 135. As a result of a more extensive prospective use of Official Statistics, clarification of the need for revisions, of the difference between preliminary and final data etc. will be needed, especially for less experienced users. This category of users may have difficulties understanding the reason for revisions, the reasons for differences between timely estimates and final more precise data etc. It must be explained that revisions are usually an integral part of statistical practices.
- 136. For the transparency in this context and improvements in statistical literacy, the adoption of a revision policy of the SSC is recommended. The revision policy would contain the explanation of the need for revisions, of differences between preliminary and final data, of planned revisions; it would also include rules for treatment of non-planned revisions, etc.

3.4.6 Statistical Analysis, International Standards, Annual Reports

- 137. The SSC provides analyses usually for the state administration; short analyses are included in bulletins and press releases. Analytical work is a part of the activities of subject matter departments, with significant share mainly in national accounts and other more complex fields of statistics. They are used to check the data quality as one of the final stages in data production. Press releases, publications, analyses are purely statistical products; they do not include any political assessment and comments.
- 138. Efforts of the SSC are made to adhere to international standards, terminology and definitions and to the use of worldwide-accepted standards. The SSC joined the General Data Dissemination Standard of the IMF; it already has reached a certain progress in accession to the Special Data Dissemination Standard. Metadata are respecting the SDDS and the introduction of SDMX is in the planning phase.
- 139. Annual reports on the fulfilment of the tasks and the implementation of the five-year Programme are submitted to the Government and the President of the Republic respectively. The Parliament is also periodically informed about the activities of the SSC (as a part of the report of the government).

- 140. The aim of official statistics in Azerbaijan is to respond effectively to the needs of users. The scope of the dissemination activities is quite extensive, covering variety of types and channels serving the users to get the information satisfying their needs.
- 141. A wide range of statistics disseminated in the form of statistical publications is used mainly by state administration and some key users. In recent period the amount of statistics disseminated on the website has increased significantly. Data on the website are both in the PDF and EXCEL format.
- 142. More attractive, illustrative and explanatory presentation of statistics on the website would serve to more extensive use of statistics mainly from the side of the general public.
- 143. The target should be an on-line public database such as PC-axis as a modern tool for dissemination of statistics which allows the user to generate tailor-made tables and figures, a search tool which makes it easier to find what the user needs, including

- extended metadata and methodological information on statistical products. It will certainly require investments in human capacities and IT. The subject matter coordination of this development and implementation should also be ensured.
- 144. The core of the information disseminated consists in figures, accompanied only in some cases by related comments and explanations. Standardised information on the methods and procedures used is thus not generally available for the public. Definition of variables, information concerning data quality/data production, links between preliminary and final data etc. should be added. This information is very useful and if inserted closely to the data, it is easier for the user to understand the information and the misinterpretation of statistics can be thus avoided.
- 145. A more user-friendly approach (e.g. using more graphics) might attract not only the categories of perspective users of statistics (students etc.), but also users in general and lead to a more extended use of official statistics in the country.
- 146. Improvement of the existing style of dissemination to even more active communication, a regular continuation and development of already established user satisfaction surveys (including its extension e.g. to universities) and or website satisfaction surveys would reveal more needs and useful extensions.
- 147. Activities targeted on various types of users could be designed according to their characteristics, profiles, needs, knowledge and their experience with official statistics. For example, a specific yearbook for students, invitations for students or other users to interesting presentations in SSC or in regional statistical bodies, competitions for students and similar initiatives related to young generation would improve statistical literacy and lead to a better understanding of the importance and the role of statistics in a democratic society. At a high school level, statistics is used in study programmes with empirical aspects, and for university students in particular micro data from household surveys might be used for statistical analysis and assessments.
- 148. The equal access for users is defined in the law on Official Statistics. It is important to ensure that all groups of respondents have access to the same statistics at the same time. The website could serve as the most suitable tool for this purpose. Statistical release must be defined as well as under which conditions pre-access can be given. The precise and uniformed timing of all press releases is also recommended (e.g. always at 10 am).
- 149. Therefore there is a need for elaborating a complex dissemination policy as an official document of the office. It would define the main strategy, principles, tools and rules for dissemination of statistics and communication with users. It should reflect also IT developments and users' needs, including improved metadata, user-oriented services etc.
- 150. Similarly, for the reasons of transparency and clarity of the procedures related to data revisions, it is recommended to elaborate and to adopt as an official document of the SSC a revision policy explaining the main aspects of revisions.

3.5 RELATIONS WITH MAIN USERS OF STATISTICAL INFORMATION

3.5.1 Relations with the Central Government

- 151. The central government in Azerbaijan is considered as the main user of statistics for planning and decision-making in the country. Therefore the SSC pays great attention to the co-operation with ministries and other administrative bodies in their dual role of data producers and users of statistics. The SSC has a good position among the government bodies as an independent institution fulfilling its mission in a satisfactory manner. The representatives of the ministries confirmed good cooperation and contacts with the SSC.
- 152. The Programme of Statistical Works is prepared in interactive consultation with the central government bodies before it is agreed by the Cabinet of Ministers.

 Representatives of the ministries are members of the Statistical Council and the Methodological Council of the SSC. Because of their involvement in these activities and bodies they can directly influence mutual statistical production and co-operation. Their proposals for improvements are oriented mainly to some extension of the availability of the data (e.g. quarterly national accounts from expenditure side, more detailed desegregation of ICT data), of the data periodicity or improved documentation (e.g. BoP). The SSC has started the preparation of agreements related to the exchange of data between statistical and other bodies.
- 153. Central government bodies are receiving statistical publications as well as the necessary additional information they need for their work. The communication between both actors functions very well and the assessment of the services provided by the SSC is generally very positive.

3.5.2 Relations with Local Governments

- 154. The regional statistical offices (83 regional offices with the staff of 1040 employees) are in close contacts with the representatives of the regional and local administration. The regional offices receive all the copies of the statistical publications of the SSC.
- 155. The staff is involved mainly in the data collection activities and usually receives the copies of the statistical questionnaires collected by other local bodies (e.g. subordinated to the ministries) or provides methodological assistance to them.
- 156. The regional statistical offices provide statistical information to regional and local bodies in the form of usual statistical outputs and react to the questions and needs of regional or local bodies (regional analyses). They also cooperate with other institutions in the regions.

3.5.3 Liaison with Research Institutions and Universities

- 157. The State Statistical Committee is co-operating with research institutions and universities. They are represented in the Statistical Council and in the Scientific and Methodological Council. According to the State Programme on Improvement of the Official Statistics for 2008-2012, the University of Economy is responsible for the preparation of the new sampling rules of the SSC.
- 158. The SSC staff teach at higher education institutions, either in Baku or in regions. In cases of specialized studies in statistics, the students pass 2 traineeships in the SSC; the SSC staff as members of the examining committees participates in their final exams. The universities receive copies of the SSC publications. Students contact the SSC or regional bodies with questions related mainly to their studies. Students also participate as interviewers for the population census.

3.5.4 Relations with some other Users

- 159. The Central Bank of Azerbaijan (NBA) is in regular and good contact with the SSC both as data provider and as user of official statistics. NBA expressed its satisfaction with the statistics provided by the SSC. In some cases more detailed data (e.g. for oil industry, where the statistical confidentiality prevents the data availability), extension of some statistics (e.g. quarterly assets and liabilities by foreigners and residents), or more timely data (CPI) have been proposed to the SSC. The SSC aims at satisfying the demands of external users; e.g., the SSC is preparing an agreement with the NBA related to the exchange of the data.
- 160. The representative of the World Bank explained that the WB would like to have more disaggregated statistics on the financial sector. The representative also expressed a wish to receive more national accounts data for analytical and forecasting purposes.

3.5.5 Relations with Mass Media

- 161. Statistical information is provided to the media regularly in form of monthly and quarterly reports, which describe the economic and social development of the country. Press releases inform on statistical products such as economic indicators once they are released. For representatives of the mass media, quarterly press conferences are offered.
- 162. The chairman of the SSC regularly invites journalists to his office for bilateral discussions on statistical data. Specialists of the SSC discuss their statistical results with journalists and other users. Statistical information is provided to the media on demand by e-mail or in printed form. Workshops for journalists are offered on new statistical indicators and products.
- 163. Experts from the SSC provide comments and interviews that are broadcasted in TV programmes. Press releases are usually prepared by experts of the relevant division under the supervision of the division management. Training of experts for their work with the media is not established.
- 164. Journalists make use of the release calendar to plan their work. Journalists use the SSC website to search information and to download reports. However, the impression given

- by media representatives was that an active interest in statistical products by the media and the public is limited or even rather the exception.
- 165. The media landscape seems to consist of relatively large number of TV channels (at the moment: 7 central plus various regional channels) but only small to medium sizes print media; it was said in the meeting with representatives of the mass media that the largest newspapers only print around 7000 to 8000 copies. Thus, given the rather fragmented structure of the media sector, it is a challenge to ensure that statistics get a widespread dissemination.

- 166. Very good relations of the statistical bodies with the government institutions at central and local levels, including extensive dissemination of statistical information and permanent communication, contribute significantly to a very good reputation of the SSC and of regional statistical bodies in the country.
- 167. Similarly, in the case of the NBA and of some other institutions, the relations with the SSC and data providing are perceived to be working well, the needs of the users should be further assessed and addressed.
- 168. The co-operation with research institutions and universities, their involvement in the methodological works related to statistical production and, on the opposite side, the participation of official statisticians in the educational process are considered as essential elements for statistical development. Special attention should be paid to more attractive dissemination of statistics for students.
- 169. Given the rather fragmented structure of the media sector, a dissemination policy is to be developed that ensures the widespread dissemination of official statistics.
- 170. The documentation of the service for the media and a monitoring of the role of media and of the website are recommended. For example, the number of press releases, the number of circulated copies of important publications like the yearbook, the number and quality of contacts with journalists, and the number of radio/TV programmes which feature contributions from staff members of the SSC should be documented. Similarly, quantitative information on the response to press releases, on the reporting of statistical indicators and products, the number of hits of certain indicators and products on the SSC website etc. should be documented.
- 171. The training programme of the SSC should contain courses on writing press releases and on dealing with the media.

3.6 International Cooperation

- 172. The basis of the SSC's international activities is outlined in Article 5: The SSC of Azerbaijan shall, by the established procedure and in accordance with international legal standards, establish links with the statistical authorities of foreign countries and with international organisations on matters within its competence, conclude cooperation agreements with them, acting as a representative of the Republic of Azerbaijan, organise conferences, meetings and seminars at international level and take part in the meetings organised by intergovernmental and non-governmental international organisations, according to international agreements, receive statistical information from foreign countries with a view to comparing the economic, demographic, social and environmental situation of the Republic of Azerbaijan with that of other countries.
- 173. There is a sector for international co-operation and co-ordination of statistical work within the division of co-ordination of statistical work in SSC of Azerbaijan. This sector has 3 staff members.
- 174. The SSC has signed agreements on international co-operation with a number of countries: Turkey, Sweden, Uzbekistan, Bulgaria, Kazakhstan, Russia, Moldova, Jordan, Tajikistan, Hungary, Belarus, Germany and Iran. An agreement on the exchange of statistical data on external trade was signed with Eurostat in 1999.
- 175. The SSC has benefited from several co-operation projects with SIDA/Sweden, EU (food security programmes and other EU programmes), ILO, USAID and UNICEF. For the moment the major project is the EU funded project: Twinning Assistance to the SSC of the Republic of Azerbaijan in the field of national accounts, non-observed economy, business statistics and producer price index. The project has a budget of 900 000 Euro. This project started in November 2009 and will end in February 2012.
- 176. The SSC encourages the participation of employees in international conferences and seminars. Participation is partly funded by international organizations and partly sourced from funds of the SSC.

Assessment

177. The SSC is rather active regarding international cooperation, and encourages employees to participate in international conferences and seminars. This is very important in order to ensure improved harmonisation with international practises and requirements. A major EU funded twinning project will last from 2009 until 2012, but it was noted that the SSC would need additional support in some specific areas. The English language skills of the staff must be improved in order to benefit from participation in international conferences and in order to better understand European and other international legislation/documentation.

4 STATISTICAL DOMAINS

4.1 METHODOLOGY, CLASSIFICATIONS

- 178. The Coordination of the Statistical Works Division plans and coordinates the methodological activities.
- 179. The Scientific-Methodological Council, in addition to SSC staff members, includes a number of experts from the Ministry of Economic Development, the Ministry of Finance, the Economic Institute under the Academy of Sciences, and the State Economy University. The Council deals with a wide range of methodological issues such as new methodologies and standards, as well as the improvement of statistical products. Its constitution ensures that the user perspective is taken into consideration as far as corresponding issues are concerned.
- 180. The Coordination of Statistical Work Division has developed guidelines on methods of official statistics such as data processing, analysis, estimation, and questionnaire design. It also offers training for subject matter divisions, e.g., on new methodologies. The Scientific-Research and Design Technological Centre deals with survey design issues.
- 181. Publications on statistical results usually have a section on methodological issues that inform users on related aspects of the statistical product.
- 182. The State Programme on Improvement of the Official Statistics for the period 2008-2012 obliges the SSC to use modern scientific achievements in the statistical practice, to update the methodological basis for rapid calculation of indicators which characterize the social-economic development of the country and the activity of the central executive authorities, to increase of quality of the official statistical data, to reduce the response burden, to improve the methods for guaranteeing statistical confidentiality, to give the users access to the applied statistical methods, and others. All these tasks are at least partly under the competence of the methodological unit and require its input.
- 183. The Law on Official Statistics makes it obligatory for institutions, enterprises, and organisations to use international classifications for the exchange of information. A large number of classifications has been translated and adapted for national use; the list of available classifications contains 26 entries.
- 184. Whereas the competence for the NACE classification and its adaptation to national purposes lies by the SSC, the assignment of NACE-codes to enterprises is a responsibility of the Ministry of Taxes. Workshops on the application of classifications for respondents have been organized by the SSC. Different seminars were organized for the respondents by the SSC of Azerbaijan on applying of classifications. Regional seminars were organized for 8 districts in 2001, for 5 districts in 2004, for 4 districts in 2010. Local government organisations, as well as large legal entities or their representatives have participated in these seminars. Also the seminar on applying of economical classifications was organized for the inspectors of Ministry of Taxes by the SSC of Azerbaijan in 2009. Monitoring of coding of kind of activities of economical

- units on NACE were implemented during the survey on the assessment of the quality of register carried out in 2004, 2006 and 2008 in the frame of TACIS projects.
- 185. For revised classifications like NACE, CPA, and PRODCOM, correspondence tables are available. The transition to the NACE 2008 has been already implemented carefully.
- 186. The State Programme on Improvement of the Official Statistics for the period 2008-2012 obliges the SSC to carry out a series of tasks, which will result in improved classifications, and a more efficient use of them.

- 187. Representatives of the scientific community in the Statistical Council and staff members of the SSC who play a role in university teaching and research are indicators of the close contacts of the SSC with the scientific community. These close ties should be used for efficiently solving methodological problems and giving advice in methodological issues to subject matter units.
- 188. In projects such as the establishment of a quality management system, of a metadata system, or of databases or registers of administrative data, the methodological unit has to play a strong or even a leading role.
- 189. Methodological challenges are a number of projects imposed on the SSC by the State Programme on Improvement of the Official Statistics for the period 2008-2012. Concrete methodological tasks are
 - The provision of metadata for internal and external users,
 - The assessment of the quality of administrative data,
 - *In the context of online database service, the provision of disclosure control methods.*
- 190. A number of projects are foreseen in the State Programme on Improvement of the Official Statistics for the period 2008-2012 that will improve the compliance of the statistical products of the SSC with international standards.
- 191. A database on classifications is available in the SSC of Azerbaijan. Respondents can access the SSC website and download any classifications. The implementation of database tools such as search and subsetting functionalities in this database as well as explanatory notes is recommended which will improve the quality of coding and of statistical products.

4.2 DEMOGRAPHIC AND SOCIAL STATISTICS

4.2.1 Demographic Statistics

- 192. The current system in Azerbaijan for monitoring demographic processes is based on census data, which are collected every 10 years, and data on births, deaths and migrations. On the basis of these data updated population figures are estimated. Data on the natural and migratory movements of population are obtained on the basis of primary reports from the Ministry of Justice, Ministry of Health and the Ministry of Internal Affairs:
 - Record certificate on births (primary document of Ministry of Justice);
 - Record certificate on deaths (primary document of the Ministry of Justice, to which is attached a medical certificate on death, which is the primary document of the Ministry of Health (Form № AZS-106));
 - Marriage certificates (primary document of the Ministry of Justice);
 - Record certificate on divorces (primary document of the Ministry of Justice);
 - Statistical annexes to arrivals and departure documents (primary documents of the Ministry of Internal Affairs).
- 193. Civil act registration is carried out in accordance with the Resolution of the Cabinet of Ministers of the Republic of Azerbaijan on 31 October, 2003 № 145 "Rules for state registration of civil act" and are said to be consistent with the recommendations of the UN.
- 194. The Demographic sector within the Demographic and Social Statistics Division as well as the related division of the Main Computing Centre is responsible for collecting, processing and analysing demographic data, and preparing them for publication. The two divisions have altogether 14 employees. The Demographic sector of the Central Office produces demographic statistical indicators as well as social statistical data and related statistical publication (e.g. "Women and men in Azerbaijan", "Children in Azerbaijan", "Youth in Azerbaijan"). All are equipped with PCs.
- 195. The division uses seven reporting forms (two monthly, three quarterly and two annual) to produce its statistics. Vital statistics comes from regional registry offices of the Ministry of Justice via the regional statistical offices where data are checked and coded, to the Main Computing Centre for further processing. Data on migration are transmitted from Regional passport services of the Ministry of the Interior to the regional office, for coding and transfer to the Main Computing Centre (MCC). On the basis of vital and migration statistics the population size is estimated quarterly at the regional level and monthly at national level.
- 196. Coding of causes of death is realized by experts of Ministry of Health on the basis of "International Statistical Classification of Diseases and Causes of Death" X rev. of the WHO (ICD-10) in the MCC.

- 197. The following annual data are processed:
 - births by the age of mother; by age, marital status of mother and order of birth; by age of mother and father; sex of the child and mother's age; the days and months of births, etc. Based on a comment by a UNICEF representative, it was noted that the definition of live births, as applied by the Ministry of Health, is not compliant with the WHO definition. Unfortunately the methodological explanations available on the web are only in Azeri. According to UN Demographic Yearbook the main difference is that infants born alive of less than 28 weeks' gestation, of less than 1000 grams in weight and 35 centimetres in length, who die within seven days of birth, are excluded. The effect of this difference is that there are fewer registered live births than according to WHO definition and thus also lower infantile mortality rate than according to this definition. Actually, this last issue is illustrated in the booklet Women and Men in Azerbaijan 2009 where a footnote to table 1.13 Infant mortality mentions that the average rate of infant mortality was estimated to 43 per 1000 live births, based on the "Demographic and Health Survey" whereas the official figures in the table varies around 11 - 17 per 1000. It can also be mentioned that the average figure on infant mortality as given by UN Demographic yearbook was 11.6 in 2007, whereas the figures in table 1.13 gives 11.5 for girls and 12.6 for men. During the discussions it was also mentioned that the registration of births could be delayed in some parts of the country. Thus the issue of quality of birth registrations needs to followed up and new practises implemented.
 - mortality on sex, number of lived days and months, birth and mortality on calendar months, sex of dead children during 0-6 days, on stillbirth and main cause of death) and etc;
 - marriages by the age at marriage, marital status before marriage;
 - divorces by sex; by age and duration of marriage; by days and months, the number of common children:
 - migration by age and sex, sex and education, by marital status, sex and year of birth, place of birth. After the publication of the results of the 2009 census, new estimates of the data on immigration/emigration have been calculated and published on the website.
- 198. It was informed that a new State Migration Service had been established in 2007 in order to improve the quality of the registrations of migrations. The focus in the first phase had been to improve registrations of immigrations. In the future the registration also of emigration and internal migration will be addressed more and more.
- 199. Statistical data on the population are published in yearly bulletins, in the monthly report on "The socio-economic development in the country", in the yearbook "Statistical Indicators of the Republic of Azerbaijan", "Demographic Indicators of the Republic of Azerbaijan", "Children in Azerbaijan", Women and Men in Azerbaijan", "Family in Azerbaijan" and other summary yearbooks.
- 200. The survey on "Demography and healthcare" was conducted in 2006 with technical and financial support of the USAID and UNICEF, and the results of the survey have been presented to the international organizations, governing bodies of the country and users. A similar survey is planned for 2011, and the representative from UNICEF expressed

- major concerns that this survey is going to be organized by the Ministry of Health instead of the SSC, as in 2006. Normally, such surveys should be handled by a professional and independent body, such as a National Statistical Office, in order to ensure proper preparation and performance.
- 201. A global information network between the SSC of Azerbaijan and the Ministries of Justice and Health is being designed to improve the registration system of births and deaths. At the moment SSC of Azerbaijan is connected to the automated interdepartmental "Entrance-Exit and registration" data search system (the Ministry of Internal Affairs is responsible for that system). The SSC of Azerbaijan is also taking initiatives to influence and utilise this system; this would give the SSC access to a more important and comprehensive set of data on migration. The SSC is connected to the Automated Registration Information System of the Ministry of Justice (Acts of Civil Status) and after finishing of some technical work on this system will gain access to data on natural movement of population. These data-sources will be used for demographic statistics and population censuses.
- 202. Issues discussed, mainly linked to the population census, but also relevant for population registration in general, were the principles and practices applied for registration of place of residence. It was made clear that the internally displaced population from the occupied territories (some 700.000 +) was registered as living in the area within the occupied territory where they came from, and not where they now live. This is of course not a good practice for local demographic analysis and planning, but apparently there were some local adjustments that took into account the reality for planning of schools etc. Apparently, those counted as still living in occupied territories, were still included in the total population of Azerbaijan, and thus there is no influence of important national figures as for example the GDP per capita. Another issue is to what extent the population living abroad actually are being counted as part of the population of Azerbaijan. According to the census form time limit was less than 12 months, which correspond to UN and EU recommendations.

203. The SSC produces the main demographic indicators and has an extensive dissemination programme in this area, through several publications and with most data accessible on the web in the PDF format. There are some issues related to the quality of migration data (both emigration/immigration and internal migration) and to the definition of live births. Data on external migration has been partly missing for the last years but estimations backward will be done on the basis of the recent census. Furthermore, a new State Migration Service was established in 2007 which should gradually give better data on immigration and eventually on emigration. The definition of live births should urgently be adapted to WHO definition, which requires action by the Ministry of Health to change the data collection routines. On the basis of an initiative of the SSC, recent contacts between the SSC and the Ministry of Health aim at preparing corresponding changes. The principles and practises for registering those who are considered as living in the country might also have to be clarified.

- 204. Several data-bases are planned and/or under way that will increase the quality and efficiency of demographic statistics and censuses. The SSC will in principle have access to these electronic data, both transaction data and status data, and will need to develop a new production system for demographic statistics when data are of sufficient quality.
- 205. It is highly recommended that the SSC takes an active role in this development to ensure that the needs of official statistics are covered in contents and quality of the databases.
- 206. The planned Survey on Demography and Healthcare is an important supplement to demographic statistics in general and can also serve as a quality check. Thus it is advised that the responsibility for this survey should be in the hands of the SSC who has the competence for designing such a demanding survey and ensure its independent implementation and analysis.

4.2.2 Population Census

- 207. The responsibility for the population census was placed in separate population department directly linked to the chairman and not linked to the area of demographic and social statistics which is often the case in many NSIs.
- 208. The population census was held 13-22 April 2009, based on a Decree of the president of the Azerbaijan Republic on June 7, 2006.
- 209. The design of the census was based on UN Recommendations and was well planned through user consultations, a pilot survey, recruitment of census staff and training and raising public awareness and motivation. The census operation involved some 28.000 persons.
- 210. The census operation went quite well in general, even if some refusals were registered. The census form required manual coding and registration and thus the final preparation of the census results will take time, even if some preliminary figures are planned for July 2010 and some more figures in September.
- 211. The issue of registration of place of residence was discussed (see also demographic statistics) and apparently persons displaced from the occupied territories are still in principle considered as living there and not where they de facto now are living. This is based on a political decision.
- 212. The census operation could not utilise any sort of address register or population register, because such registers are not available in Azerbaijan, but it was foreseen that in future if possible the SSC might cooperate with other public bodies/ministries in order to use any registers available.

- 213. The population census 2009 which has begun publishing results, was well prepared and performed and will be a valuable source both for updating sampling basis and providing and extensive overview of different aspects of the Azerbaijan community.
- 214. The SSC might already now start developing a strategy for simplifying future census operations by the use of different types of registers such as for addresses, property, population, in cooperation with relevant authorities.

4.2.3 Household Survey

- 215. Production of statistics on income and living conditions and final consumption, which is based on household surveys, is ensured by the SSC.
- 216. In the Household Budget Surveys Statistics Division 5 persons are responsible for the complex household survey. Their work contains the development of methodology, preparation of the questionnaire, and specifications for programmers including checks and outputs, then the organization of the survey, data analysis and dissemination. All are equipped with PCs.
- 217. The last census data (1999) of all the households on the territory of the country were put into a database of households that was established by the SSC and now is used as a frame for household surveys. The database includes codes and area of the census department, instructor station, counting station, surname, name, patronymic household head, number of household members, and the full address of the household, including the zip code.
- 218. Since 2001, with the assistance of experts from the WB, a survey of household income and budgets has been conducted quarterly. Until 2006, a complete rotation of the sample was applied and 100% of households were replaced quarterly. 2.200 households were asked to complete the questionnaires by 65 interviewers in the regions.
- 219. Since 2006, a new methodology was introduced, the rotation system has been replaced by the stability approach, and the sample has not been modified with the exception of households, which moved away or their members died. In those cases, new households replaced the previous. The number of households increased to 4250, and the number of interviewers to 125.
- 220. Among the 4250 households, 46% are coming from rural population and 54% from urban regions. The survey is based on a multistage random sample.
- 221. On the basis of the new census results (in 2009), a new sample frame will be created.
- 222. The questionnaire has approximately 3000 indicators, on characteristics, income, living conditions, expenditure and consumption of the households.
- 223. The interviewers receive a manual/handbook for the survey and a training programme is organized for this purpose. In November, the list of households is distributed among the interviewers, and then they contact the households and check their readiness to answer the questionnaire.

- 224. Each interviewer collects data from 34 households. The willingness to respond the questions (also on the basis of detailed evidence of expenditures) is higher in rural parts, while in the urban regions about 4 households from the above-mentioned sub-sample are not ready to co-operate. In these cases, they are substituted by new households (on the basis of a pre-defined procedure). The interviewers usually collect data on paper questionnaires and then they put it into the computer. The data are checked visually by the interviewers, then by supervisors in the regions and afterwards in the main computing centre.
- 225. The households are receiving bonuses (very low) for their answers; the increase of the bonuses is planned in the near future as it can help to improve the response rate and the quality of the data.
- 226. Key indicators (income, consumption and expenditure per capita, and the level of poverty) are calculated in accordance with methodological recommendations of Eurostat and the WB. Among the main users, price statistics (for weighting scheme) and national accounts are widely using the outcomes of this survey.
- 227. Starting from January 2002, the COICOP classification was used in national statistics and it has been used in this survey.
- 228. The main data on income, living conditions, etc., are included in the Statistical Yearbook, in specific yearbook "Main results of household budget survey in the year 2008", in some other publications, e.g. "Families in Azerbaijan", "Children in Azerbaijan", "Women and Men in Azerbaijan". They are also disseminated via the website, although a specific section on income and living conditions among the sectoral data presentations is missing. A bulletin with indicators on improvement of dwelling conditions is issued annually.
- 229. Statistics of income and living conditions according to the EU legislation is now studied in the SSC, the aim is to prepare its implementation in the near future. The need to cover important information based on the EU standards on disposable income, social exclusion, pensions and living conditions will need further efforts and investment. Plans for the future are envisaged, mainly in the form of technical assistance from other countries, e.g. from Bulgaria.

- 230. The household statistics produced by the SSC is a very important source for other statistical fields (national accounts, prices) and for the assessment of the social situation in the country. This multipurpose use requires statistics of a very good quality; therefore the efforts of the SSC are made to respond adequately to the users need.
- 231. The burden on households in the case of such a complex questionnaire is quite high; support of their involvement in the form of an increased bonus might be helpful.
- 232. Further initiatives are planned to adapt the survey to the EU standards, mainly the SILC regulation. It will certainly need further investment and support, mainly in the field of methodology and capacities. Methodological assistance in this field is required from the EU with the involvement of a highly specialized experienced staff.

4.2.4 Labour Market Statistics

- 233. The Labour Statistics Division is responsible for collecting and processing data on labour and preparing them for publication. The division comprises 6 staff members and has 6 PCs; the Labour Statistics Data Division of the MCC has further 10 employees.
- 234. The system of indicators on labour statistics is designed in accordance with the Labour Statistics Convention (№ 160), the Recommendation (№ 170) of the International Labour Organisation, and the objectives of the State Programme on Improvement of Official Statistics and the Programme of Statistical Works. The main sections of Labour Statistics are: (a) Economically active population, employment, unemployment and visible underemployment, (b) Structure of the economically active population, (c) Average wages/salaries and hours of work, (d) Structure of wages/salaries, (e) Costs of labour.
- 235. The division uses 11 monthly, quarterly, half-yearly, and annual forms. The data on quantitative and cost indicators are compiled in accordance with National Classification of Economic Activities and Employment, which is based on the international classifications ISIC-rev. 3 (NACE 2002) and ISCO-88.
- 236. The main sources for statistics on the labour market are (a) administrative sources or statistical reports submitted by enterprises and organizations and (b) surveys such as the labour force survey.
- 237. Starting in the third quarter of 2005, a household survey of employment has been conducted on a regular basis. A regionally stratified random sample is taken in each quarter. The sampling frame has been the population census 1999. The collected data comprise the economically active population including the unemployed and breakdowns according to the marital status, the gender, the educational attainments, the distribution on age groups, and others. The quarterly sample size has been increased from 3200 in 3rd quarter 2005 to 4725 in 1st quarter 2010.
- 238. Data on registered official unemployment are submitted to the SSC by the Ministry of Labour and Social Protection on a regular basis.
- 239. A number of surveys have been conducted during recent years, some of them in cooperation with international partners. These surveys are partly based on sampling.
- 240. A sample household survey on the "Studying the cost of labour force in Azerbaijan" was conducted in September 2004 supported by TACIS 8. The results of survey have been published in Azerbaijani and English.
- 241. In the period 2006-2008, the following sample surveys have been carried out: The survey "Studying of the structure of wages" was conducted. In addition, surveys "Studying the use of child and women labour in Azerbaijan" and "Economic activity of population" by economic regions and country in whole have been conducted. The results of the surveys "Studying of the structure of wages" and "Studying the use of child and women labour in Azerbaijan" have been published in Azerbaijani.
- 242. For the survey "Child labour" and for the development of the database on child labour (2005 –2006), financial assistance was received from the International Labour Organisation (ILO).

- 243. Special attention is given the non-observed economy: since 2001, pilot surveys focusing on various aspects of the labour market (informal employment, underemployment, etc.) have been conducted. Starting in the third quarter of 2005, a household based survey of employment has been conducted on a regular basis. In this way, year by year the database of non-observed economy continues to grow. Additional data on informal employment will be obtained from the results of the labour force survey.
- 244. In accordance with the programme on improving of Official Statistics, as part of the Tacis "Statistics 6" Programme, the sampling pilot survey on the "underemployment of the population" by households was conducted in July of 2004. Results of the survey on wages of separate categories of workers by occupations and posts have been published in Azerbaijan. In 2005 the following sample surveys have been carried out: "Studying the use of child labour in Azerbaijan", "Studying the number and incomes of the population occupied in informal sector of economy", "Studying the non-observed labour incomes of the persons occupied in the national economy" and "Wages of separate categories of workers by occupations and posts according to fulfilled time".
- 245. Further sample surveys conducted during the past 10 years by the Division of Labor Statistics include "Unemployment of the population", "Studying the use of child and female labour", "Studying the structure of wages", "Working Hours", "The cost of labour by employers in non-agricultural economy", "Economical activity of young people (under 30)", "Study of informal employment in the households", "The spent hours and average wages/salaries of workers in occupations and jobs", "Economical activity of population".
- 246. The State Programme on Improvement of the Official Statistics for the period 2008-2012 obliges the SSC to carry out a series of tasks, which will further align with international recommendations and widen the range of statistical products.
- 247. Labour market data are published with bulletins, a yearbook and by web-page of the SSC of Azerbaijan. The annual yearbook "The Labour Market" includes data from 2000 onwards on population and labour resources, employment by economic activity, turnover, labour conditions, labour market supply and demand, unemployment rate, wages and salaries, labour costs, and vocational education; breakdowns with respect to gender are available. In addition, a collection "Civil Servants" is published, containing data on the number of civil servants, their age, qualifications and other indicators.
- 248. The results on the SSC website are EXCEL and PDF-files; the statistics are accompanied be methodological descriptions and explanation. Most results are yearly data, covering the period from 1995 till 2009.
- 249. The meeting with external partners confirmed that there were good relations with users of statistical indicators and products related to the labour market.

250. For performing the household survey used to collect labour force data, a regionally stratified random sample is taken in each quarter; the sample size has substantially been increased during the last years. The origin of the sample frame has been the previous population census; improvements on the sample frame such as a wider source of data besides those from population censuses is recommended. In addition, a rotating

- panel design has proved advantageous for such surveys and should be considered by the SSC. The quality of the sample frame is crucial and should be documented.
- 251. For various surveys, the business register is used as the sample frame. Again, the quality of this register is crucial for sample surveys and monitoring of this quality and measures for the quality and for improvements of the register are recommended.
- 252. The role of administrative data, the sources and the corresponding metadata should be described in detail. In the future, the use of administrative data from the State Protection Fund might improve considerably the efficiency and quality of labour statistics.
- 253. The users of labour statistics, whom the assessment team met, expressed great satisfaction with statistical indicators and products and also the service provided by the SSC. However, there is space for improvements: more detailed metadata such as standard documentations are needed to inform the users about the statistics and their quality; more detailed and tailor-made breakdowns should be offered; the results should be delivered in a format that can be basis for the users own analyses, e.g., as Excel-sheets; the SSC website should be the main distribution channel.

4.3 MACROECONOMIC STATISTICS

4.3.1 National Accounts

- 254. The National Accounts Division (NAD) comprises 17 staff members divided in three units: The national accounts unit (seven persons), Non-observed Economy (three persons) and Financial Statistics (five persons), and two senior statisticians. All staffs are equipped with PCs.
- 255. The System of National Accounts 1993 (1993 SNA) provides the framework for the compilation of the Azerbaijan national accounts statistics. The definitions and concepts of the 1993 SNA are applied, including the delineation of the production boundary and the definition of assets and liabilities. The recommendations of the 1993 SNA are followed for the classification of institutional units, transactions and other flows.
- 256. The national accounts statistics is compiled and published based on international comparable classifications. The main economic activities, establishments and enterprises are classified according to the national classification of kinds of economic activities that is compatible with the European industrial activity classification (NACE) and a national classification of products and services that is compatible with the Classification of Products by Activity (CPA) is applied.
- 257. The NAD produces annual value added and GDP at current and constant prices by activity, annual expenditures of GDP at current and constant prices, annual components of value added and primary income by activity, annual sets of accounts for the institutional sectors (non-financial enterprises, financial enterprises, households, general government and non-profit institutions serving households (NPISH)) and rest of the world accounts.

- 258. The NAD produces quarterly GDP by activity and by expenditure at current and constant prices. Monthly flash estimates of GDP by activity at current and constant prices on cumulative basis are also compiled.
- 259. Regional estimates of GDP are being compiled. Input-output tables have been compiled for 2006 and are planned to be compiled for 2011. Supply and use tables (SUT) have been compiled regularly since 2004. The financial accounts have been compiled from 2007 onwards.
- 260. Timeliness in general is good. Annual data is published 10 months after the reference year, quarterly data within three months after the reference quarter. The monthly estimates are published around 15 days after the reference month.
- 261. GDP covers all non-financial transactions and all resident units, including producers engaged in unrecorded activities. GDP is compiled mainly from the production side, while the expenditure and the income approach are also applied (lack of data sources prevents complete construction of the accounts from the expenditure and income side). The contribution of the informal sector to GDP is estimated on the basis of special surveys and other sources, and included in the accounts by production activities.
- 262. Production output is valued at basic prices. Intermediate and final consumption are recorded at market prices. Own account production of agricultural products for own final consumption is estimated by use of market prices and owner-occupied housing is included by imputed rents. Gross fixed capital formation is recorded at market prices. Transactions are generally recorded on an accruals basis with the exception of general government transactions (expenditures and income) which are recorded on a cash basis.
- 263. The data sources applied for the production approach include reports on production and expenses submitted to the SSC by enterprises, employment and wage surveys, the National Bank of the Azerbaijan Republic (NBA) (banking and monetary statistics), the Ministry of Finance (the general government budget and reports on customs payments) and other specific sources for the accounts by activity, e.g. agriculture, industry, construction, transport, communication, retail trade and services and health and education.
- 264. The data sources applied for the expenditure approach comprise the Household Budget Survey (HBS), the retail trade survey, reports of income and expenditures of NPISH, reports on customs payments and import and export of goods and services provided by the customs authorities, and BoP data provided by the NBA. Efforts are made to align concepts and definitions with business and industrial statistics.
- 265. The final consumption of government is estimated from current expenditure reported in the annual state budget. Fixed capital formation is estimated from the expenditure of enterprises and organizations on capital investments, geological prospecting operations etc. Changes in inventories include changes in inventories of raw materials and supplies, goods for resale, finished products, and unfinished production. Net exports are derived from customs data that are adjusted by the NBA according to BoP recommendations, and includes also adjustments for "shuttle" trade.
- 266. Estimation of data in prices of the previous year: The data in current prices are deflated by the appropriate components of the available price indices. Final consumption of households is deflated by the CPI. Government final consumption is extrapolated using

- employment data. Imports and exports of goods and services are deflated using unit value indices for imports and exports. Gross fixed capital formation is deflated using mainly the price index for capital investment.
- 267. The non-observed economy (NOE) is estimated to account for 8-10% of GDP in 2010 compared to 14% in 2006 and some 25% in 2000. The decrease in the share of the NOE is explained mainly by the relative growth of the oil-and-gas industry, in which unrecorded activities are practically absent.
- 268. In accordance with the SNA, the NAD since 1998 includes estimates of the NOE in the national accounts statistics. Adjustments are made for non-observed production, production in the informal sector, own account production by households, distortion of data in statistical reporting, under-recorded production and non-response in surveys.
- 269. To improve the exhaustiveness and the international comparability of the national accounts statistics the NAD and other SSC Divisions work to identify the areas where NOE plays an important role and to compile estimates of the NOE activities. This work has been supported by a Eurostat project for candidate countries to increase the coverage of macroeconomic statistics. The main sources for estimating NOE are special surveys to sectors with a high proportion of informal activity/employment, SUT and I/O tables, household surveys and surveys on economic activity and labor market surveys.
- 270. Annual national accounts statistics are published in "National Accounts of the Azerbaijan Republic" (Azeri and English), the statistical yearbook "Statistical Indicators of the Azerbaijan Republic" (Azeri and English), "Azerbaijan in Figures" (Azeri and English), on Internet (www.azstat.org). Quarterly series are published in the "Statistical review" (Azeri). Monthly series are published in "The Socio-economic Development in Azerbaijan" (Azeri). The data are also published on Internet (www.azstat.org) and in SSC press-releases (Azeri).

- 271. The national accounts in general appear to be in line with the recommendations of the 1993 SNA and good practices are applied. The SSC subscribes to the GDDS of the IMF for national accounts and intent to apply for subscription to the SDDS, although the documentation appears not to have been updated since 2007.
- 272. The coverage of economic activities is adequate and appropriate methods are applied to estimate and include the NOE in the accounts. Although the SSC has not been able to obtain full information for international oil consortium operating in the country, the division of national accounts compile indicators by including estimates of unavailable data.
- 273. Government transactions are recorded on cash basis as the data received from the Ministry of Finance is provided on cash basis. The NAD is aware of this and considers the possibilities of retrieving data on accrual basis.
- 274. Annual series are available to users from 1995, quarterly series from 2001 from the SSC's website in pdf format. Pre-release calendars including revisions dates are available to the public. User demand have been expressed for longer time series, preferably in electronic and easy-to-use format, and for greater detail in particular for the financial accounts and input-output tables for analytical purposes.

275. A three years action plan for implementation of 1993 SNA and 2008 SNA was implemented in 2009. NACE Rev 2 is planned to be implemented for SNA indicators in stages during 2011-2012

4.3.2 Price Statistics

- 276. The prices statistics division in the central office comprises eleven staff members. The division is adequately equipped with IT resources; each staff member has his/her own PC connected in the LAN. In addition there are price collectors located in Baku and in the regions who undertakes the regular price collection.
- 277. The prices statistics division is responsible for the compilation and dissemination of the consumer price index (CPI) the producer price index (PPI), export and import price indices, the construction price index and services PPI for selected branches (e.g. transport, postal services, telecommunication). The SSC subscribes to the IMF GDDS, where more detailed documentation of the Azerbaijan CPI and PPI is provided. Only the CPI and the PPI have been assessed.
- 278. The staffs of the price statistics division is knowledgeable and participates in international seminars and training events which helps keeping the division up to date with the developments in CPI and PPI methods and practices.

4.3.3 Consumer Price Index

- 279. The scope and definitions of the CPI is broadly in line with international standards and recommendations as provided in the *Consumer Price Index Manual* (2004) (*CPI Manual*) and in the SNA. The coverage of goods and services corresponds to household final consumption expenditure in the SNA with the exception that imputed rentals for owner occupied housing is not included in the CPI. The CPI follows the national concept and thus does not include private consumption in Azerbaijan of foreign households visiting the country. Own account production for own final consumption (of agricultural products) is included in the weighting scheme.
- 280. The weights of the CPI is derived from the HBS, with some adjustments, and updated annually. The CPI is based on a large sample of approximately 130.000 individual goods and services priced monthly (involving about 100 price collectors), distributed on 565 elementary aggregates. The sample is kept up-to date and includes also "difficult to measure" items such as e.g. insurances and financial services.
- 281. The calculation and aggregation methods (COICOP) are in line with the recommendations of the *CPI Manual*; the elementary indices are compiled using geometric means. The weights of the preceding year are linked into the CPI of April the following year. Missing prices and seasonal items are imputed according to international recommendations. Price collectors are trained and provided with guidelines to perform quality adjustments during the price collection.
- 282. The CPI is published within three days following the reference month. A pre-release calendar is available to the users. The CPI and detailed sub-indices are published in printed publications, and the main aggregates are also available in pdf format from the SSC's website. Documentation is available from IMFs GDDS website.

- 283. The Azerbaijan CPI is in line with good practices and international standards and recommendations. The sample of goods and services is kept up-to date, weights are updated annually and calculation methods and classifications used are in line with international recommendations. The Azerbaijan CPI subscribes to IMF's GDDS.
- 284. Owner occupiers' expenditures are partially covered by including expenditures on maintenance and repair of dwellings. No estimate of the rental value of owner occupied dwellings is included, however. The prices statistics division may consider the development of a consumer price index for this post and whether this should be included in the overall CPI.
- 285. Long, fixed based indices are available from IMFs website but not from the SSCs website, which only includes monthly series of the current and preceding years.

4.3.4 Producer Price Indices

- 286. The scope and definitions of the PPI is in line with the recommendations of the *Producer Price Index Manual* (2004) (*PPI Manual*). The PPI covers industrial production (mining and quarrying, including the oil industry, manufacturing and electricity production). The weighting scheme is derived on basis of the output volumes from industry statistics. Some 2.500 prices are collected monthly from approximately 490 establishments.
- 287. The PPI is aggregated and published according to NACE and PRODCOM. The calculation methods are in line with the recommendations of the *PPI Manual*. The elementary indices are compiled using geometric means prices. Weights are updated annually and the new series linked onto the old one. Missing prices are imputed according to international recommendations.
- 288. The PPI is published within three days following the reference month. A pre-release calendar is available to the users. The PPI and detailed sub-indices are published in printed publications, and the main aggregates are also available in pdf format from the SSC's website. Documentation is available from IMFs GDDS website.

- 289. The Azerbaijan PPI follows good practices and international standards and recommendations. The sample of establishments and products is kept up-to date, weights are updated annually and calculation methods and classifications used are in line with international recommendations. The Azerbaijan PPI subscribes to IMF's GDDS.
- 290. Long, fixed based indices are available from IMFs website but not from the SSCs website, which only includes monthly series of the current and preceding years. The prices statistics division thus may consider the possibility to provide longer time series.
- 291. Price indices for, e.g., telecommunication and freight and passenger transportation are being compiled.

4.3.5 Foreign Trade Statistics

- 292. The Division of Trade, Services and Tourism Statistics comprises eleven staff members, of which three are engaged in the regular compilation of foreign trade statistic. All are equipped with PCs.
- 293. The recording and aggregation of commodities is based on the Harmonised System (HS 2007). The foreign trade statistics includes only commodities. Within the TACIS programme, a pilot sample survey on external trade in services was implemented in 1999 the results of which were used for improvement of the SNA and BoP statistics. This survey was not repeated because of a lack of funds.
- 294. The main source of the foreign trade statistics is the State Customs Committee, who collects and review information on exports and imports of all goods. On this basis the SSC compiles the foreign trade figures, which can be broken down according to the HS and on countries of origin/destination.
- 295. The customs data in general is thought to be exhaustive and adequate for the compilation of the foreign trade statistics, and there is a good cooperation between the State Customs Committee and the SSC. The (unit) prices of the customs data are also used for the compilation of import and export price indices.
- 296. The (un-declared) boarder trade, so-called shuttle-trade, by individuals is estimated on basis of various sources and included in the totals. Problems and delays have been encountered for the recording of oil and gas exported through pipelines. The Division is aware of the growing importance of E-commerce in terms of purchases of software downloaded from the Internet or goods such as CDs or books purchased from abroad through the Internet by Azerbaijani households; the Division is considering methods for recording such activities.
- 297. As quality assurance the trade statistics division has been conducting mirror statistics with the neighbouring countries, Ukraine, Kazakhstan, Uzbekistan, Moldova and Belarus. During these comparisons the reasons of various divergences are determined and measures for the elimination of discrepancy on these parameters are undertaken.
- 298. The foreign trade statistics is used as input for the compilation of the national accounts and for the BoP statistics compiled by the National Bank of Azerbaijan (NBA).
- 299. Foreign trade statistics is published in a monthly publication (*External trade in Azerbaijan*) that includes data broken down according to the HS on detailed groups of goods and by countries. However, the publication only includes cumulative series, although source data provided from the State Customs Committee are discrete monthly. Annual series dating back up to five years are published in publications that are also available on the SSC's website in pdf format.

- 300. The Azerbaijan trade statistics follows international recommendations and applies international or international comparable classifications (the HS is applied).
- 301. Monthly data on foreign trade are published as cumulated series, while recommended practice is to publish discrete (monthly or quarterly) series. Hence, the trade statistics division should consider publication of discrete monthly/quarterly series.

4.3.6 Balance of Payments

- 302. The Balance of Payments (BoP) statistics is compiled by the National Bank of Azerbaijan (NBA) under the Statistical Law, the Law of the NBA and a Resolution of the Cabinet of Ministers on Balance of Payments Statistics. The BoP is compiled in accordance with the BoP Manual (BPM5). The SSC subscribes to the IMF GDDS, where more detailed documentation of the Azerbaijan BoP statistics is provided.
- 303. Seven persons in the NBA are engaged in the regular compilation of BoP statistics; all staff is equipped with adequate IT resources. The main sources of the BoP are the commercial banks, the NBA, the Ministry of Finance and other establishments. The compilation of the BoP is reported to be in line with the BPM5.
- 304. The SSC compiles the BoP for services on the basis of a special survey that is developed in cooperation with the NBA.
- 305. The main challenges for the coming years will be the availability of data for compilation of special aggregates according to the BPM6 and implementation of the special software to be developed by the IMF for compilation of these aggregates (the software is not yet available). The need for technical assistance from statistically advanced countries was mentioned as a priority. The NBA discusses treatment of e.g. goods for processing and international merchandizing with the Customs Committee.
- 306. The NBA publishes the BoP data in the Review of the National Bank of Azerbaijan and on its website, where data are available in Excel format. Data are accompanied by appropriate documentation.

- 307. The BoP is compiled by the NBA and in general appears to be in accord with the recommendations of the BPM5 Manual, and subscribes to IMF's GDDS. However, there is a lack of more detailed information from the oil industry (e.g. on dividends) due to current legislation that prevents the SSC to obtain this information from the industry. The SSC should take steps to investigate the possibilities to obtain this data. There is a close and good cooperation between the SSC and the NBA.
- 308. The NBA has also expressed a need to receive data on assets and liabilities of foreigners and export and import of currencies and other assets by private households.

4.4 BUSINESS STATISTICS

4.4.1 Business Statistics

- 309. Short-term and structural business statistics is compiled by the Industry, Transport and Communication Statistics Division, and the Division of Trade, Services and Tourism Statistics. The Industry, Transport and Communication Statistics Division comprises 16 staff members, of which three to four persons are engaged in the regular compilation of industrial statistics. The Division of Trade, Services and Tourism Statistics comprises 11 staff members, of which three to four persons are engaged in the regular compilation of the internal trade statistic (retail and wholesale). All staffs are equipped with PCs.
- 310. The EU regulations on short-term statistics and structural business statistics provide the general framework for the production of business statistics in Azerbaijan. Since 1997 the SSC has compiled business statistics according to the national classification of kinds of economic activity, which is based on NACE (NACE rev. 2 has been implemented) and, since 2000, the national product classification compatible with PRODCOM.
- 311. The SSC business statistics provides a comprehensive set of indicators for business activities, including industrial production, construction, retail and wholesale trade statistics (turnover, employment and wages and salaries), statistics for the services producing sector, and entrepreneurship indicators. The main part of the business statistics is collected by the regional offices that are equipped with software from the SSC for validation and processing of data. Monthly statistics are generally collected from enterprises with more than 40 employees. Quarterly data are collected from enterprises with employees less than 40 persons.
- 312. To streamline the production process and to reduce the response burden, the involved Divisions over the previous year have started to harmonise the large number of survey questionnaires on business statistics. The intention is to further integrate the questionnaires ("one establishment one questionnaire") and establish possibility for electronic reporting.
- 313. Until 2003, the SSC obtained the relevant information only from parts of enterprises in the oil industry; the production had to be estimated on basis of a special survey to the industry and included in aggregates. The activities in the non-observed economy are estimated on the basis of a number of sources and included in the aggregates. The Industrial Production Index (IPI) is a main indicator for the short-term economic development. It subscribes to IMF's GDDS.
- 314. Business statistics for the services producing sector is being developed. Currently indicators for turnover, employment and salary and wages are being compiled.
- 315. The statistics are published in monthly bulletins and in the report on "The Socio-economic Development in the Country", as well as in the publication "Industry of Azerbaijan". Statistics on small entrepreneurship is published in the yearbook "Small entrepreneurship in Azerbaijan". In general only the unadjusted, raw data are published, i.e., no seasonally adjusted figures are published.

- 316. The EU regulations on short-term statistics and structural business statistics provide the general framework for the Azerbaijan business statistics. Business statistics is compiled according to international classifications, e.g. NACE (NACE 4.2 has been implemented), PRODCOM and HS.
- 317. The business statistics provides a comprehensive set of indicators for business activities, including retail trade turnover and employment, wages and salaries, industrial production and other series. Business statistics for the services producing section is being developed.
- 318. The Industrial Production Index is a main indicator for short-term economic development. It subscribes to IMF's GDDS and applies good practices. Up to 2003, the SSC could obtain only part of the data for business statistics on the oil industry; the production was estimated and included in the overall industrial production. The activities in the NOE are estimated and included in totals.
- 319. Main future challenges will be the further integration of business statistics questionnaires, development of electronic questionnaires and publication of seasonally adjusted series.

4.4.2 Energy Statistics

- 320. Because of the role of the production of energy for the national economy of Azerbaijan, the energy statistics is one of the priority areas in the work of the State Statistical Committee, which is the body responsible for the production and dissemination of statistics in this field. The staff in the Fuel-Energy and Material Balance Statistics Division deal with the tasks in methodology, data production and dissemination; all of them are equipped with PCs.
- 321. The energy sector is also part of the business statistics and for the production of structural and short-term indicators according to the EU standards it is included in usual business surveys. Additional needs in comparison to the general content of business statistics are covered by specific statistics and surveys.
- 322. In a wide context, the statistics of energy is covering: mining and related production in oil refineries, other production of energy, export, transport, and consumption of energy with the aim to cover all the aspects and offer to users the statistics necessary for statistical analyses and evidence-based decisions.
- 323. In the preparation of methodology and surveys, close co-operation with the Customs Committee, the National Academy of Science and other institutions is of great importance. The data from the Customs Committee, Ste Oil Company and some other organizations are used to complete the overall picture of the state and processes in this sphere.
- 324. The frame for statistical surveys is the statistical register created on the basis of registration at tax authorities. In 20 oil-producing enterprises approximately 150 establishments are registered, while in the production of gas it is approximately 15 establishments, and for electrical energy two producers are included.

- 325. This branch of statistics has started developing in 2000 with the preparation of a pilot survey in industrial enterprises, which was conducted in 2001. Since 2002, annual forms ensuring the observation of processes in industrial enterprises have been collected on a regular basis.
- 326. Sample surveys in monthly and quarterly periodicity enable the production of short-term indicators, which serve for the monitoring of energy consumption in enterprises. The results are used for the analysis of the current situation in the country; they also serve to users to predict the development in the short-term prospective.
- 327. Data are submitted to local statistical offices by mail, directly or in an electronic form, and after checks they are sent to the SSC of Azerbaijan. Electronic versions of all reports can be downloaded from the SSC website and may be submitted electronically. The software for the data capture and processing is developed in the MCC and data production is carried out with the use of this SW. Detection of errors and output tables are part of this SW. The response rate reaches about 85-90% of the surveyed population. The military sector is not covered by the surveys.
- 328. Since 2007, a monthly sample survey of fuel and energy consumption has been applied in households for the needs of the energy balance and approximately 0.5-1% of households are included in the sample and questioned on the consumption of oil, electricity, wood and gas. It contains also the consumption for transport activities (in case that this type of services is also provided by natural persons).
- 329. From 1997 to 2000, the department used the state classification of economic activities based on NACE, and from 2000 the classification of products based on PRODCOM. From 1 January 2010 the latest versions of NACE classification and PRODCOM are applied.
- 330. From 1999 to 2007 the publication "Balance of Fuel-Energy and Material Resources" was issued annually with data related to main types of fuel and energy. It provides statistics on the resources and consumption of oil, natural gas and certain types of petroleum products, electricity (including the industrial sector), heat (including a breakdown by economic activity), as well as consumption of fuel and energy in state institutions and households, and consumption of secondary energy. Since 2008 a new edition of "Power of Azerbaijan" is being produced.
- 331. The energy balance published since 2007 reflects the energy situation in the country, including production of primary energy, import, export, change of stocks, deliveries in transformation sector, release of sector of transformations, inter product transfers, consumption in the power branch, losses at distribution, suitable for final consumption, final not power and power consumption (including breakdown by sector) and statistical divergences. All figures are in physical measurement units (oil equivalent). The preparation of this publication was based on a manual "Guidelines for Energy Statistics", prepared by the International Energy Agency, Eurostat and the OECD. Starting from the annual results in 2009, statistical data on alternative energy sources are also included.
- 332. The energy balance for 2007-2009 is also available on the website.

- 333. The SSC of Azerbaijan is also publishing a monthly information "Movement of fuel," "Electrical consumption and heating", and quarterly "Resources of electric and thermal energy".
- 334. On the request of international organizations energy questionnaires are delivered to the International Energy Agency, Eurostat, the OECD and some other international users.
- 335. Energy Statistics is one of the priorities of the State Statistical Programme for 2008-2012; it focuses in particular on the following aspects (in cooperation with the Ministry of Industry and Energy):
 - Improving energy statistics and the methodology for the national balance of energy in accordance with international standards (harmonization with international statistics).
 - Update existing forms of accountability and performance in the field of energy.
 - Development of statistical indicators on alternative and renewable energy sources by 2011.

- 336. Energy statistics in Azerbaijan has undergone a significant development in recent years and new initiatives have been undertaken or are planned for the near future. Taking into account its importance in Azerbaijan, the continuous process of the increase of availability and quality of statistics is highly desirable.
- 337. The improvements in data availability and timeliness of data are related to statistics presented on the website of the SSC, which concerns mainly energy balances.
- 338. Specific data collections in households might be a subject of reassessment in relation to household surveys that are covering a wide range of households and questions related to household consumption.

4.4.3 Transport Statistics

- 339. For transport statistics in Azerbaijan the SSC is the responsible body. Inside the SSC, the industry, transport and communications department ensures the methodology, data collection, organization, dissemination and data analysis in this field. All the staff is equipped with PCs.
- 340. Statistical units having transport as the main activity are surveyed in the framework of the business statistics. Beyond this framework, specific data belonging to transport statistics (transport of goods, passengers, transport facilities etc.) are produced.
- 341. Transport statistics in Azerbaijan is covering not only transport data related to the rail, sea, air, and road as well as urban and pipeline transport, but also data on vehicles and roads.
- 342. The SSC is involved even in road statistics; in co-operation with the Ministry of Transport new activities are under preparation.
- 343. A special attention is paid to the road transport, to which various types of units contribute, among them also many small entrepreneurs and natural persons as private

- owners of vehicles who provide this type of services. Therefore, the survey methodology takes into account this situation
- 344. During the last decennia, for this reason, the sampling methods were introduced in surveying this type of transport. As a result, significant improvements were reached in data availability. Supported by TACIS Programme, a sample survey of the activities of natural persons providing road transport services was carried out in 2001. The experience gained within this project served as an important input for further similar exercises in this field.
- 345. As a frame for the survey on road transport, the register of vehicles as the main administrative source of data from the Ministry of the Interior is used. The register is updated once a year. The sample covers approximately 8% of the vehicles.
- 346. The periodicity of the survey is biennial; since 2006, the last survey was organized for the reference year 2008 and data were published in 2009.
- 347. To ensure high level of response in this survey, the interviewers were engaged for data collection. In the last survey 150 interviewers contributed to the very high response rate of 90%.
- 348. The classification of activities NACE Rev. 2 has been introduced for data production since 2010; similarly, the classification of products based on NST has been implemented since 2004.
- 349. Transport statistics has its own section in the Statistical Yearbook, a special publication "Transport of Azerbaijan" was released in 2009 (in 3 languages); statistical bulletin on transport is issued monthly. On the website, 64 tables on transport are presented.
- 350. Transport statistics belong to the priorities in the 2008-2012 State Programme on Improvement of the Official Statistics in the Republic of Azerbaijan. Among the main goals of transport statistics are:
 - working out of the methodology on motor and road census and organization of the census (in co-operation with the Ministry of Transport);
 - creation of e-database on transport statistics (in co-operation with the Ministry of Transport).

- 351. The transport statistics covering all types of transport and its infrastructure is well developed in Azerbaijan.
- 352. To ensure data availability on road transport, taking into account the conditions in the country, significant efforts have been made namely by interviewing vehicle owners.
- 353. Further developments as reflected in the Five-Year Programme are focused on a more systematic approach to transport statistics, improvements of data availability and quality.

4.5 AGRICULTURE STATISTICS

- 354. Agriculture is a very important part of the national economy. To meet new requirements related to international needs and the development of the market economy, new definitions and indicators have been introduced in the field of agricultural statistics. The privatisation process has been completed and a very large number of small farms have emerged. Data on rural households and farmers are, mainly, collected on a sample basis. The Agricultural Statistics Division co-operates with the Ministry of Economic Development, the Ministry of Agriculture, Ministry of Ecology and Natural Resources and the State Committee on Cartography and Land.
- 355. The Agricultural Statistics Division is responsible for collecting, processing and preparing data on agriculture, forestry and fishery and preparing them for publication. The division comprises 12 persons within the SSC and 15 within the MCC.
- 356. The division uses 30 official statistical report forms (6 monthly, 6 quarterly, 3 semi-annual and 15 annual, 7 of which are used in sample surveys).
- 357. The division uses the National Classification of Economic Activities, which is based on NACE and CPA.
- 358. Official statistical reports are collected and processed by two main groups of agricultural units:
 - Agricultural enterprises and organizations (around 2000);
 - Individual entrepreneurs, family peasant farms and households (around 1.2 mln.)
- 359. In the first group of farms statistical data are collected by full coverage. For the second group of farms statistical data are collected by sampling. The agricultural census 2005 is used as sample base by taking into account the later changes. The sample of farms is implemented by the Research and Technological Design Center statistical data of SSC of Azerbaijan. Depending on the nature of work for the survey are selected from 1 to 5% of households in total. During the statistical surveys works on decreasing of burden of respondents are continuing. For example, the use of improved sampling methods on state of animal breeding allowed a reduction of the sample size from 18000 to 3000.
- 360. As part of the TACIS Programme, a sample survey of livestock of households and farmers was undertaken in 2000. Since 2001, this survey has been conducted annually, with funding from the state budget. From January 2003 the survey is conducted on a quarterly basis.
- 361. Since 2000, a sample survey of producer prices of agricultural products produced by households and farmers has been conducted. Starting in 2001, a sample survey of intermediate agricultural consumption by households and farmers has been carried out. As preparation for the agricultural census, a pilot survey of land use in the Shamakhi district of the Republic was conducted as of 1 June 2001 jointly with the Statistical Office of the Land of Hessen in Germany. A pilot survey on the stock-raising sector and agricultural structures was conducted on 1 July 2002 and a sample survey of natural persons who are engaged in agriculture production was conducted on 1 June 2004.

- 362. In accordance with the Decree of the President of the Republic and with the corresponding government regulation of the country, the general agriculture census in all territory of the Republic of Azerbaijan, with the exception of occupied territory, was conducted in June 2005.
- 363. In 2006, a sample survey on the labour force in agriculture was conducted. Furthermore, a study on the value of fixed assets in agriculture was held in 2005, and a sample survey on mineral and organic fertilization for the 2007 harvest has been conducted. The latter survey will be conducted annually from the end of 2009. Sample surveys on beefarming were conducted in 2006 and 2008.
- 364. Indicators of agriculture include information on population and area, irrigated land, the distribution of employed population, capital investment by sector, gross agricultural output, the number of farms, crop areas of major crops, production and productivity of crops, productivity, livestock and poultry, production of main livestock products, the value of products sold by agricultural enterprises, and index of wholesale prices of agricultural products.
- 365. Key economic indicators of agricultural enterprises and private entrepreneurs contain data on land area, agricultural land, gross income, number of enterprises, employment, productivity, availability of equipment and fixed assets, energy consumption, production costs, vacation prices, labor costs and the level of profitability.
- 366. Under the guidance the SSC the number of cattle is estimated by 1 January for rural and urban administrative-territorial districts annually.
- 367. An important statistical source for rural areas has been record-book for economy for rural administrative-territorial districts, which are updated every five years. The last year is 2010 and in the next period (2011-2015) a new record-book for economy will be applied. The form entails the following sections: 1. Name of farmer, date, month and year of birth, education, employment, etc. 2. Availability of livestock by type and semi-age groups on 1 January. 3. Availability of houses and intra-yard buildings on 1 January, year of build, convenience, accommodation, etc. 4. Availability of land for the species on the 1st of January.
- 368. The SSC of Azerbaijan receives annually a report from the State Land and Cartography Committee on the availability and use of land by species and land users at all as well as irrigated lands by 1 January.
- 369. In contrast to agriculture, all forestry and forest lands are publicly owned. The main statistical data are obtained from administrative sources. Existing data include forests, large tracts of forest, silvicultural activities (such data as cost, cost of work, refurbished green areas), restoration of forest by type, the activity of cleaning and conservation of forests, forest fires, land preparation and planting, dead areas of the forest, reclamation of land by districts.
- 370. On fish farming the Ministry of Environment and Natural Resources provides data on cost and volume of production, volume of fish farming, fishing quota of fish species, production of farmed fish on the fish species, number and types of fishing vessels, costs of aquaculture and protection of fisheries, production of fry in ponds, etc.
- 371. Within the State programme a survey on economic indicators in the field of agriculture was conducted in 2009. Furthermore the following actions are planned:

- Preparation of methodology and carrying out survey on perennial plants by type and age (2010);
- study of suburban households (2011);
- carrying out accounting of purebred animals and birds (2012);
- carrying out survey on the production of decorative products (2011, in 2010 a pilot survey was conducted);
- the improvement of statistical indicators on protection of forest resources, recycling and use of reproduction, as well as the method of compilation (2012).
- 372. The annual publication "Agriculture of Azerbaijan" is being published. Furthermore since 2008, the publication "Forestry, Fishery and hunting economy of Azerbaijan" is published annually. For some years compilations have been published: "Crop Production" (2007), "The number of cattle (2006)," Production of livestock products "(2009)," Fruits and Vegetables "(2006).
- 373. Within the field of agriculture, forestry and fishery 16 (12 of them are on main reports and 4 of them are on small reports, e.g. "Crop of summer plants") bulletins are issued: "The livestock and poultry in the Republic of Azerbaijan (annually), "Sown area and productivity of crops (annual)," "Sown area of crops under harvest of current year (annual)", "Condition of livestock farming" (monthly), "Sowing of crops (monthly, from February to June) and "Collection of agricultural products "(monthly, from June to November), etc.
- 374. It was observed that some rather unexpected changes in time series for some data, number of tractors 29500 in 1999, 14887 in 2005, cereal harvesters from 3634 to 1298, irrigation systems from 963 to 92, could be explained by structural changes, replacement of old equipment and giving of some part of the technique to the Agroservice enterprises.

- 375. Statistics on agriculture is an important area, which is rather well covered through different surveys and a broad range of publications. Due to the lack of available methodological information in English it is difficult to assess the degree of compliance with for instance European regulations in this area, but it can be assumed that many key data are covered. The cooperation with the Ministry of Agriculture appears to be very good, and the Ministry was also well satisfied with the supply of statistics in the field of agriculture.
- 376. A major challenge is the update of the register and the sample frame of agricultural units, which now is based on the 2005 agricultural census. It appeared that plans exist by the State Land and Cartographic Committee to develop an administrative farm register, viz. to be able to handle farm subsidies etc., and a close cooperation between such a register and the SSC might help solve the problem.
- 377. It was noted that the at present the State Land and Cartographic Committee provides data on the availability and usage of land by species, users of land, as well as irrigated lands. Based on the discussion with a representative from the committee, it can be assumed that in future the Committee can be and important partner in providing

information also related to properties and addresses as some pilots are being started in this area.

4.6 MULTI-DOMAIN STATISTICS

4.6.1 Environment Statistics

- 378. The Sector of Ecology and Health Protection Statistics is part of the Demographic and Social Statistics Division. Less than two persons within the SSC and two persons within MCC are devoted to environment statistics. A number of reporting forms have been developed to collect environmental statistics. Data are collected by local statistical authorities and transmitted in electronic form to the Main Computing Centre of the SSC and then to the Demography and Social Statistics Department. Data on ecology statistics are collected via 14 report forms. Of the 14 report forms 7 are collected and processed by different ministries or other state bodies.
- 379. A major part of the statistical reporting on environment statistics is thus developed by different ministries and state agencies and is included in the Programme of Statistical Works. These data are collected according to the Law "On official statistics" and Law "On protection of environment". The following topics are being covered:
 - Water consumption and use of water resources for different purposes (household water, manufacturing and agricultural purposes), wastewater by purification categories (treated to standard quality, effluents treated to standard quality, insufficiently treated), loss "JSC Melioration and Water Resources";
 - Emissions from road transport Ministry of Environment and Natural Resources;
 - Environmental Control Ministry of Environment and Natural Resources;
 - Data from meteorological stations Ministry of Environment and Natural Resources;
 - Receipt and disbursement of the Fund for Environmental Protection Ministry of Environment and Natural Resources;
 - The sanitary condition monitoring of air, water sources, land the Ministry of Health;
 - Medical waste Ministry of Health.
- 380. Reporting developed by the SSC of Azerbaijan on environment statistics includes the following indicators:
 - Atmospheric air protection: emissions from stationary sources, their disposal, greenhouse gas emissions by regions, types of economical activity;
 - Generation, use, storage and disposal of hazardous waste in the context of urban economic activities:
 - Exploration work;
 - National parks and reserves;
 - Costs of environmental protection

- 381. A system of indicators and a database on environmental protection is under development.
- 382. The SSC issues statistical bulletins annually, such as "Hazardous waste", "Protection and use of natural resources" and statistical publication "Environment in Azerbaijan" in which some figures are presented by economic regions of the country. Statistics is also available on land resources (by type and use), on forest resources, natural parks and reserves, the use and protection of water resources (by designation and industry), air pollution (quantity, emissions by source and type of economic activity, from 2006 PM on greenhouse gas emissions, air pollution in different cities). Furthermore statistics on Waste (hazardous waste production, use and disposal of certain cities); exploration and research and environmental protection (cost: current and capital, violations, fines) are also readily available.
- 383. The State Statistical Programme for the period 2008 to 2012 plans the following work in environment statistics:
 - Improvement of the waste statistics and creation of the indicators system. Working out of the new waste classification and obtaining of the new statistical data in this field, in order to correspond with international standards (2008-2009).
 - Preparation of indicators on the rational use of the natural resources and on the protection of the environment. The data collected will be used to complete the questionnaires of international organizations (2011).
 - Preparation of a system of indicators on domestic waste.

- 384. The SSC is already collecting and disseminating a broad range of environmental statistics, with the support of several ministries, even if the resources for this area appear to be rather limited. The compilation of an environmental yearbook is a major contribution. The cooperation with the Ministry of Environment and Natural Resources seems to be functioning very well. The Ministry also produces part of the environmental statistics, for instance estimations of emissions from road transport, data on environmental control and on use of funds for environmental protection.
- 385. An issue raised was the responsibility of the SSC in this area in relation to other authorities. In general it is important that the statistical authority has the capacity and the competences to ensure proper quality control of the basic data and is able to put different environmental indicators in a more systematic context. Thus it is often a task of the statistical authority also to make independent estimations of for instance emissions, also by using available statistics within the agency. It might also be important to put the different indicators into a systematic framework, such as environmental accounting. This could be an area for future development.
- 386. It was also noted that part of environmental statistics and namely waste statistics was produced within the SSC outside the present section on environment and health. The issue was raised whether it would be better to strengthen the field of environmental statistics by merging these areas and by ensuring a closer link with for instance agricultural statistics, business statistics and/or economic statistics.

4.6.2 Statistics on Information and Communication Technologies

- 387. The responsibility for ICT statistics lies within the Transport and Communication Statistics Division. The area of statistics on the information society has been developed over the last years based on the EU Council and Parliament decision and on experiences from Latvia. In light of this, it has been decided to concentrate collection of information on two sources, enterprises and households. The development was also supported by the Ministry for Communication and Information Technologies. At the end of 2005, the households sample survey was carried out. Since 2005 all enterprises (except the individual economy and agriculture) are covered by annual data collection. The first results of Information society statistics in Azerbaijan were published in March 2006.
- 388. The State Statistical Programme for the period 2008 to 2012 plans the following work on information society statistics:
 - Conducting of the monitoring on using of ICT in households (2010-2011).
 - Creation of a database for information-oriented society statistics and development of a methodological basis in this field. Systematization of the indicators characterizing the use of ICT by population and in the branches of the economy. Simplification of the data used by the information-oriented society, free access to databases. Work in cooperation between the State Statistical Committee and the Ministry of Communication, Information and Technology (2010).
 - Working out of the methodology on e-trade in the trade network and organization
 of its statistics. Study the development of e-trade in the country, definition of its
 impact on the activity of enterprises and the society. Availability of the statistical
 data for the assessment of the ICT in the trade network in cooperation between the
 State Statistical Committee and the Ministry of Economic Development (2012).
- 389. The main publication is a well designed yearbook on Information society in Azerbaijan, translated into English. According to this yearbook, 17 per cent of the population were internet users in 2008, against 8 per cent in 2005.

Assessment

390. The area of ICT statistics is well developed, in line with European practice, and with a good presentation of the results.