# Adapted Global Assessment of the National Statistical System of Moldova

**Final Version** 

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### **PREFACE**

The Adapted Global Assessment (AGA) of the national system of official statistics of Moldova was undertaken in the framework of the Eurostat funded project 'Global assessments of statistical systems of candidate and potential candidate countries as well as ENP countries'. ICON-INSTITUT Public Sector GmbH, a company under contract with Eurostat, was responsible for organising all activities and tasks related to the AGA.

The AGA process was initiated by Eurostat on request of the Moldovan National Bureau of Statistics (the NBS) in March 2010 to agree in principle on the implementation of an adapted global assessment, and confirmed in 2012 establishing dates for the assessment missions. The assessment was conducted by the following AGA team of experts: Mr. Günter Kopsch (formerly DESTATIS, Germany) who was the leading expert, Ms. Bronislava Kaminskiene (Statistics Lithuania), Ms. Vera Herrmann (EFTA), Mr. Jason Schachter (UNECE) and Ms. Claudia Junker (Eurostat). The assessment findings are based on an extensive review performed during assessment missions conducted from 16 till 20 April 2012 and from 3 till 7 September 2012. Many internal and external partners were met (see Annex 1). Written material was made available by the NBS in advance or during the assessment mission. Major sources used for this evaluation include the 'Law on Official Statistics' (see *Annex 2*) and the 'Programme of Strategic Development of National Bureau of Statistics for 2012–2014' (see *Annex 3*) as well as replies to a questionnaire sent in advance to the NBS, covering main institutional formal and practical issues as well as information on statistical domains.

The assessment team very much appreciates the openness of communication both with staff of the NBS and with representatives from other partner and stakeholder organisations. We hope the assessment will be of benefit to the further development of the NBS.

## **EXECUTIVE SUMMARY**

- 1. The main goal of the Adapted Global Assessment (AGA) of the National Statistical System (NSS) of Moldova is to evaluate the level of conformity vis-àvis European standards, incorporating the UN Fundamental Principles of Official Statistics, the European Statistics Code of Practice and the Eurostat Statistical Requirements Compendium. Through this process the AGA supports the improvement of the NSS and its alignment with European and international recommendations, standards and best practices.
- 2. The National Bureau for Statistics of the Republic of Moldova (the NBS) is the main producer of official statistics and is responsible for the coordination of the Moldovan statistical system.
- 3. The Law on Official Statistics (hereafter referred to as the Law), as valid at the time of the assessment, presents a solid legal basis for the production of official statistics in the country which is in a process of transformation towards a modern society based on democratic values and the rule of law, and towards a market economy. It corresponds broadly with the UN Fundamental Principles of Official Statistics and the equivalent parts of the European Statistics Code of Practice. The Law includes provision for all essentials of a statistical law, and includes the provision that not only the NBS but all producers of official statistics in Moldova should comply with its rules.
- 4. Some amendments and clarifications to the Law are nevertheless recommended. A major recommended change is to strengthen the position of the Director General of the NBS through a fixed term of office (preferably renewable once) and by his or her appointment based on a competitive and qualification-oriented procedure.
- 5. Following discussions with many interlocutors in the course of the assessment, the Assessment Team came to the conclusion that the principles of professional independence, objectivity and impartiality, and statistical confidentiality are adhered to in practice by the NBS. The Assessment Team saw no signs that the principles of professional independence and of statistical confidentiality were not being observed within statistical units of other official statistical bodies.
- 6. The Statistical Council has been given an important role as an adviser of the NSS of Moldova by the Law. It is therefore not clear why the Council has not met for a long time and was not involved in the preparation and adoption of the 2011 and 2012 work programmes as well as the multi-annual programme of strategic development. It is strongly recommended that the Council be reactivated very soon and perform regularly the work which is stipulated by the Law.
- 7. Further improvement of the use of administrative data for statistical purposes is a clear objective of the NBS. It is recommended that NBS pursues agreements with all holders of administrative data that can be used for statistical purposes. Such agreements should include rules for data sharing and should also state the commitment of both sides to avoid duplication of work and to improve the administrative data files so that they can be better used for statistical purposes. Moreover, the NBS should be entitled to be involved in the design of administrative records relevant for statistical data production and this involvement may have to be stipulated in the Law.

- 8. It appears necessary to prepare and publish instructions and guidelines for the protection of statistical confidentiality for production and dissemination processes. Moreover, it is recommended that a document be produced describing the preconditions for the provision of micro-data to researchers, as well as the procedures that have to be followed. Such guidelines should also make clear which institutions and individual researchers may receive and use such data.
- 9. The NBS prepared and adopted internally a 'Programme of Strategic Development of the NBS for 2012–2014.' It is recommended that the NBS updates the programme for the years 2013–2015 or 2013–2017, and includes all official statistics (with the exception of official statistics of the National Bank), as stipulated in the Law. The updated multi-annual programme, which should be submitted to the Government for adoption, should be used to develop a mid-term strategic orientation on how to approach European requirements. It should include development activities of all the statistics producers, as well as budget estimates and the international assistance needed for the implementation of all planned activities. Within the NBS, the programme should be complemented by an operational plan containing the activities needed and milestones for the implementation and monitoring of these activities.
- 10. According to the Law, official statistical bodies in Moldova include the NBS and its territorial sub-divisions, the statistical department of the National Bank of Moldova, and statistical departments of other central public authorities specified in the programmes of statistical works as authorised to produce official statistical information. Combined, they form the National Statistical System of Moldova. The NBS is in charge of producing approximately 75 per cent of official statistics. It is recommended to determine precisely in the next programme which public bodies are official statistical bodies and belong to the NSS. In general, in a small country like Moldova, it would be more efficient to concentrate nearly all statistical expertise in one institution. This means that the NBS should take responsibility for as much statistical data as possible from other institutions, provided that the necessary resources are available from the state budget.
- 11. The Law gives competencies to the NBS in its function as the coordinator of the Statistical System of Moldova. The NBS's main instruments for the coordination include its responsibility to prepare the programmes of statistical works, to develop and decide on the methodology used for the production of official statistics (in cooperation with other official statistical bodies). It has also concluded some Memoranda of Understanding (MoU) with other official statistical bodies. Overall, however, the Assessment Team has got the impression that the NBS only partly fulfils its role as the coordinator of the NSS. It is therefore recommended that the NBS expands its coordination activities, which may partly need amendments of the Law. At the same time, however, the NBS can only meet these responsibilities if it has the necessary resources for the labour-intensive tasks that are entailed.
- 12. The non-statistical task 'Informational service on financial reports' is executed under the Law of Accounting by a specific legal unit being part of the NBS structure, but clearly separated from all statistical activities. Data are collected twice a year for big companies and once a year for all others, and results published in an aggregated form. Individual data can, however, be submitted to Ministries upon request. Respondents are well informed about these conditions and accept

- that these data are not confidential. Although it is always problematic if a statistical office carries out a non-statistical task, it appears that in this case the advantages for the NBS outweigh the disadvantages.
- 13. The NBS states that its mission is to coordinate and produce official statistics on the economic, social, and demographic situation of the country. These statistics should be relevant, reliable, and accessible to users, being able to support informed decision making by central and local public authorities, facilitate the development of the private sector, and contribute to informing society as a whole.
- 14. The recent reorganisation of the NBS provided as a central element the integration of posts from the previous so-called 'Main Computing Centre' now called 'General IT Division' into their corresponding statistical divisions. This can be considered a huge step forward in modernising the organisational structure of the NBS, as it brings together different statistical processes such as methodological development, the collection, validation and editing of data, and data dissemination and analysis into one organisational unit, ensuring greater efficiency and integration of these processes. The NBS should share its experiences regarding this procedure with other countries. Furthermore, the integration of the two census divisions (population and agriculture census) into the respective divisions of population and agriculture statistics are additional elements of the move to a modern statistical organisation. One issue to be considered is the general organisational structure with rather small formal units. This type of structure can create bottlenecks in the case of changing workload, thus enhancing the risk of delays when staff members change or are not present for some reason.
- 15. With the recent reorganisation and its possible benefits in terms of efficiency gains and synergies between IT and statistical staff, the NBS should consider and reflect upon a reallocation of staff based on priority areas of statistics such as national accounts and business statistics and also for development areas such as the coordination of the statistical system, quality management, coordinated methodology development including sampling, analytical work, etc. The creation of central units for coordination, methodology and quality, will help to develop these areas in a consistent and more efficient way than at present where many of these activities are spread throughout the NBS.
- 16. A large number of territorial units (35) currently exist, which is high for a country of the size of Moldova. These territorial units serve as the basis for the collection and processing of data, as well as ensuring first quality controls, which are then transmitted to the central office for aggregation. These territorial units also facilitate close communication with enterprises and local public authorities, which has a positive impact on data collection. It is recommended that the number of regional offices should be reduced alongside, and based on the same principles as the upcoming regional reorganisation of the country. Related to this, it seems advisable to consider reallocation of staff from regional offices to headquarters when modern means of data collection (electronic questionnaires, online transmission modes) to allow the freeing up of resources from the regional offices. The NBS should have the right to allocate human and financial resources between the territorial units and headquarters in a more flexible way and be entitled to manage overall resources for the NBS and its territorial units on its own: otherwise the reallocation of human resources between the regional offices and the headquarters will not be possible.

- 17. According to the Annual Budget Law of Moldova, funding for NBS activities is provided from the state budget, determined annually by the Ministry of Finance. In addition to funding for the statistics-based central management activities of the NBS, the budget includes funding for the General IT Division, territorial statistical bodies, Labour Force and Household Budget Surveys, Censuses, and other related surveys. The total annual budget for the statistical system has increased in recent years, including the amount allocated from the state budget (a 44 per cent increase between 2009 and 2011).
- 18. Overall, the NBS relies very much on donor financing. The state budget is not adequate for financing statutory survey work and for maintaining an appropriate IT infrastructure. Increases in financial and human resources are definitely needed in order to develop and comply with EU statistical standards and to replace the old and very outdated IT infrastructure. This is even more pressing if modern ways of data collection are to be introduced. In the long term, the NBS should reduce its dependency on external resources and should be enabled to finance statutory statistical activities from its own budget provided by the government. Particularly in the case of social statistics, it appears that projects are dominated by donor needs, whereas Moldovan needs should be the basis for donor financed projects. In order to do this, NBS's multi-annual programme should take in particular into account the needs of national users along with European requirements In addition, since internal resources might not be sufficient to meet current statistical needs, the NBS should look into ways of increasing operational efficiency and effectiveness.
- 19. Human resources are a critical component for the effective production of quality official statistics. Without such resources, both the short and long -term development of a national statistical system could be in jeopardy. While the NBS has some elements of a human resource management system in place, such as a central recruitment policy, a recruitment policy for the heads of the territorial statistical bodies, some training of regional offices and interviewers, and a performance evaluation system for civil servants, it would benefit from implementing a more comprehensive and all-encompassing system in this area, especially in view of the limitations in staff numbers and hence, the need to keep staff motivated and make use of the limited resources in the most efficient way. It is important to plan more effectively the allocation and development of available staff in order to provide incentives for staff to stay in the NBS, especially for the young recruits and IT experts. This strategy should include elements such as recruitment procedures targeting statisticians, and more comprehensive training programmes for all the staff. Such training programmes should also allow for exchange of experience among staff and possibly provide new incentives and learning possibilities for staff. Systematic performance evaluation and career development (especially for new recruits and junior staff), as well as planned and more systematic mobility of staff are other elements of such a human resource management system. Mobility of staff should be especially encouraged to avoid routine procedures, guarantee inflow of new ideas and approaches, and improve career opportunities.
- 20. The IT Division seems quite understaffed and underpaid to face effectively the requirements of a modern statistical office, in terms of database management, development of applications and integration of new technologies. The development of computer applications by the IT Division is currently neither organised, structured, prioritised nor is sufficiently financed. It is strongly

recommended that the IT Division be reinforced with regard to the number of staff, their qualifications and their remuneration. It is also recommended that NBS plans and urgently schedules the process of the development of applications in order to abolish outdated MS-DOS applications. The introduction of new technologies, electronic data collection and modern data management will result in a redistribution of staff and its tasks. This will allow the application of a wider class of validation techniques and will help to avoid any risk of a breach of confidentiality. The development of a standardised and efficient system such as the Automated Information System has the potential to improve the efficiency of all phases of the statistical processes but needs sufficient and stable financing.

- 21. Activities to ensure the accuracy and reliability of statistics, as well as confidentiality of disseminated data, are undertaken on a permanent basis at the stage of production of statistics. A clear organisational structure for managing quality within the NBS has just been created as part of the recent reorganisation. It is recommended that one of the tasks for this newly created structure is to establish procedures in order to assess, monitor and manage the quality of different stages of statistical production processes and to create generic procedures of quality checking for primary data.
- 22. It is recommended that the efficiency of data production be improved in a number of ways: by stimulating electronic data collection and use of administrative data; by designing guidelines for methodologies; by checking definitions of indicators with the intention to avoid inconsistencies; by improving the editing and imputation processes; by implementing seasonal adjustment methodology (Eurostat recommendations and software DEMETRA+) and by offering methodological assistance to other producers of official statistics. More involvement of the subject matter staff in tabulation and analysis using IT is recommended.
- 23. The long- term rationalisation should envisage a further shift from exhaustive reporting to sample surveys and related methodologies. This will require strong central coordination and the active involvement of the territorial statistical bodies. Thus, it would be indispensable to create a strong planning and methodological department in the centre which will supervise the whole process of data production. It is especially important to encourage staff working in the centre to learn about field data collection and the regional staff to learn about methodology development. Moreover, a Quality Commitment Statement, laying out principles and commitments related to quality in statistics which are consistent with the goals set out in the Mission and Vision statements should be developed and published. It is further recommended that the NBS decides as soon as possible on an overall quality assurance framework (QAF); and based on this, a quality management system as well as specific actions and measures should be implemented. For this purpose, an EU financed project could be launched to support the NBS in choosing the most suitable tools and frameworks.
- 24. The NBS follows best practices in dissemination policy. A release calendar is published on the website and changes are monitored on a regular basis. A fixed release time is in place and press releases are disseminated to all official mass media institutions. All users get access to statistical releases at the same time. Preliminary results are published when considered useful and are marked as such. In addition, rules are fixed on how corrected data should be announced to users.

The NBS's website is well-structured and provides a huge range of statistical information free of charge. It is the most important source of dissemination and priority has been given to its permanent development. Internal training on dissemination as well as seminars for journalists on the use of public statistics are offered and set standards. It is recommended that the NBS continues with the improvement of the website by preparing tailored information packages for the various types of clients continues with training for different user groups and expands dissemination in English. The development of a statistical journal could be envisaged.

- 25. According to a user satisfaction survey, the NBS's independence and expertise are well acknowledged by the public. Among all government services the NBS enjoys a high level of trust. Relations with main users, and in particular with other government services, are well established on a bilateral basis. But it appears that the NBS has no formalised, regular and multi-lateral contacts with other user groups, apart from the media.
  - A proactive, better structured and systematic approach to contacting different user groups, guaranteeing that their needs are taken into account, is recommended. Joint working groups with users of certain statistics (for example working groups on social statistics, on business statistics, on macro-economic statistics) that meet regularly in order to discuss and support important projects of the respective domain should be introduced. Regular user fora and / or user satisfaction surveys could be another way of stimulating and increasing user consultation.
- 26. The NBS is implementing a number of UN and Norway supported cooperation projects, as well as projects with the EU, Romania, France, Turkey and Sweden. These projects have supported the NBS in developing its production capacities especially in the area of social statistics, resulting in some very specific and sophisticated data sets. These projects mainly target international standards and to a much lesser extent European standards. Moreover, some of these projects support the NBS in areas that are important for the donors, but not necessarily of the same importance for the development of the overall Moldovan statistical system. It is strongly advised that the NBS maintains a very strong coordination role of all the donor support in order to channel this support to areas most in need and in order to avoid duplication.
- 27. The NBS has stated an overall objective of implementing EU standards in its statistical production which is a very welcome development. The area of Short-Term Statistics (STS) can be mentioned as a very visible example of this change towards applying EU standards. However, so far it seems that this approach is limited to a few statistical areas whereas in most of the other statistical areas international standards are taken as the guiding principle. With the agreement to apply European standards in the statistics chapter of the Association Agreement currently being negotiated, the orientation towards European standards should become the rule. The NBS is therefore advised to give some consideration to this orientation and it should mention the need of the application of European standards in the strategy document for the years 2012-2014. It also should develop a plan on how to move towards the application of these standards in the long run. In this process of change the NBS shall reflect upon in which statistical areas the application of European standards is reasonable because of their relevance to the local conditions and to what extent national needs should be the basis for

- producing statistics. Eurostat is willing to support the NBS in this process, also with the help of EU financed projects in such areas as quality management.
- 28. The NBS is making good progress towards implementing international classifications into their national system of classifications. The classification systems used are broadly consistent with international guidelines. Implementation of the European activity classification NACE Rev. 2 in 2013 is strongly supported and implementation of the European product classification CPA should be targeted as soon as possible. It is recommended that the NBS coordinates all classifications used in statistics.
- 29. It is necessary to improve the quality of the statistical business register by the following means: to update the IT basis for the statistical register; to use all available administrative data sources for updating the statistical register; and to improve the coverage of local units. The NBS should make efforts to include individual entrepreneurs in the statistical business register using information from administrative registers (such as the registers of the tax authority and the social security organisations). Clear procedures for updating the economic activities of entities (who is responsible, which sources can be used, when is information available) must be developed and implemented.
- 30. Demographic statistics in Moldova are based on both population censuses and administrative data about vital events (births, deaths, marriages, divorces) and migration. The primary source for vital statistics is the civil registration of every vital event in the country registered by the Ministry of Health, who issues medical certificates confirming births and deaths, and the Ministry of Justice, who registers civil status documents. Although lacking data for the Transnistria region, these vital statistics seem to comply with international standards in terms of compulsory and continuous registration and confidentiality of data.
- 31. A major problem is the unknown size of Moldova's non-resident population, making current estimates of its resident population fairly unreliable. Moldova appears to have problems in this statistical domain due to high levels of emigration (both irregular and temporary labour migration), lack of current census data and lack of data coverage for the Transnistria region. Moldova is therefore in need of a national strategy to improve migration statistics. A wide array of sources need to be combined in an effort to improve the estimates, including available register based data, border control data, household surveys, ad hoc migration surveys and use of data from other countries (including country of birth data).
- 32. The next Population and Housing Census will be conducted in April 2014, based on the Law on Population and Housing Census in Moldova, which was adopted by the Parliament in April 2012. The census will collect data on people living in Moldova, as well as those who work and live abroad. While much work remains to be done in planning and developing the content of the census questionnaire, the NBS plans to collect data on the territorial distribution of its population according to their demographic characteristics, socio-economic conditions and standard of living. Full funding for the census is required together with external support from other organisations. A large amount of work still needs to be done to plan and conduct this census and planning needs to start immediately. It is very important that Moldova follows current UN/UNECE recommendations regarding census methodology, including use of recommended definitions of usual residence.

- 33. An impressive amount of work has been conducted in the Social Statistics field, covering a wide array of topics and involving effort to incorporate international standards. However, data seem to be produced based on the donor-driven nature of many projects, and much information resulting from these projects is not fully utilised because there are very few users requesting these data. There are also issues of sustainability when ad hoc surveys and questionnaires are dependent on external funding.
- 34. The Household Budget Survey (HBS) suffers from high level of non-response and efforts must be made to reduce this problem. In the long term, computerisation of data collection methods from current paper and pencil methods is recommended, which would facilitate coding of data and lead to greater accuracy and centralisation of data collection.
- 35. The NBS has done a good job of adapting international standards on labour force statistics to the national conditions of Moldova and ad hoc modules provide additional information on a number of important topics. The main problem is the sampling frame of the LFS which will be redesigned after 2014 (based on results of the 2014 Population Census). As data are only published at the four regional levels, it is recommended that the NBS investigates whether the current sample size can be reduced without having a major impact on the accuracy of its estimates.
- 36. In general, concepts and definitions used for National Accounts are methodologically sound and mainly conform to internationally accepted standards and practices. However, calculations are still based on SNA 93. Nearly all accounts are being compiled, with the exception of financial accounts. Annually, a supply / use table (35 by 35 industries) is compiled. Adjustments for the informal sector are made on the basis of OECD recommendations. The non-observed economy is estimated to be about 22% of GDP. Classifications and breakdown by sectors used in the compilation of National Accounts are in broad conformity with international recommendations. Timeliness of the publication of National Accounts data can be commended. Methodologies and additional metadata are presented on the NBS website. The SDDS summary methodology is regularly reviewed and updated.
- 37. The main recommendation is to concentrate on the transition from SNA 1993 / ESA 1995 to SNA 2008 / ESA 2010. Further improvements that the NBS needs to consider the scope and the quality of National Accounts compilation include the separate calculation of GDP for the 4<sup>th</sup> quarter; the improvement of seasonal adjustment methods; the implementation of chain linking method with annual overlap; the compilation of financial accounts and of fixed capital formation in accordance with SNA requirements; and the estimation of illegal production. Increased human resources and technical assistance are necessary to achieve improvements in these areas. The improvement of price indices, in particular for service sectors and for imports and exports, is also important.
- 38. The Ministry of Finance of the Republic of Moldova produces Government Finance Statistics following international rules, albeit not the most recent ones. Data are used mainly by the Ministry itself for policy purposes and for publication of statistical information on the Ministry's website. Data are also given to the NBS as sources for National Accounts compilations. It is recommended that the NBS implements GFS Manual 2001 as soon as possible and calculate data on an accrual basis instead of a cash basis.

- 39. External trade statistics appear to be well developed and follow international standards. Customs declarations are the source of these data. Data, which are provided to the NBS by the customs authorities, are checked by specialists of the NBS. Unclear issues are discussed with customs and corrected, if necessary. All data are given quarterly to the National Bank for the compilation of Balance of Payments Statistics.
- 40. The scope and methodology of Balance of Payments Statistics is consistent with the Balance of Payments Manual 5<sup>th</sup> edition with the exception of flows related to Transnistria. The balance of payments of Moldova excludes most transactions of Transnistria with non-residents. A problem seems to be that the flows of money coming in the country are higher than the exports. For the sake of the reliability of Foreign Trade and Balance of Payments Statistics it is necessary to find out the reasons for the divergences, which are increasing over time.
- 41. The Consumer Price Index (CPI) is compiled in accordance with the Consumer Price Index Manual, Theory and Practice 2004. To improve the quality of CPI calculations, it is recommended that NBS: avoids considerable changes in weights for the sake of comparability of price indices in time; implements adjustments of prices when the quality of goods has considerably changed; and, apart from HBS data, uses additional information for the determination of weights for goods and services (for example data from retail trade survey, data of national accounts, etc.). It should also be considered to collect price data in rural areas because inflation in rural areas might be different from inflation in urban areas. Due to large changes in the coverage of goods, it is recommended that NBS defines procedures for updating the factors used for weighting of indices.
- 42. In the area of business statistics the NBS is encouraged to review the needs of its users for statistical data from businesses and re-design / streamline data production based on this assessment. The NBS has recently implemented an integrated short-term statistical survey covering different areas with similar questionnaires. This is a first step towards applying European standards in Business Statistics but much work still needs to be done. A number of obsolete surveys are still conducted based on traditional user needs and on previously used practices and approaches. These numerous surveys (annual as well as short-term) are blocking resources for new development areas. The overall number of business-related surveys may be reduced and replaced by surveys according to European standards. There is also a need to review questionnaires, definitions and concepts of the different business-related surveys in order to avoid duplication, inconsistencies and contradictions.
- 43. Government decisions or laws regulate statistics on agriculture. They are centralised in the NBS with the exception of the land cadastre. The NBS is responsible for the collection and production of statistics on agriculture including macroeconomic calculations on agriculture. The importance of the agricultural sector is reflected in the statistical programme of the NBS. Exhaustive reports are collected and a huge number of surveys are undertaken in agriculture in order to provide the statistical information needed by decision makers. With financial support from Sweden, the EU and Romania an agricultural census was conducted in 2011 in line with FAO and EU guidelines and standards. The agricultural census is of major importance and lays a foundation for future improvement, as it will complete the picture of the situation in agriculture. Additionally, it will allow the creation of a register that can be used as a future sampling frame in order to

- enhance the existing sample surveys and to shift the focus from exhaustive statistical surveys to sample surveys, which would reduce response burden on big and medium economic units of the agricultural sector. Based on data from the agricultural census, which are available soon, it is recommended that the NBS undertakes an evaluation of all agricultural statistical activities and launches a discussion with main users regarding the scope, quantity and frequency of statistical information to be provided in the future.
- 44. Due to the increased need for environment statistics for monitoring progress made regarding the Government's action programme, international conventions and agreements on environment and climate change, the NBS and the Ministry of Environment have established a working group that made a decision regarding Environment Statistics, including the collection of data and the elaboration of environmental indicators. The NBS activities have been supervised by international organisations and in particular by the EEA. It seems that the Moldovan statistical system is progressing well in the field of environment statistics.
- 45. It is recommended the NBS gives priority to the following improvement actions:
  - To prepare an updated multi-annual programme of strategic development for all official statistics, providing a mid-term strategic orientation on how to approach European requirements. In this process of change, the NBS should reflect upon in which statistical areas it is reasonable to apply European standards and to what extent national needs should be the basis for producing statistics.
  - To make every effort to obtain increased financial and human resources to develop and comply further with EU statistical standards and to replace the very outdated IT infrastructure. In the long term, the NBS should reduce its dependency on external resources.
  - To revise the Law in particular with the intention to strengthen the position of the Director General of the NBS through a fixed term of office and through his or her appointment based on a competitive and qualification-oriented procedure.
  - To reactivate the Statistical Council very soon so that it can perform regularly the work which is stipulated by the Law.
  - To strengthen the NBS's role as the coordinator of the Moldovan statistical system by concluding meaningful memoranda of understanding with the other statistics producers. Memoranda of understanding should also be concluded with all producers of administrative data.
  - To reduce the number of regional offices in line with the upcoming regional reorganisation of the country. Related to this, it seems advisable to consider reallocation of staff from regional offices to headquarters when modern means of data collection allow the release of resources from the regional offices.
  - To implement a more comprehensive and all-encompassing human resource policy, especially in view of the limitations in staff numbers. Mobility of staff shall be encouraged.
  - To reinforce the IT Division with regard to the number of staff, their qualifications and their remuneration. To plan and schedule the process of the

- development of applications in order to abolish outdated MS-DOS applications.
- To develop and decide on an overall quality assurance framework and based on this a quality management system together with specific actions and measures to be implemented.
- Improvements are needed in several statistical domains, and especially:
  - Improvements in the quality of the Statistical Business Register.
  - Development of a national strategy to improve Migration Statistics and estimates of the resident population.
  - Full funding for the Population and Housing Census and accelerating the planning for carrying out this important endeavour. Use of internationally recommended definitions of usual residence.
  - Investigate whether the current sample size of the Labour Force Survey can be reduced without major impacts on the accuracy.
  - Transition from SNA 1993 / ESA 1995 to SNA 2008 / ESA 2010 and some further improvements to the scope and the quality of National Accounts compilation. An increase in human resources and technical assistance are necessary.
  - Reduction of the overall number of business related surveys and replacement by surveys according to European standards.
  - Evaluation of all agricultural statistical activities regarding the scope, quantity and frequency of statistical information to be provided in future.

# 1. LEGAL BASIS

### 1.1 GENERAL OVERVIEW

- 46. The Law on Official Statistics of Moldova, passed by the Parliament of the Republic of Moldova on 9 December 2004, is the legal basis for the production of official statistics in Moldova (the English text is enclosed in Annex 2 of the report). It corresponds broadly with the UN Fundamental Principles of Official Statistics and the equivalent parts of the European Statistics Code of Practice. The Law includes provision for all essentials of a statistical law, and includes the provision that not only the NBS but all producers of official statistics in Moldova should comply with its rules.
- 47. The NBS is the central statistical body. The NBS is an administrative authority created under the Government to manage and coordinate statistical activities. According to the Law, the NBS has the ability to issue, within the limits of its competence, normative acts related to the production of statistical information, compulsory for all persons that are subjects of the Law. The status of the NBS as a central administrative authority is moreover stipulated in the Law on Government (No. 64-XII of 31 May 1990, as subsequently amended and supplemented). Article 22 of that law determines that other administrative authorities shall be set up by the Parliament, at the proposal of the Prime Minister, in order to manage, coordinate and control their fields of activities, which do not fall directly within the scope of duties of Ministries. Central administrative authorities are managed by Directors-General or Directors appointed as such and relieved of their duties by the Government. According to Article 23 of the Law on Government, the Government shall exercise control of the legality and appropriateness of activities of other central administrative bodies. Detailed rules on the organisation and functions of the NBS are laid down in Government Decision No. 1034 of 29 December 2011 'On the adoption of the Rules on the organisation and functioning of the National Statistical Office, structure and composition of the Board, and its maximum number of staff', published on 6 January 2012 in the Official Gazette.

# 1.2 ESSENTIALS OF STATISTICAL LAW

- 48. The following aspects are considered to be essentials of a statistical law:
  - Guarantee of professional independence for producers of official statistics.
  - Adoption of a multi-annual statistical programme by the relevant legislative authorities.
  - Strong power to collect and access data for statistical purposes.
  - Firm guarantee of statistical confidentiality.
  - Impartial dissemination of statistical information produced.
- 49. Further important aspects which should also be laid down in the statistical law are the organisation and coordination of the statistical system (including the mandate

of the statistical office), as well as the role of the Statistical Council. These aspects are discussed in later chapters.

#### 1.3 Professional Independence

- 50. According to the UN Fundamental Principles of Official Statistics, as well as the European Statistics Code of Practice, the producers of official statistics should be professionally independent. The production of statistics should be policy-remote and decided solely on the basis of professional criteria. Otherwise, it is possible that influence could be used to manipulate the results through the choice of standards and methods and/or dissemination practices. The statistical law should contain sufficient safeguards against all such possible interventions. Professionalism and independence are the fundamental principles for the credibility of a statistical system, and credibility is of the highest importance, due to the fact that statistical data deemed as unreliable will not be used, and are therefore useless.
- 51. Article 5 of the Law includes the main principles on which the production of official statistics in Moldova shall be based. In explanation of the principle 'impartiality', it is stipulated that official statistical bodies have the right 'to conduct all the activities necessary to produce statistical information and namely, select statistical methods and methodologies, systems of indicators, classifications, nomenclatures, recording and processing techniques, sources of data, contents, forms and deadlines for statistical information spreading and disseminate the statistical information impartially and independently, without any pressure from local and central public authorities, political parties, trade unions, employers' organisations and other legal persons, as well as from physical persons'. 'Statistical deontology' is defined as the 'obligation of the official statistical bodies to select on the scientific basis the sources, methods and procedures of statistical surveys conducting, and publish, in an accessible form, the sources of data, area of coverage and computing methodologies'.
- 52. As already stated above, the Law stipulates that 'the central statistical body is an administrative authority created under the Government to manage and coordinate the statistical activity'. The Law stipulates, moreover, that the central statistical body is managed by a Director General, who is appointed and dismissed by the Government. The selection procedures for the appointment, as well as his or her term of office including rules against early dismissal, are not addressed in the Law. On the contrary, the Director General of the NBS has to leave his or her post in the event of a change in Government. As far as the qualification required of the Director General is concerned, the Law stipulates only that he or she must have at least five years of experience in the statistical or economic and financial field and that he or she must meet other conditions, which are stipulated in the Law on Civil Service Positions and the Statute of Civil Servants. Among other things, it is a necessary condition to have the required education for the corresponding position and to fulfil the specific requirements to occupy a certain civil position. For senior public officers (as in the case of the NBS Director General) Article 27 of the Law on Civil Service Positions stipulates that they have at least five years' experience in the public function concerned.

- 53. It would be advisable to establish rules on qualification, selection, appointment and dismissal procedures, as well as a fixed term mandate, within the Law. The term of office for a Director General of the NBS should be five years with the possibility of a five-year renewal. As the Director General of the statistical office is responsible for ensuring the professional independence of the organisation, it would be prudent to strengthen this position through some form of special protection granted via statistical legislation.
- 54. The Law has given the Statistical Council an important role as an adviser of the National Statistical System of Moldova. The Council has been set up to develop and promote official statistics and to assure the use of objective, transparent and scientific methodologies, indicators and classifications in statistical activities. It is therefore of the utmost importance that Council members adequately represent all groups of stakeholders of official statistics. In Moldova it appears that the institutional composition of the Council, as it is determined by the Law, can be seen as a good representation of stakeholders. The private sectors of the economy and society are well represented. However, the Assessment Team was informed that the Statistical Council last met in December 2009. This means that the annual programmes for 2011 and 2012, as well as the Programme for Strategic Development of the NBS for 2012-2014, were not discussed in the Council. Although the programmes were, according to the statement of NBS's management, coordinated with and accepted by all Ministries, the Law determines clearly that the Council examines all multi-annual and annual programmes. The Council's lack of activities in recent years might be due to the very high, partly political, level of current members, and their lack of availability, which makes it difficult to schedule meetings with at least a majority of members.
- 55. The Assessment Team strongly recommends that the Council be reactivated very soon and is able, with the support of the NBS, to perform regularly the work which is stipulated by the Law. Two members of the Statistical Council strongly supported reactivation of the Council. It would be advisable to appoint some new members of the Council, still sufficiently high-level persons but with clear mandates and interests in the work of the Council and the NBS, and probably at a more operational than political level. For the sake of full independence of the Council, moreover, consideration should be given to appointing a chairperson who comes from a non-governmental institution.
- 56. Having the statistical system (and a statistical office) defined as independent in law is a good prerequisite to achievement of independence in practice. It cannot be considered as a guarantee, however, and ultimately independence has to be seen to exist and to be respected in practice, in particular by the Government. Following discussions with management and other staff of the NBS, as well as with many stakeholders, the Assessment Team came to the conclusion that the principles of professional independence, and of objectivity and impartiality, are not only guaranteed by the Law, but are also practiced by the NBS.
- 57. In 2010, the results of a survey conducted by the Institute of Public Policies and Magenta Consulting, on the satisfaction with public services from the perspective of beneficiaries, revealed that 77% of surveyed citizens were satisfied with the quality of services offered by the NBS. This was one of the highest scores among public institutions.

58. The Assessment Team saw no signs that the principle of professional independence was not being observed within statistical units of other producers of official statistics.

#### 1.4 PROGRAMMING

- 59. The Law should ensure that a multi-annual statistical programme be drawn up. The role of such a programme is to describe the scope of statistical activities over the next four or five years, setting clear priorities as to what activities will be carried out. The programme should be adopted by the relevant legislative state authorities because determination of what is statistically relevant in the country is a political decision. The details for the implementation of the programme can be decided at a lower level, for example by the Statistical Council or even by the Head of the NBS after consultation with advisory bodies. The programme should also include an estimate of the budget needed to implement the programme.
- 60. Article 13 of the Law is called 'Programs of Statistical Works'. This Article stipulates that the multi-annual programme, which shall span a period of three to five years, will be approved by the Government. It shall include all official statistics, with the exception of the statistics of the National Bank, and it shall establish the main objectives and development directions of official statistics. Paragraph 3 of Article 13 states that the annual programmes of statistical works shall contain the measures necessary for the implementation of activities stipulated in the multi-annual programme, and that it determines the bodies responsible for the production of statistical information. According to paragraph 4, all statistical works carried out by official statistical bodies in accordance with the programme are financed by the state budget.
- 61. In practice, the English versions of a 'Strategy for National Statistics Development 2008-2011' and a 'Plan of Action for National Statistics Development for the period 2008-2011' can be found on the NBS website. The plan includes the activities envisaged, the institutions responsible for the implementation of these activities, and the period specified for its execution. The website in Romanian contains a 'Programme of Strategic Development of National Bureau of Statistics for 2012-2014', which was translated into English for the Assessment Team. This document has been adopted only by the NBS Board, and only includes a strategic programme for the NBS. The legal basis for this programme is the 'Government Decision No. 176 of March 2011' providing an approach for the elaboration of multi-annual development programmes for the Ministries and other governmental institutions. This strategic programme was sent to and accepted by all Ministries, but it was not formally adopted by the Government.
- 62. The NBS management stated that an annual programme for the year 2012 had been produced and adopted by the Government. As it has been translated only partly into English, it has yet to be published on the English version website. Notwithstanding the 2012 annual programme, it is recommended that a multi-annual programme including all official statistics is produced and submitted to the Government for adoption, because it is the basis for the mid-term planning of the production of official statistics, the division of work within the statistical system, and resources available for official statistics. In the programme, the distinction

- between official statistics and administrative data should be made very clear, and it should also include a list of producers of official statistics.
- 63. The NBS prepares and publishes an annual report of its activities related to the progress of the implementation of the programme. It is recommended that an annual report be published which includes the activities of all producers of official statistics, thereby demonstrating the NBS's role as the coordinator of the national statistical system.

#### 1.5 MANDATE FOR DATA COLLECTION

- 64. The statistical law should provide producers of official statistics with the right to decide on the most appropriate way to acquire the basic information necessary for the compilation of their statistics from all data sources. Public organisations should be obliged to give access to administrative data for statistical purposes, and respondents to provide the information needed.
- 65. The NBS and other official statistical bodies have a clear legal mandate to collect data from respondents and to access administrative data for statistical purposes within the limits of the programmes of statistical works. Statistical units are obliged in all surveys and censuses to provide the NBS and other producers of official statistics with complete and correct data. According to the Article 18 of the Law, respondents shall submit the data as required by the statistical body free of charge to official statistical bodies, and provide the representatives of official statistical bodies with free access to the documents confirming the correctness of these data. Official statistical bodies have the right to check whether data are correct and, when inaccuracies are identified, to advise the persons who submitted these data on how to correct the inaccuracies (Article 9 of the Law). According to information received during the missions, the NBS confirmed problems with low response rates in the Household Budget Survey, whereas non-response from enterprises is at this point in time less of a problem. However, in its strategic development programme the NBS states that there is a trend of increasing nonresponse rates in some sample surveys which has a negative impact on data quality. Given the general low response, solutions to non-response should be found without applying penalties. The NBS recognises the necessity to introduce new and more efficient ways of data collection using modern electronic communication instruments, for example delivery of data using electronic questionnaires via the internet in business statistics; using computer assisted interview techniques in household surveys such as CAPI and CATI.
- 66. The NBS and other official statistical bodies are given the right to access all administrative data sources needed for the implementation of the programme. Holders of administrative data should submit the required data to official statistical bodies free of charge. It is highly significant that the Law provides the NBS with the right to influence the content of administrative data sources. *Article 20* of the Law determines that 'public authorities that collect administrative data in order to exercise their duties or manage such databases shall coordinate their content and volume with the central statistical body'. *Article 10*, paragraph 1, c) gives the NBS the right 'to submit to the public authorities that hold administrative data proposals on additional accumulation and manner of data submission, in order to use them subsequently for the production of statistical information'.

- 67. The NBS reported that administrative data are used to a significant extent but that there is a need for further improvements. Problems with the Ministry of Information Technologies and Communication were explicitly mentioned. The Ministry refuses to submit individual data from the population register to the NBS. Problems also exist with regard to access to tax data and migration data.
- 68. As already stated, the Law gives the NBS the right to be involved and consulted on the content of administrative data files, and in some areas the NBS has already done this, for example for crime and health data. The NBS has already concluded agreements on data sharing with some owners of administrative data. It is recommended that agreements are pursued with all holders of administrative data that can be used for statistical purposes. Such agreements should include rules for data sharing and commitments on both sides to avoid duplication of work and to improve the administrative data files so that they can be better used for statistical purposes. The NBS management described access to administrative data as being a rather well developed and managed process. However, in the strategic development programme it is stated that there is limited access to administrative data of sufficient quality, relevant to official statistics. Some users confirmed the need for improvements. The NBS should be more proactive in supporting Ministries to process their administrative data files properly. It seems necessary for the NBS to increase the quality control of administrative data used for statistical purposes and to be provided with metadata from data producers.
- 69. The Law gives the NBS the right to apply administrative sanctions in cases of a break of any regulation of the Law. The NBS management stated that sanctions are not used for non-response of private households and are very rarely used for non-response of businesses. Instead of issuing fines, the NBS attempts (in particular with their staff in the territorial statistical bodies) to improve cooperation with businesses, stressing the importance of statistics and convincing them to respond.

#### 1.6 STATISTICAL CONFIDENTIALITY

- 70. Statistical confidentiality is one of the most important principles of official statistics. In order to safeguard the trust of respondents, data must not be used in individual form and in a context where individual decisions are taken. A possible exception is the use of such data for scientific purposes, but under very strict and restrictive conditions. The Law, moreover, should include the requirements for a data protection architecture which ensures the functioning of confidentiality rules in all stages of the statistical production process.
- 71. The Law includes strict rules regarding statistical confidentiality. This is one of the principles on which official statistics are based in Moldova, and *Chapter 5* '*Confidentiality of the Statistical Information*' contains five Articles on this issue. In particular, the Law stipulates that data collected, processed and stored for the production of official statistics are confidential if they allow direct or indirect identification of physical or legal persons, thereby disclosing individual information. This means that confidential statistical information shall be used exclusively for the production of official statistics, and for scientific purposes under strict conditions. A few exceptions are also stated in the Law, for example individual information about the address, telephone, name, type of activity, and number of staff of legal and physical persons carrying out entrepreneurial

- activities, information about state owned enterprises, and information about public institutions. Persons involved in the production of official statistics shall have access to confidential data to the extent necessary for the production of said statistics and should be obliged to apply the same data confidentiality rules even after changing jobs or responsibilities. Access to individual statistical data without identifiers may be granted for research purposes and for strategies and programmes of national importance, the expected outcomes of which cannot refer to identifiable individual units. Last but not least, the NBS and other official statistical bodies should take all necessary technical and organisational measures required for the protection of confidential data.
- 72. The NBS management reported that there are no problems regarding the confidentiality of data in practice. Staff signs legal confidentiality commitments as part of their contracts when appointed. Internal written instructions and guidelines for staff on how to deal with micro-data in all phases of the production and dissemination processes are, however, not yet available. The NBS management explained that such a document is under preparation. The Assessment Team are thoroughly convinced that statistical confidentiality is embedded in the culture of the NBS, and that holds true also for the other statistical bodies the Assessment Team met.
- 73. However, contradictions in the legal system of Moldova allow lawyers in principle to access individual statistical data because of respective provisions in the Law on Advocacy. There is, therefore, a need for the harmonisation of legislation which will make very clear that confidential data collected for statistical purposes can only be used for statistics and for research purposes in exceptional cases.
- 74. According to the Law, the Director General of the NBS may grant access to individual statistical data without identifiers for the purpose of carrying out research projects, and strategies and programmes of national importance. The resultant statistical product must not refer to identifiable individual units. The NBS management stated that there is a demand for the provision of micro-data for research purposes. The NBS grants access according to the purpose for which the data shall be used. Data were given inter alia to international organisations as well as to Ministries. A guideline describing in detail the preconditions for the provision of micro-data for research purposes, the type of institutions that may get in practice such data, as well as the procedures that have to be followed, does not exist yet. It should be developed very soon and be published on the NBS's website.
- 75. The non-statistical task 'Informational service on financial reports' is executed under the Law of Accounting by a specific legal unit being part of the NBS structure, but clearly separated from all statistical activities. Data are collected twice a year for big companies and once a year for all others, and results are published in an aggregated form. Data can, however, be submitted as individual data to Ministries upon request. Respondents are well informed about these conditions and accept that these data are not confidential. Although it is always problematic if a statistical office carries out a non-statistical task, in particular when this task is linked to the provision of individual data, it appears in this specific case that the advantages for the work of the NBS are of greater value than the potential risks and problems linked to this set-up.

### 1.7 IMPARTIAL DISSEMINATION

- 76. According to the UN Fundamental Principles and to the European Statistics Code of Practice, dissemination is to be made on an impartial basis to honour citizens' rights to public information. Statistical offices have the responsibility to ensure that statistical results are made public. Pre-announcement of important releases is a useful tool to guarantee technical autonomy in dissemination.
- 77. The Law determines explicitly that the results of official statistics shall be disseminated in such a way that all users have equal and simultaneous access. All appropriate electronic and printed media are employed to reach users. The principle of transparency in the Law includes the obligation of official statistical bodies to provide respondents and users with the right of access to information necessary for the assessment of data quality, in particular information on methods and techniques used for the production of official statistics. The Law does not oblige the NBS to publish a pre-release calendar with the dates at which important official statistical results will be released in the following year. However, the NBS publishes an annual catalogue of statistical publications for general information to users and a more detailed schedule of press releases is elaborated quarterly and published on the website.
- 78. According to the *Article 21* of the Law, some user groups (President's Office, Parliament, Government, central and local public authorities, National Bank, Academy of Science, Chamber of Trade and Industry, trade unions and mass media) have free access to official statistical information whereas others have to pay a fee, which appears not to be in accordance with the equality principle. In practice, however, all data are available on the websites of NBS and other producers and this access is free of charge. Users have to pay for printed publications and for special services only, as is common practice in most countries. A detailed description and assessment of the dissemination policy of the NBS can be found in *Chapter 3.5* of this report.

# 1.8 ISSUES THAT MAY BE CONSIDERED FOR FUTURE REVISION OF THE LAW

- 79. Although the Law is, at present, a solid legal basis for the Moldovan statistical system, some amendments and clarifications should be considered in a future revision process.
- 80. A few amendments of special importance for the good functioning of a statistical system are described in the following:
  - A major issue should be to strengthen further the position of the Director General of the NBS. In place of *Paragraph 5* and 6 of *Article 8*, a new Article should be included which should be called '*Role and Tasks of the Director General*'. The Article should stress the role of the Director General as the guardian of the professional independence of the office (see as an example the Statistics Law of Ireland on the website of the CSO). He or she should have a fixed-term mandate of five years, which is renewable at least once. The required qualifications, the procedures of the appointment, and protection against early dismissal of the Director General should be an explicit part of the Law and not only included in other legislation. Examples to be referred to are the Statistics Laws of Turkey and Bulgaria, available on their websites as well.

- The NBS's role as the coordinator of the statistical system should be strengthened. In addition to the tasks already stipulated in the Law, the NBS should be given the right and the duty to follow up the performance of tasks assigned by the programmes of statistical works to other producers of official statistics in terms of conformity to international standards, to monitor compliance with the fundamental principles, and to perform quality control of all official statistics.
- The principle '*Professional Independence*' should be explicitly mentioned (possibly in place of '*Statistical Deontology*'), which will make it necessary to change the definition of the principle '*Impartiality*'.
- In *Article 8*, Paragraph 3, it should be made clear that the central statistical body cooperates with the statistical departments of other central public authorities, when deciding on statistical methodology.
- The inclusion of a separate Article on quality which stipulates and defines the European quality dimensions should be considered (see the Regulation on European Statistics), in which the European Statistics Code of Practice could also be mentioned.
- The Law should provide producers of official statistics with the right to intervene in cases of criticism, misuse or misinterpretation of official statistics.
- The NBS should be assigned the task to prepare an annual report on the activities of all producers of official statistics, as well as a report at the end of the multi-annual programme, both of which should be submitted to the Government and published after approval.
- Although the NBS and the other producers of official statistics already have a clear legal mandate to access administrative data for statistical purposes, and though the Law gives the NBS the right to shape the content of administrative records in *Articles 10* and 20, the NBS should be entitled to be involved in the design of administrative records relevant for statistical data production in an even stronger way (see as best practice *Article 17a* of the '*Proposal for a Regulation of the European Parliament and the Council amending Regulation (EC) No. 223/2009 on European Statistics*').
- According to the current Law, the Director General of the NBS may grant
  access to individual statistical data without identifiers for the purpose of
  carrying out scientific and research projects. It seems that there are no clear
  criteria as to which persons or institutions may receive such data and which
  procedure is to be followed. An amendment of the Law on these issues is
  recommended.
- Clear rules should be included in the Law with regard to fines to be imposed in the event that a breach occurs.

# 1.9 THE LEGAL BASIS FOR REGULAR STAKEHOLDER INVOLVEMENT

81. A Council for Statistics is established by the Law as a consultative body with the tasks 'to develop and promote the official statistics, assure an objective, transparent and scientific character of the methodologies, indicators and classifications used in the statistical activity' and 'to examine the draft programmes of statistical works and national statistical standards'. The method

for appointing Council members is laid out in the Law. Nothing is said on their terms of office nor is anything said on the functioning of the Council.

- 82. Paragraph 5 of Article 12 of the Law determines the composition of the Council:
  - Three representatives of the central statistical body;
  - One representative of the Moldovan Academy of Science;
  - One representative of the National Bank of Moldova;
  - Five representatives of specialised bodies of the central public authorities;
  - One representative of specialised higher education;
  - One representative of trade unions;
  - One representative of mass media;
  - One representative of employer's organisations;
  - One representative of the business sector.

As stated previously, the Council last met in December 2009 and it is strongly recommended that the Council be reactivated.

83. Stakeholders of the statistical system are also the producers of official statistics in other countries and international organisations. According to the Law the NBS is given the task 'to collaborate and conclude, in compliance with the legislation of the Republic of Moldova, agreements of collaboration with similar bodies from other countries and international statistical organisations'. The NBS is furthermore responsible 'to submit statistical information to the international organisations joined by the Republic of Moldova'. The Moldovan Statistical System has close contacts with the European Statistical System, in particular with the statistical offices of Norway, Sweden and Romania, as well as with Eurostat, but also with international organisations like the International Monetary Fund (IMF) and some United Nations organisations (ILO, UNDP, UN Women, UNFPA, and UNICEF). Moldova has subscribed to the Special Data Dissemination Standard (SDDS) of the IMF, and the NBS is the national coordinator.

# 1.10 OTHER RELEVANT LEGISLATION

- 84. Statistical information is produced according to the Law in accordance with the multi-annual and annual programmes of statistical works, which are approved by the Government. The programmes are developed by the NBS jointly with other producers of official statistics. The annual programme 2012 has been adopted by the Government (Government Decision No. 999 of 23.12.2011 on the approbation of statistical work programme for the year 2012). The multi-annual programme of statistical development 2012-2014, however, has only been approved internally by the Board of the NBS.
- 85. The Law determines in *Article 17* that population censuses shall be carried out every ten years on the basis of a separate law. Agricultural censuses and other censuses shall be carried out on the basis of a Government order. The next Population and Housing Census will be conducted in April 2014, ten years after the last census of 2004. It will be based on the Law on Population and Housing Census in Moldova in 2014, which was adopted by Parliament in April 2012.

This law determines the principles and the mode of organisation and implementation of the census, scope, basic concepts, characteristics on population and housing and how to collect them, conditions of temporary employment of census staff, rights and obligations of respondents, confidentiality of individual information, etc.

- 86. The Law on the National Bank of Moldova lays down in Article 72 that the Bank 'shall collect the primary statistical information that is required for the achievements of its objectives and carrying out of its tasks, from the competent authorities of the state, financial institutions and from other legal entities and individuals'. The National Bank shall moreover 'contribute to the rules and practices governing the collection, compilation and distribution of statistics within its field of competence'.
- 87. The Law on Protection of Personal Data (Law No. 133 from 8 July 2011).
- 88. The Law on Government (No. 64-XII of 31.05.1995).
- 89. Government decision No. 1034 of 29.12.2011 on the approval of the organisation and functioning of the NBS, structure, nominal composition of the Board and the number of staff.

#### 90. Assessment

The Law on Official Statistics as valid at the time of the assessment presents a solid legal basis for the production of official statistics in the country which is in a process of transformation towards a modern society based on democratic values and the rule of law, and towards a market economy. It is broadly in line with the UN Fundamental Principles of Official Statistics and the equivalent parts of the European Statistics Code of Practice. The Law includes provision for all essentials of a statistical law, and it includes the provision that not only the NBS but all producers of official statistics in Moldova should comply with its rules.

Some amendments and clarifications are nevertheless recommended for the future revision of the Law. A major issue should be to strengthen the position of the Director General of the NBS. He or she should have a fixed-term mandate of up to five years, renewable once. Further issues of some importance are explained in point 35 of this report.

Following discussions with many interlocutors in the course of the assessment, the Assessment Team came to the conclusion that the principles of professional independence, of objectivity and impartiality, and of statistical confidentiality are adhered to by the NBS.

The Assessment Team saw no signs that the principles of professional independence and of statistical confidentiality were not being observed within statistical units of other producers of official statistics.

The Statistical Council has been given an important role as adviser of the National Statistical System of Moldova by the Law. The composition of the Council, as determined by the Law, appears to be a good representation of stakeholders. The private sectors of the economy and society are well represented. It is, however, not clear why the Council has not met for such a long time and was

not involved in the preparation and adoption of the 2011 and 2012 work programmes, as well as the multi-annual programme of strategic development. It is strongly recommended that the Council be reactivated very soon and should perform regularly the work which is stipulated by the Law.

The NBS management reported that non-response in statistical surveys is a significant problem in the Household Budget Survey. It appears that there is a trend of increasing non-response rates in some sample surveys, and response burden, in particular on enterprises, is becoming more of an issue. It is necessary, therefore, to develop new and more efficient ways of data collection using modern electronic communication techniques (delivery of data by internet, CATI, CAPI, etc.).

The further improvement of the use of administrative data for statistical purposes is very well recognised by the NBS and a clear objective of the office. The NBS has already concluded agreements on data sharing with some owners of administrative data. It is recommended that agreements are pursued with all holders of administrative data that can be used for statistical purposes. Such agreements should, on the one hand, include rules for data sharing. They should, however, also state the commitment of both sides to avoid duplication of work and to improve the administrative data files so that they can be better used for statistical purposes. Although the Law gives the NBS the right to shape the content of administrative records, the NBS should be entitled to be involved in the design of administrative records relevant for statistical data production in an even stronger way. The NBS, on the other hand, should be more proactive in supporting Ministries to operate their administrative data files properly. Moreover, it seems necessary for the NBS to increase the quality control of administrative data used for statistical purposes and to be provided with metadata from data producers.

Although the Assessors are convinced that statistical confidentiality is fully respected in the Moldovan statistical system it appears necessary to prepare and publish instructions and guidelines for the protection of statistical confidentiality in the production and dissemination processes. Moreover, it is recommended that a document is produced describing the preconditions for the provision of microdata to researchers and the procedures that have to be followed. Such guidelines should also make clear which institutions and individual researchers may receive and use such data.

The NBS prepared and adopted internally a 'Programme of Strategic Development of the NBS for 2012-2014'. It is recommended that the NBS updates the programme for the years 2013-2015 or 2013-2017, and include all official statistics (with the exception of official statistics of the National Bank), as stipulated in the Law. The updated multi-annual programme, which should be submitted to the Government for adoption, should be used to develop a mid-term strategic orientation on how to approach European requirements. It should include development activities of all the statistics producers, as well as estimations of the budget and the international assistance needed for the implementation of all planned activities. Within the NBS, the programme should be complemented by an operational plan containing the activities needed and milestones for fulfilment and monitoring of these activities.

# 2. NATIONAL SYSTEM OF OFFICIAL STATISTICS

- 91. According to the *Article 7* of the Law, the National System of Official Statistics of Moldova consists of the following official statistical bodies: the central statistical body (the NBS) and its territorial sub-divisions (regional offices); the statistical departments of some central public authorities; and the statistical department of the National Bank of Moldova. The multi-annual and annual programmes of statistical works determine which central public authorities are (apart from the NBS and the National Bank) official statistical bodies. The *Article 8* of the Law regulates that the central statistical body (the NBS) is created under the Government to manage and coordinate statistical activity. Coordination includes, among other things, the development of the programmes and decisions on methodology used to produce statistical information, each in cooperation with other official statistical bodies.
- 92. In meetings with other producers of official statistics, close bilateral cooperation with the NBS was expressed. The NBS has already concluded some agreements with other producers of official statistics. Comprehensive memoranda of understanding should be concluded as soon as possible with all other producers of official statistics.

#### 2.1 STRUCTURE OF THE MOLDOVAN STATISTICAL SYSTEM

- 93. The NBS is in charge of the large majority of the production of official statistics in Moldova (about 75 per cent according to the NBS). The NBS states that the following bodies of the central public administration (apart from the NBS and its territorial bodies) are responsible for the production and dissemination of parts of official statistics:
  - National Bank of Moldova;
  - Ministry of Finance;
  - Ministry of Justice;
  - Ministry of Health;
  - Ministry of Internal Affairs;
  - Ministry of Environment;
  - Ministry of Labour, Social Affairs and Family, and National Employment Agency;
  - National Regulation Agency in Electronic Communications and Information Technologies;
  - National Commission of Financial Market.

The list of other producers of official statistics is taken from the Decision of the Government concerning the approval of the Action Plan of Statistical Works for 2012. In addition, many other public bodies collaborate with the NBS for the purpose of obtaining data they collect.

94. The NBS's 2012-2014 Programme of Strategic Development identifies some bodies of the central administration as main partners of the NBS (amongst others

- the National Bank of Moldova, Ministry of Finance, Ministry of Health and Ministry of Justice) without explaining, however, the role of these institutions in the process of the production of official statistics.
- 95. Though delimitation of the Statistical System of Moldova, and determination of which institutions are considered to be other official statistical bodies, is rather clear from the Law, it appears that the programmes do not make it transparent for users of statistics. It seems that it is difficult or even impossible to define which data published by public institutions other than the NBS and the National Bank are to be considered official statistics (having been processed according to the strong rules of the Law), and which data are merely administrative data that have not been subject to official statistics rules.
- 96. The National Bank of Moldova is responsible for monetary and financial statistics, balance of payments statistics, trade in services and foreign direct investment statistics, and international investment position, external debt and foreign exchange operations statistics. Although a new agreement between the National Bank and the NBS is still under discussion, the NBS and the statistics department of the National Bank cooperate closely. The National Bank uses statistical information from the NBS for the compilation of balance of payments and foreign direct investment statistics, while the NBS uses balance of payments data for its national accounts compilations. The National Bank is also a major user of the NBS statistical information.
- 97. Responsibility for government finance statistics (relating to expenditure, revenues and financing of government), lies within the Ministry of Finance. The Ministry of Finance (together with the National Bank of Moldova) plays the central role in the assessment of government deficit and government debt.
- 98. From discussions held with ministry representatives, it appears that at least the Ministry of Health and the Ministry of Justice have separate departments or subordinate institutions responsible for the production of official statistics.

#### 99. Assessment

According to the Law, official statistical bodies in Moldova include the central statistical body (the NBS) and its territorial sub-divisions, the statistical department of the National Bank of Moldova, and statistical departments of other central public authorities specified in the programmes of statistical works as authorised to produce official statistical information. Combined, they form the National Statistical System of Moldova. The NBS is in charge of producing approximately 75 per cent of official statistics. Because the existing multi-annual and annual programmes do not make completely clear which institutions are producing official statistical information and which of the institutions mentioned in the programmes are producers and providers of administrative data, a definite delimitation of the National Statistical System cannot be established. It is recommended to determine precisely in the next programme which public bodies are official statistical bodies and belong to the National Statistical System.

In general, in a small country like Moldova, it would be more efficient to concentrate nearly all statistical expertise in one institution. This means that the NBS should take responsibility for as many statistics as possible from other

institutions, provided that the necessary resources are available from the state budget. Statistical units in other public authorities (with the exception of the National Bank) will only be rather small and will therefore be lacking highly professional expertise.

### 2.2 PROGRAMMING AND COORDINATION MECHANISMS

- 100. Statistical systems with some degree of decentralisation need to be well coordinated for the sake of system efficiency. The statistical office should be given a leading role as the coordinator of the system, and other producers should use the same standards, in particular regarding classifications provided by the statistical office. In addition, they should harmonise their methods with methods used by the statistical office, and, last but not least, should include their work programme in the overall statistical programme to avoid any duplication. They should also provide their results to the statistical office for further dissemination. The statistical office, on the other hand, should support the work of other data producers, in particular by providing methodological assistance.
- 101. According to the Law, the NBS is the coordinator of the Moldovan Statistical System. The *Article 8* of the Law designates the NBS as the administrative authority to manage and coordinate all statistical activities. The NBS is, inter alia, responsible for:
  - Developing the programmes of statistical works together with other official statistical bodies;
  - Developing statistical methodology in accordance with international and regional standards;
  - Deciding on the unified methodology used to produce statistical information together with central public authorities;
  - Developing and approving with relevant bodies, either independently or jointly, national statistical standards, classifications, and regulations on their implementation;
  - Providing other official statistical bodies with necessary methodological assistance;
  - Coordinating the dissemination of statistical information carried out by other official statistical bodies, including international organisations;
  - Collecting from other official statistical bodies available statistical information to be used in data series or statistical publications.

In contrast to statistical laws in many other countries, the Moldovan law does not explicitly stipulate that the NBS shall follow up the performance of tasks assigned by the programmes of statistical works to other producers of official statistics in terms of conformity to European and international standards; nor that the NBS shall monitor compliance with the fundamental principles, or that the NBS shall perform quality control of all official statistics.

- 102. The NBS has already concluded some agreements with other producers of official statistics and holders of administrative data:
  - National Bank of Moldova;
  - Ministry of Health;
  - Ministry of Internal Affairs;
  - Ministry of Environment;
  - Ministry of Information Technologies and Communication;
  - Agency of Real Estate Information and Land Registration.

Comprehensive memoranda of understanding should be concluded as soon as possible with all other official statistical bodies and all producers of administrative data used for statistical purposes.

- 103. The NBS cooperates closely with many Ministries on a bilateral basis. It seems, however, that partners cooperate only on an ad-hoc basis and that cooperation is highly dependent on individuals responsible for the respective statistical areas. Consideration should be given to placing the cooperation in the statistical system on a more formal basis and to establishing working groups for important statistical areas.
- 104. The Law does not assign explicitly a role to the Statistical Council in the coordination of the statistical system. It only determines that the draft programmes are discussed by the Council and that the Council gives its opinion on the programmes. However, as the Council last met in December 2009 it was not possible for the 'Programme of Statistical Development of the NBS 2012-2014' and the annual programmes 2011 and 2012 to be discussed by the Council.

#### 105. Assessment

The NBS's main instruments for the coordination of the Moldovan Statistical System include its responsibility to prepare the programmes of statistical works and to develop and decide on the methodology used for the production of official statistics (in cooperation with other official statistical bodies). It also has memoranda of understanding with other official statistical bodies. Current memoranda are partly agreements with other official statistical bodies and partly agreements with providers of administrative data. Comprehensive memoranda of understanding should be concluded as soon as possible with all other official statistical bodies. They should include the other authority's guarantee to comply with the European Statistics Code of Practice and to provide human and financial resources for the implementation of their statistics, along with the establishment of a working group for the coordination of activities. They should also guarantee the NBS's obligation to determine standards, to provide guidelines, and to give methodological support, as well as the exchange of data in compliance with confidentiality rules, and the exchange of information on the implementation of the programme.

The Law gives competencies to the NBS in its function as coordinator of the Statistical System in Moldova. A good example of the coordination of statistical activities is the provision of data to the IMF in the framework of the Special Data

Dissemination Standard (SDDS), where the NBS is the national coordinator. Overall, however, the Assessment Team have the impression that the NBS only partly fulfils its role as the coordinator of the NSS. It is therefore recommended that the NBS expands its coordination activities (which may partly need amendments of the Law) with regard to the monitoring of implementation of the annual programme, the monitoring of the use of international standards, and the monitoring of compliance of other producers with the European Statistics Code of Practice. Equally, however, the NBS can only meet these responsibilities if it has the necessary resources for these labour intensive tasks.

It is recommended that the yearly activity report does not only include activities of the NBS, but of the whole Moldovan Statistical System. Reporting on the multi-annual programme should be conducted at the end of the period of validity.

# 3. NATIONAL STATISTICAL SERVICE

#### 3.1 Institutional Mission

- 106. The NBS states that its mission is to coordinate and produce official statistics on the economic, social, and demographic situation of the country. These statistics should be relevant, reliable, complex, and accessible to users, being able to support informed decision making by central public authorities, facilitate the development of the private sector, and contribute to informing society as a whole.
- 107. The NBS's vision is to produce highly credible and quality statistics, developed on the basis of a coherent and updated system of statistical research from all administrative data sources produced by state authorities. Further, they seek for the national statistical system, coordinated by the NBS as the central authority on statistics, to adhere to European standards and good practices and be based on modern information technologies.
- 108. The NBS also adheres to several values related to the production of statistics. These values include reliability, impartiality and objectivity, user orientation, relevance, credibility, cooperation, transparency, timeliness, confidentiality, costefficiency, professional ethics, and commitment to quality.

# 109. Assessment

The NBS's institutional mission, vision, and values provide a precise and comprehensive description of their tasks, which are consistent with the fundamental principles of official statistics.

# 3.2 ORGANISATION OF THE NATIONAL STATISTICAL SERVICE

# 3.2.1 Organisation of the NBS

- 110. The NBS is responsible for the organisation of official statistics in Moldova and it is independent of other government Ministries, affording its considerable autonomy. The NBS is responsible for oversight of all methodologies, data collection, data calculations, organisation of surveys, and development of questionnaires. Divisions (and some sections) are situated under the direct supervision of the Director General and two Deputy Directors General.
- 111. The NBS recently reorganised its divisional structure, which included the integration of the majority of the posts allocated to information technology into the corresponding statistical divisions (in total 50 posts), while a certain number of IT administrators and programmers remain in a separate IT division (30 posts). This integration of IT staff into the corresponding statistical domain sections and divisions was a lengthy and at times painful process due to the increase in the number of civil servants in the NBS, salaries and related issues. The process is not yet finalised as this integration of staff is based on normal competitions for hiring

civil servants, and IT staff have to apply for posts in these sections and divisions. The staff changes resulting from this competition process will lead to changes in the staff composition and potentially also to some redundancies. It needs to be emphasised that the progress in this area (abolishing the main computing centre, establishing a new IT division and integrating the work of data validation and processing into the work of the headquarters) is of significant importance to the NBS. The former structure of the main computing centre is one that is still prevalent in many offices of the countries of the former Soviet Union. Usually it employs a significant number of staff that is not available for methodology work, leading to potential duplication of work and preventing headquarters staff from having in-depth knowledge about the content of the statistical data as they only see and approve aggregated data. It is, therefore, a significant step forward for the NBS in moving to a modern structure of a statistical office.

- 112. The revised organisational chart includes new units on quality management and internal audit, policy analysis, monitoring and evaluation, coordination and development, information and communication, and statistical methods, although all of them are rather small sections.
- 113. According to the Decree No. 106 of the Director General of the NBS 'On delimitation of the functions between the Director General and the Deputy Directors General' from 19 November 2012, the following organisational units are included under the Director General:
  - Director's Chamber
  - Juridical Service
  - Internal Audit and Quality Management Service
  - Policies Analysis, Monitoring and Evaluation Service
  - Coordination and Development of National Statistics System Service
  - Information and Communication with Mass-media Service
  - Human Resources Section
  - Internal Services Section
  - Financial-Economic and Accounting Division
  - International Collaboration and European Integration Section
  - Synthesis and Dissemination of Statistical Information Division
  - National Accounts and Macroeconomic Synthesis Division
  - Price Statistics Division
  - Social Services and Living Conditions Statistics Division
  - Labour Market Statistics Division
  - Statistical Methods Section
  - Coordination of Data Collection in Households Service
  - Management and Procurement Section
  - Demography Statistics and Population Census Division

The units under the Deputy Directors General are as follows:

- Statistical Infrastructure Division
- Agriculture and Environment Division
- Industry, Energy and Constructions Statistics Division
- External Trade and Market Services Statistics Division
- Informational Technologies Division
- Informational Service of Financial Reports
- The activity of Territorial Statistical Bodies

The new organisation chart will be available soon.

# 114. Assessment

The NBS recently incorporated its main computing centre and the majority of the IT staff into its central organisation. This is a huge step forward in modernising the organisational structure of the NBS, as it brings together different statistical processes such as methodological development, the collection, validation and editing of data, and data dissemination and analysis into one department, ensuring greater efficiency and integration of processes. The NBS should share their experiences regarding this procedure with other countries. Furthermore, the integration of the two census divisions (population and agriculture census) into the respective statistical divisions of population and agriculture statistics are further elements in the move to a modern statistical organisation.

According to NBS's officials, the current reorganisation is intended to be temporary in nature, as the entire system will still need to be restructured to comply with EU standards. The current structure gives division heads the flexibility to reorganise resources based on work needs.

One additional issue to be considered is the general organisational structure with rather small formal units. This type of structure can create bottlenecks in the case of changing workload, thus enhancing the risk of delays when staff members change or are not present for some reason. A more flexible structure could be an alternative. There seems, for example, to be an excessive number of units within the Statistical Infrastructure Division. It is also recommended that the quality and the methodology units be combined, which would thereby improve internal communications about methodologies.

With the recent reorganisation and its possible benefits in terms of efficiency gains and synergies between IT and statistical staff, the NBS should consider and reflect upon a reallocation of staff based on priority areas of statistics such as national accounts and business statistics; and also for development areas such as coordination of the statistical system, quality management, coordinated methodology development including sampling, analytical work, etc. The creation of central units for coordination, and methodology and quality, will help to develop these areas in a consistent and more efficient way than at present where many of these activities are spread throughout the NBS.

## 3.2.2 Organisation of Regional Offices

- 115. The National Statistical System consists of the NBS, some other official producers of statistics, and 35 territorial statistical bodies (TSB). The latter are located in the 32 rayons of the country, in the municipalities of Chisinau and Balti, and in the Autonomous Administrative Territorial Unit of Gagauzia.
- 116. The TSBs work under the control and supervision of the NBS and the NBS defines the methodology, develops the instructions and instruments for data collection and surveys, compiles indicators and indices, and implements necessary quality checks. The basic functions of the TSB include the collection, entry and processing of primary data in the regions as well as some initial checking of the data. For this work, each TSB receives from the central office the list of surveys to be conducted in a given year and the enterprises / households to be covered in the sample surveys. These plans of activities are assigned to TSB employees who then collect responses from relevant respondents. Enterprises appearing in sample are informed in advance regarding the data they will have to provide in the course of the year. When the reporting period is due, enterprise data are individually brought to the TSB office on paper by the enterprise representative and are immediately entered accompanied by an initial data validation procedure. Household data are collected through face-to-face interviews and price data are collected from shops and markets by price collectors. The NBS is embarking on the introduction of electronic reporting, first through making questionnaires available on the internet so that they do not need to be sent / picked up in the TSB offices, and secondly, through establishing some kind of web-based data collection system. These are still very much plans for the future, however.
- 117. Data are transferred to the NBS, which carries out additional data checks, verifying primary data with the TSB in cases of discrepancies, final processing and the validation and publication of the data. After data are validated at the central level, aggregated regional data are sent back to the TSB, which in turn provides local government authorities with these aggregated tables.
- 118. Data for regions are produced and published centrally through the website of the NBS. TSB disseminates data on paper and in electronic format - directly addressing the main users from Local Authorities. Published data are consistent wherever they are published. Primary individual data are transferred electronically from the TSB to the NBS and stored there; paper questionnaires remain in the secured offices of the TSB however and are destroyed after three years. Requests for any kind of regional data coverage have to be initiated through the NBS. The TSB are clearly subordinated to the NBS and do not have any relationship with the local government for example in terms of financing or provision of staff. Heads of the TSB and their deputies are nominated by the Director General of the NBS, either after an open competition or through internal mobility. However, there is no real mobility between regions and the centre for reasons of differences in salaries and living conditions. The TSB are financed centrally through the budget of the NBS but can also have their own small sources of income, for example by renting out free space in their building. Selling publications is another source of income, but all these incomes go to the central budget.
- 119. As of 1 January 2012, the TSB employed in total 395 staff and a network of 267 interviewers, whereas the NBS employs 196 staff and another 11 staff is available for the Information Service for Financial Reports. The TSB staff are normally

statisticians with university education (with a few exceptions), and the network of interviewers is engaged in household surveys (labour force and household budget surveys) and agricultural surveys. The proportion of staff allocated between the TSB and the NBS and the number of staff per TSB is based on current circumstances, such as the number of interview-based surveys, paper questionnaires, number of economic units in their respective region, etc. The NBS has full authority to define the number of staff per TSB based on these criteria. However, it has no right to redeploy staff between TSBs and between the TSB and headquarters.

- 120. The number of staff working for the TSB including their interviewer network is generous and may have to be adapted in the long term, if more modern ways of data collection such as web-based surveys or electronic reporting channels are introduced. The organisation and efficiency of both TSB staff and the interviewer network may also need to be reconsidered in the future as a way to free up resources for more methodological and analytical work.
- 121. The current structure and number of TSB staff follow in principle the regional structure of the country and can be considered to be very large given the size of Moldova. It is therefore advisable that with the planned reorganisation of regions in the country (in conjunction with their regional development plan, Moldova plans to introduce statistical regions in line with the NUTS classification in order to produce regional GDP by 2014), a corresponding change in the number and location of the TSB be adapted as well. This reorganisation, together with progress in improving the technical infrastructure, may also lead to a possible reduction in the number of staff in the regional offices, thus freeing up resources for methodological and analytical work in the headquarters.

#### 122. Assessment

The regional structure and organisation of the TSB seem to be reasonable compared to the current development of the country, the statistical system and the current methods of data collection in Moldova. The degree of autonomy afforded to the NBS for making decisions concerning the number of staff in the TSB and nomination of the head of the TSB is in line with a modern organisation of the office. During the forthcoming regional reorganisation of the country it is recommended that the number of TSB employees, including both the number of staff in the TSB and in the interviewer network, be reviewed. The review should also be shaped by the introduction of more modern means of data collection, such as internet-based surveys or electronic data collection. In this case, the number of staff in the TSB may be reduced while the number of staff in headquarters shall be increased. For this, the NBS will need to receive the authority to allocate human and financial resources between territorial units and headquarters in a flexible way and be entitled to manage overall resources for the NBS and its territorial units on its own.

## 3.3 RESOURCE MANAGEMENT

## 3.3.1 Finance and Budgeting

- 123. According to the Moldovan Annual Budget Law, funding for NBS activities is met from the state budget. In addition to funding statistics-based central management activities of the NBS, the budget includes funding for the General IT Division, Territorial Statistical Bodies, Labour Force and Household Budget Surveys (the network of interviewers who are engaged on two household and all agriculture surveys), Censuses, and other related surveys.
- 124. The total annual budget for the statistical system has been increased in recent years, including the amount allocated from the state budget (a 44 per cent increase between 2009 and 2011). In terms of total budget, there was a notable increase (70 per cent) between 2010 and 2011, primarily due to increases in external funding for the General Agricultural Census (mostly from Sweden, but also with contributions from the European Commission). Of the 2011 budget, 45 per cent was allocated for census activities, 7 per cent for policy management (administrative expenditure), 48 per cent for statistical works and of them 5 per cent for IT expenditure. Regarding funding of central management's activities, 90 per cent of the budget was allocated towards salaries and just 9 per cent was for operational and maintenance expenditure.
- 125. The state budget in very large part is sufficient only to pay staff salaries and very little remains to finance IT renewal, survey work and other development work. Funding of larger scale surveys (agriculture census and possibly also the population census) is not possible without external support. The rate of IT renewal and new applications for data editing and processing is very low and the state budget does not allow for a regular update every 4-5 years as should be required.

 Table 1:
 National Bureau of Statistics budget 2009-2011

		2009				2010				2011					
		Financing source				Financing source			Financing source						
Programme/sub-		State	Special :		External		State	Special :	means	Externs		State	Special m	eans	External
programme	Total	Budget	From th	Provision	sources	to tal	Budget	From th	Provision	1	to tal	Budget	From the	Provision	sources
16	10141		rent of	-		IO LAL		rent of	of paid	sources	to tal		rent of	of paid	
			public	services				public	services				public	services	
	15115	*****	goods		15155	## 1 F # 0	10.555	goods		*****	010500		goods	100	
Total,	43449,1	39856,3	1903,2	174,3	1515,3	53465,9	49375	1835,9	91,6	2163,0	91059,8	57336,1	1890,8	169,2	31663,7
Average annual	3565,6					3562,04					3559,5				
population															
(thousand persons)															
Per 100 inhabitants	1219					1500					2558				
(MDL)															
GDP, current	60429803					71885474					82174000				
prices (thousand															
MDL)															
In % from GDP	80,0					80,0					0,1				
62. Magnitude	3					3					3				
of financial															
resources															
In % from GDP 62. Magnitude of financial	·					· .					,				

 Table 2:
 Financing of works of the National Bureau of Statistics 2009-2011

	2009				2010					2011					
		Financing source				Financing source				Financing source					
Programme/sub-		State	Special :	means	External		State	Special r	means	Externs		State	Special m	ieans	External
programme	to tal	Budget	From th	Provision	sources	to tal	Budget	From th	Provision	1	to tal	Budget	From the	Provision	sources
h.o.p	10 141		rent of	of paid		10141		rent of	of paid	sources	IO IAI		rent of	of paid	
			public	services				public	services				public	services	
			goods					goods					goods		
Total, including:	43449,1	39856,3	1903,2	174,3	1515,3	53465,9	49375	1835,9	91,6	2163,0	91059,8	57336,1	1890,8	169,2	31663,7
Policy development	5995,2	5995,2	-		-	6403,6	6403,6	-	-	-	6182,7	6182,7	-	-	-
and management in															
statistics															
(administrative															
expenditures)															
Statistical works	36883,0	33289,9	1903,2	174,3	1515,3	39223,2	35132,7	1835,9	91,6	2163,0	43830,9	38455,1	1890,8	169,2	3315,8
Including the IT		2553,9					2183,1				4201,6	2208,3			1993,3
expenditures*															
Census	571,2	571,2	-	-	-	7839,1	7839,1	-	-	-	41046,2	12698,3	-	-	28347,9

<sup>\*</sup> IT expenditures cover all expenditures for the purchase of hardware component equipment, for their maintenance and repair, for the purchase of software products, for the use and maintenance of IT systems, databases and registers, for the instalment and service of PC networks, etc.

Financial resources as provided by the state budget are sufficient to cover the salaries of the staff in the headquarters and the TSB. The state budget is not adequate with regard to computing resources and to the financing of normal survey work, the latter becoming more important the more the NBS introduces sample surveys in all statistical domains. The state budget is not sufficient to develop and comply further with EU statistical standards, nor can it be considered to provide a sustainable basis for the development of the NBS and the statistical system in Moldova. In the long term, given its high reliance on outside funding, it would be good for the NBS to reduce its dependency on external resources. In addition, since internal resources are not sufficient to meet current statistical needs, the NBS should look into ways of increasing operational efficiency and effectiveness, which will require planning and well defined priorities over a multivear period.

At present most of the one-off and ad hoc projects implemented by the NBS are in the area of social statistics and are supported by UN organisations (UNDP, UN Women, UNFPA, UNICEF). These UN projects focus on many areas of social statistics (time use survey, violence against women, gender related issues, etc) but also include capacity building activities such as increased dialogue with users and better dissemination of data. It seems that the NBS is relying to a large extent on external funding of projects not only for development activities but also for regular data production. It seems advisable that the NBS develops its own long-term strategy and tries to fit donor projects into this long-term strategy rather than having its work dominated by the priorities of donors. This dependence on external donors should be carefully evaluated and reflected upon.

## 3.3.2 Staff, Recruitment, and Training

127. At the end of 2011, the NBS had 107 posts, 7 for the census division, and 82 for the NBS General IT Division (GITD), so in total there were 196 posts. In 2012 the situation has changed based on the new organisational chart and the integration of a number of staff from GITD into the statistical sections / divisions of the NBS. The NBS now has a total of 196 posts, including 156 civil servant positions. 30 staff members continue to work in the IT department (GITD), as a kind of centralised IT service. In addition, there are another 11 staff working for the separate entity of the Information Service for Financial Reports. While the overall number of staff, with 365 staff in the TSB, the interviewer network of 276 people, and 196 staff at the NBS headquarters, can be considered largely sufficient, the structure and distribution of staff between the headquarters and the regional offices needs further reflection. This is also necessary in view of the need of users for more complex statistical information, of increased challenges for the development of methodology and analysis, and the need to apply EU standards in the long run.

 Table 3: The organisation of the National Bureau of Statistics

No.	Sub-division	No. of posts in the structure 09.2012	No. of posts in the structure 12.2011	No. of posts in the structure 12.2011 (Census Division, IT Division – respective sections)
	Management	3	4 (incl. 1 driver)	
	Director's Chamber (with the office title)	3	-	
	Juridical Service	2	1	
	Internal Audit and Quality Management Service	1	-	
	Policies Analysis, Monitoring and Evaluation Service	1	-	
	Coordination and Development of National Statistics System Service	1	-	
	Information and Communication with Mass- media Service	2	-	
	Human Resources Section	4	3	
	Internal Services Section	4	3	1 (IT Division)
	Financial-economic and Accounting Division	10	5	
	Financing and Planning Section	4	-	
	Accounting Section	5	6	
	International Collaboration and European Integration Section	5	4	
	International Collaboration Service	2	2	
	European Integration Service	2	1	
	Synthesis and Dissemination of Statistical Information Division	5	8	
	National Accounts and Macroeconomic Synthesis Division	10	9	
	Consolidated Accounts Section	7	7	
	Financial Statistics Service	2	1	
	Statistical Infrastructure Division	10	5	
	Business Structural Statistics of Section	4	-	

No.	Sub-division	No. of posts in the structure 09.2012	No. of posts in the structure 12.2011	No. of posts in the structure 12.2011 (Census Division, IT Division – respective sections)
	Statistical Registers Section	4	-	8 (IT Division)
	Statistical Classifications Service	1	1	
	Agriculture and Environment Division	16	7	
	Agriculture Statistics Section	5	5	7 (IT Division)
	Statistical Sample Surveys in Agriculture Section	4	-	
	Environment Statistics Service	2	1	
	Section of Censuses in Agriculture	4	-	4 Census Division
	Industry, Energy and Constructions Statistics Division	15	7	
	Industry Statistics Section	6	3	5 (IT Division)
	Investments and Constructions Statistics Section	6	3	4 (IT Division)
	Energy Statistics Service	2	-	
	External Trade and Market Services Statistics Division	17	9	9 (IT Division)
	External Trade Statistics Section	5	4	
	Transportation, Communications and Tourism Statistics Section	6	2	
	Internal (Domestic)l Trade and Market Services Statistics Section	5	2	
	Price Statistics Division	5	5	
	Demography and Population Census Statistics Division	9	-	
	Demography Statistics Section	4	3	1 (IT Division)
	Population and Housing	1		3 Census Division
	Censuses Section	4	-	5 Census Division
	Social Services and Living	17	14	
	Conditions Statistics Division			
	Living Standards Statistics Section	8	9	
	Education, Science and Culture Statistics Section	4	2	3 (IT Division)
	Social Services Statistics Service	3	2	
	Labour Market Division	14	9	

No.	Sub-division	No. of posts in the structure 09.2012	No. of posts in the structure 12.2011	No. of posts in the structure 12.2011 (Census Division, IT Division – respective sections)
	Occupation Statistics Section	5	5	
	Wage Statistics Section	7	3	4 (IT Division)
	Statistical Methods Section	4	5	
	Sampling and Inference Statistics Service	3	3	
	Coordination of Data Collection in Households Service	2	0	
	Total	160	107	7 Census Division + 42 IT Division
	Informational Technologies Division	30	40 (+42)	
	Management	3	3	
	Design and realisation of complex computer applications Section	6		
	Designing of Computer Applications Service	2	5	
	Development of Computer Applications Service	2		
	Testing and Implementation of computer applications Service	1		
	Management of Informational System and Engineering of System Section	8		
	Shared Resources Management Service Statistical IT System	3	10	
	Management Service	4		
	Operational Printing Service Section	6	8	
	Data Entry and Validation Section	7	8	
	Management and Procurement Section	6	6	
	Total BNS	196	107 (+7+82)	
	Public Servant of Dignitary (PSD) – 1			
	Management Public Servant of the Higher Level (PSMHL) – 2			
	Person from the Chamber of the Person of Dignitary Function (PCPDF) – 3			
	Leading Public Function			

No.	Sub-division	No. of posts in the structure 09.2012	No. of posts in the structure 12.2011	No. of posts in the structure 12.2011 (Census Division, IT Division – respective sections)
	(LPF) – 45			
	Execution Public Function			
	(EPF) - 105			
	Personnel for Technical			
	Service Ensuring the			
	Functioning of the Public			
	Authority (PTSEFPA) – 40			
	Informational Service of the Financial Reports under the NBS	11	11	
	Total	207	207	

- 128. The vast majority of staff are women, who make up between 80-90 per cent of total staff. Staff can be employed / recruited via open competition, transfer from one public institution to another or within the organisation, and by nomination for non-civil servants done on the basis of interviews. All NBS staff has university education, which is a pre-condition for employment, and all staff has civil servant status. This is not the case for staff from GITD and the remaining smaller IT service after reorganisation; staff working for this division does not have civil servant status.
- 129. Recruitment follows a general procedure for government civil servants and not necessarily the needs of the NBS. Since the new law No. 158 on Public Function and the Status of the Public Servant from 4 July 2010, all civil service recruitment is based on open competitions encompassing written and oral tests. The NBS works in close cooperation with the Academy of Economic Science in order to engage students for traineeships at the NBS.
- 130. The NBS has developed a performance and promotion system based on an annual evaluation of the staff. Promotions are based on the degree of positive / negative evaluations from the previous year and follow established rules.
- 131. The NBS management considers the NBS to be an attractive place to work due to the presence of international projects, stable work conditions, civil servant status, and fellowship programme opportunities such as study visits and training courses financed by donors, as well as the fact that the salaries between the NBS and other Ministries do not differ very much. However, this does not prevent relatively high turnover of staff, especially from the IT and the national accounts divisions and particularly among younger experts. Most former employees referred to higher salaries elsewhere, opportunities for extra-paid project work in other Ministries, better career prospects elsewhere, etc. Very low staff mobility within the NBS may also contribute to this high turnover as there are very few opportunities for career advancement.
- 132. The turnover among IT specialists is increasingly endangering the operations of the NBS in this particular area. As the state budget does not provide sufficient financing for renewal of the IT infrastructure nor for the development / acquisition

of modern IT applications, and the status and salaries of IT staff are less advantageous than in the NBS itself, there is a potential risk that the NBS will not be able to keep / hire qualified IT staff, which could create a critical problem for the NBS. Contrary to many other public organisations, IT development in the NBS is not just a basic service to operate computers but a pre-condition for efficient data collection, processing and dissemination. The special requirements of a statistical office for qualified IT specialists and a modern IT infrastructure need to be taken into account.

133. Little statistics-oriented training is organised within the NBS due to lack of resources. The Academy of Public Administration under the President of the Republic of Moldova organises training for all civil servants in the field of public administration, economics, finance and human resources management, etc., but does not specifically target the needs of the NBS although the NBS has made these needs clear to the State Chancellery. Internal statistical training is mostly organised through international donors such as Norway, UNDP and the Commonwealth of Independent States (CIS). The NBS does provide some training for regional offices on quality assurance and for interviewer techniques.

#### 134. Assessment

The NBS carries out some elements of a human resource management system but these are limited and isolated, such as the performance and evaluation system, some training and a centralised recruitment procedure. In a situation where there is a shortage of staff resources it would be advisable to interlink the various elements and develop a more encompassing human resource system. This could start with a better planned and designed recruitment procedure that focuses on and targets the need of the NBS for statisticians and economists, leading to an induction programme for new recruits and a performance measurement and evaluation system that links progress in work with training opportunities and career perspectives. In the short run, it would also be advisable to organise some training courses oriented towards specific skills in communicating statistics, such as on the relationship with the media and other users, dissemination of statistical information etc. Mobility of staff within the NBS should not be seen as a threat but as an opportunity to generate new ideas, spread experiences across the organisation and retain young specialists.

While the overall number of staff in the statistical system covering the NBS and the TSB together may be considered largely sufficient, the distribution and structure of staff is not adequate for a modern statistical system. The forthcoming regional reorganisation of the country may contribute to a better distribution of staff, but the NBS needs to have the authority and power to apply staff allocation in a flexible way both among the different TSB and between the headquarters and the TSB, including the transfer of posts from the TSB to headquarters. Furthermore, the situation concerning the specialist IT staff needs special attention in order to guarantee the recruitment and retention of highly qualified staff in this domain.

## 3.3.3 Information Technology

135. Under the new reorganisation of the NBS the new General IT Division (GITD) is composed of 30 staff. GITD includes 5 sections: Management Information Systems Section (8 people), Complex Information Application and Design and

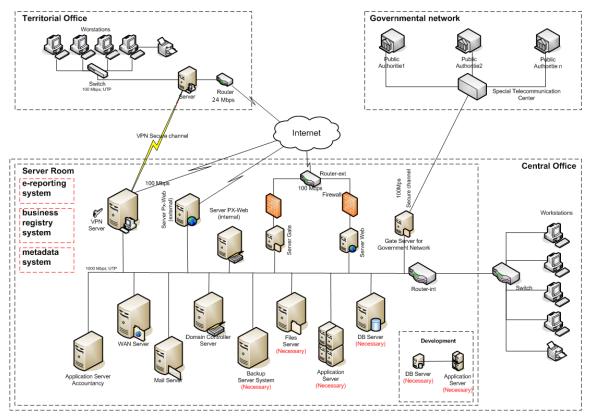
- Realisation Section (6 people), Printing Service (6 people), Data Entry and Validation Section (7 people), and an engineer programmer (1 person).
- 136. IT expenditures (4201,6 thousand MDL including 1993,3 thousand MDL from external sources in 2011) cover all purchases of hardware component equipment and their maintenance and repair, the purchase of software products for the use and maintenance of IT systems, databases and registers, and the instalment and service of PC networks.
- 137. Currently the NBS including its territorial bodies is operating over **670** computers, of which **268** require replacement in the near future, and **301** require modernisation. Concerning IT hardware the current situation is presented in *Table 4*.

Table 4: IT hardware of the NBS

	NBS	Central office	Territorial offices
Require replacement	268	88	180
Require upgrade	301	99	202
In good condition	101	33	68
Total PC	670	220	450
Printers	180	60	120

138. IT network linking the NBS with the Territorial Statistical Bodies is presented in *Figure 1*:

Figure 1. Information technology architecture.



- 139. The NBS runs about 60 different, not standardised, applications for the production processes in the various statistical domains. Most of the applications are still MS-DOS based. However, the IT Division will transform existing applications to modern programming languages and will be able to provide interoperability with other administrative systems.
- 140. SPSS, SAS and STATA are the basic statistical software packages in use for statisticians in the NBS but the IT Division recognises that having more than one statistical software package creates complications in terms of licensing, training and deployment.
- 141. With the help of international experts, the NBS developed an IT strategy including a cost estimate for the IT improvements required in the future by the NBS. The concept has eight modules: collection, storage, processing, dissemination, metadata, classifications, registers and security. The main problem is lack of sufficient staff and financial resources.

The IT Division seems quite understaffed and underpaid to face the requirements of a modern statistical office, in terms of database management, development of applications and integration of new technologies. The development of computer applications by the IT Division is currently neither organised, structured and prioritised, and neither is it sufficiently financed. It is strongly recommended that the IT Division be reinforced with regard to the number of staff, their qualifications and their remuneration. It is also recommended that the development of applications is planned and scheduled urgently in order to abolish outdated MS-DOS applications.

The introduction of new technologies, electronic data collection and modern data management will result in a redistribution of staff and its tasks. This will allow the application of a wider class of validation techniques, will avoid any risk of a potential breach of confidentiality, and will largely increase the efficiency of the system.

The development of a standardised and efficient system such as an Automated Information System has the potential to improve the efficiency of all phases of the statistical processes but needs sufficient and stable financing.

## 3.4 INTERNAL AND EXTERNAL MONITORING OF QUALITY AND PERFORMANCE

- 143. The NBS management and staff place high importance on quality and ensure that work practices reflect this priority. They should continue to make every effort to ensure the quality of the statistical work of the NBS.

  A range of measures to ensure the high quality of work at each stage of the information flow are already undertaken. Both primary and processed data are carefully checked for internal and temporal consistency, as well as cross-checked with available data from other statistical and administrative sources. In order to ensure high quality, primary data meetings (workshops) are frequently organised with respondents, in which definitions are explained, as well as the right way to fill in questionnaires, especially when these are modified or first implemented.
- 144. For all statistical outputs the NBS regularly monitors timeliness and punctuality. During the annual revision of statistical questionnaires and in the process of elaborating the draft annual programme of statistical works (PSW) the following quality dimensions are analysed: relevance, coherence and comparability. Quality indicators on accuracy and non-response rates are calculated for the main variables from household sample surveys and annual structural business statistics. Accessibility and clarity is assessed based on the results of user satisfaction surveys and web-based opinion surveys. Results of the monitoring of timeliness and punctuality are presented in an annual report to the Government on completion of the PSW. The quality indicators on accuracy for the main variables from sample surveys are presented in the metadata, posted on the NBS's website. The results of this monitoring are available for the top management.
- 145. Metadata should provide users of official statistics with adequate information about the meaning of the data, about the methodology used to collect and process them, and about the quality of the results. Comprehensive documentation on

sources and methods is published and updated regularly although most of it is in the Romanian language only. It includes information on concepts, definitions, classifications, data sources, compilation methods, statistical techniques and other relevant methodological aspects and procedures. For each statistical questionnaire, the methodology and instructions for data completion are included. Metadata as required by the IMF through its Special Data Dissemination Standard (SDDS). SDDS summary methodologies and other related descriptions are reviewed and updated regularly (also available in English). The metadata are accessible for all users, for example on websites and in statistical publications.

- 146. Methodologies are developed by NBS sub-divisions. For sample design, the NBS has specialists in a separate Statistical Methods Section although there are only three staff members. Methods to be used are discussed and decided by the Management Board, while outside institutions are sometimes consulted. In 2011, the NBS produced 106 titles of statistical works / surveys with monthly, quarterly and annual frequency according to the programme of statistical works (in total 417 works / surveys). The majority of surveys (85 per cent) were organised exhaustively and the rest (15 per cent) were based on selective methods (samples), mainly for the production of socio-economic indicators. The Statistical Methods Section undertook activities concerning the development, improvement and implementation of sampling methodology according to international standards, in particular of the EU, to meet NBS needs. Sampling methodology for short-term business statistics surveys was developed and implemented in 2011.
- 147. Although the NBS has a number of process and product quality- related actions in place such as quality assessment of surveys, documentation of processes, metadata and other measures, there is no overall concept or strategy for quality in the NBS. The NBS should adopt a comprehensive quality management system based on internationally available models (EFQM, TQM, ISO, QAF), taking the most suitable elements from each system and adapting them to local conditions as well as deciding on the required elements for short-term implementation and longer-term perspectives. This would help to put all the quality-related actions into the right context and framework. The quality strategy should include a work plan specifying quality reports, assurance frameworks, quality indicators, etc, and there needs to be stable and sufficient financing for these activities.

## 148. Assessment

Activities to ensure the accuracy and reliability of statistics, as well as confidentiality of disseminated data, are undertaken on a permanent basis at the stage of production of statistics. During data collection, entry and processing, the data are checked and validated according to logic and arithmetic rules and compared with data from previous periods and with available administrative data.

A clear organisational structure for managing quality within the statistical authority has just been created as part of the recent reorganisation.

As one of the tasks for this newly created structure, it is recommended that procedures are established to assess, monitor and manage the quality of different stages of statistical production processes: and to create generic procedures for quality checking of primary data.

The efficiency of data collection should be improved by stimulating electronic data collection and use of administrative data. Electronic questionnaires and IT tools for data editing and analysis would allow for more flexibility of operation and accuracy of data. Furthermore, tools with improved functionality for interactive control and editing, as well as more involvement of the subject matter staff in tabulation and analysis using IT, might be implemented and stimulated.

It is recommended that the NBS introduces the following quality measures: design guidelines for methodologies; to check definitions of indicators with the intention to avoid inconsistencies; to analyse the possibility of using more administrative sources for reducing response burden and improving the accuracy of results; to improve the editing and imputation processes; to implement seasonal adjustment methodology (Eurostat recommendations and software DEMETRA+); and to offer methodological assistance to other producers of official statistics.

The long-term rationalisation should envisage a further shift from exhaustive reporting to sample surveys and related methodologies. This will require strong central coordination and the active involvement of the territorial statistical bodies. Thus, it would be indispensable to create a strong planning and methodological department in the centre which would supervise the whole process of data production. It is especially important to encourage the staff working in the centre to learn about the field data collection and the regional staff to learn about the methodology development.

Moreover, a Quality Commitment Statement, laying out principles and commitments related to quality in statistics which are consistent with the goals set out in the Mission and Vision statements should be developed and published.

It is further recommended that the NBS decides as soon as possible on an overall quality assurance framework (QAF) and based on this a quality management system. Such a system needs to be based on, and to be in line with, the overall objectives of the QAF and the quality policy, which should then be defined in terms of specific actions and measures to implement the policy. For this purpose, an EU financed project could be launched to support the NBS in choosing the most suitable tools and frameworks. Once the framework is defined, an implementation plan needs to be designed.

## 3.5 DISSEMINATION POLICY

- 149. The NBS follows best practice on dissemination policy. A release calendar is published on the website; its changes are monitored on a quarterly basis and indicated in advance. A fixed release time is in place and press releases are disseminated to all official mass media institutions. All users get access to statistical releases at the same time. Preliminary results are published when considered useful and are marked as such. In addition, rules are fixed on how corrected data should be announced to users. According to the NBS management, all statistical products included in the statistical work programme are published on the website and are available free of charge.
- 150. The NBS's website is well-structured and provides a huge range of statistical information. It is the most important source of dissemination and priority has been given to its permanent development. A statistical databank and other tools or

interactive instruments (for example a calculator on the consumer price index, animated maps), based on PC-Axis, have been implemented. A significant section is devoted to the Special Data Dissemination Standard (SDDS) of the IMF, with some data and meta-data also available in English.

- 151. During 2011, the NBS provided 144 press releases, 38 statistical issues and over 320 data sets. By the end of 2011, the statistical databank included 24 statistical themes, including 73 sub-themes, presented in about 500 tables and time series graphs that are updated on a monthly, quarterly or annual basis. According to the NBS management, web dissemination (coinciding with a decrease of paper publications) will remain a future priority.
- 152. According to the NBS's own assessment, dissemination is seen to be complete, but the evaluation of this topic was difficult for the assessment team because little information is available in English on their website.
- 153. According to a list of public events provided by the NBS, several international and national seminars and workshops on several topics have been organised during the last 2-3 years (for example on labour statistics, on population statistics, on agriculture statistics and the first agricultural census, and on results of the time use survey). The NBS also celebrated World Statistics Day. In addition, with the support of UNDP, a seminar for journalists on the use of statistics was developed and held in 2011, which was most appreciated by its participants.
- 154. An internal regulation on dissemination is in use. Statistical data which are not included in the statistical work programme are provided by the NBS for a fee specified in accordance with a government regulation that fixes tariffs for payable administrative services.
- 155. It is not evident, however, that the statistical outputs ensure proper interpretation of the statistical information provided, and that they meet users' needs, as there is no process in place to consult users regularly and to monitor the relevance and practical utility of existing statistical information. The diversity of needs by different user groups is not specifically reflected in dissemination, for example by providing custom-designed analyses or tools for different user groups.

## 156. Assessment

The NBS dissemination policy follows the state of the art and best practice in dissemination. The NBS management and staff reflect, respect and support the principles of independence, impartiality and objectivity, accuracy, timeliness and punctuality.

Priority is given to modern dissemination technology and to further development of the NBS website. Internal training on dissemination as well as seminars for journalists on the use of public statistics are offered and set standards.

Some improvements towards a more client oriented approach appear to be necessary, however. It is therefore recommended that the NBS distinguishes between different types of clients, for example the media and general public, as opposed to ministry officials, and members of the scientific community, as they all have different needs. The improvement of the website should be continued by preparing tailored information packages for the above mentioned types of clients.

In addition, for the sake of the international statistical and scientific community, dissemination in English should be further expanded.

It is also recommended that training for different data user groups be continued, thus setting standards for increased statistical literacy. For the same reason, it is recommended that the development of a statistical journal (disseminated electronically or as print version) could be envisaged that reports on statistical findings or technical developments in an explanative way.

## 3.6 RELATIONS WITH MAIN USERS OF STATISTICAL INFORMATION

- 157. A user satisfaction survey based on a public opinion poll in 2010 has shown evidence that the majority of users appreciate the statistical data provided by the NBS and that progress has been made regarding the overall quality of statistics over the past decade.
- 158. The NBS has contacts with some main data users, either on the working level and/or through specific agreements. In the planning process of the programmes of statistical works, main stakeholders are generally involved but only on a bilateral basis. The NBS reported problems in explaining modifications (of statistical processes, surveys or mode of analyses) being undertaken in order to fully adhere to European requirements and standards; such modifications are sometimes difficult to communicate and not always understood by users, in particular if they need statistical information of national importance. However, when normative or legislative documents are further developed and/or changed, formal administrative or consultation procedures are applied at least within Government services.
- 159. Various problems in the process of user consultation still exist, for example there is no process in place to address user needs to the NBS in a regular and formal way, and no procedures exist in order to prioritise between different users' needs. Moreover, no consultations or discussions on possible changes in methodology, other than bilateral, are provided and only few working groups with users exist that do not meet regularly. Even the Council (where main stakeholders have a seat) has not met for a long time.
- 160. As a consequence of the still limited consultation with users there is some evidence that relevance and utility of existing surveys or statistical information provided by the NBS are not monitored regularly. This may result in a number of surveys, activities or statistical products that no longer respond to users' needs but are maintained for purely 'historical' reasons.

### 161. Assessment

According to a user satisfaction survey, the NBS's independence and expertise are well acknowledged by the public. Among all government services the NBS enjoys a high level of trust. Relations with main users, and in particular with other government services, are well established on a bilateral basis.

However, it appears that NBS has no formalised, regular and multi-lateral contact with other user groups, apart from the media. A pro-active, better structured systematic approach in contacting different user groups, guaranteeing that their needs are taken into account, should be introduced. Improvements in methodology,

the introduction of new surveys, other amendments, and new results should be communicated with users more intensively before and during the process of changes.

Joint working groups with users of certain statistics (for example working group on social statistics, on business statistics, on macro-economic statistics) that meet regularly at least once a year in order to discuss and support important projects of the respective domain should be created and established; these working groups should also include other producers of official statistics if the NBS is not the only one involved in the production of these statistics. Regular user for a or user satisfaction surveys could be another way of stimulating and increasing user consultation.

## 3.7 International Cooperation

- 162. The NBS undertakes a number of international cooperation projects, with UN organisations and specialised agencies of the UN, Norway, Romania, France, Sweden, the US, the European Commission and EFTA.
- 163. Recently the IMF placed a regional adviser for Moldova, Belarus and Ukraine in Chisinau to work on national accounts, consumer price index and external trade data. A two year action plan is currently being developed focusing on the reconciliation of quarterly and annual national accounts, imputed rents, expenditure components, the investigation of primary data sources, and the introduction of the System of National Accounts (SNA) 2008.
- 164. There is a rather large project funded by UNDP, UNFPA, UNICEF, UN Women and ILO on 'Strengthening the capacity of the statistical system', implemented since 2007 and currently in its 2<sup>nd</sup> phase. A project on time use surveys, which was the first of its kind in Moldova, is co-financed by UN Women, as well as a project on violence against women. The project on strengthening the capacity of the statistical system encompasses projects on statistical data production, dissemination of statistics and the use of statistics. As for data production, the project focused on social surveys to measure topics such as time use, violence against women, social exclusion, labour migration, work accidents, voluntary work, and producing gender disaggregated labour force, structural business, and entrepreneur statistics. Furthermore, tools and methodologies were developed on such topics as population based sampling, treatment of non-response in the Household Budget Survey, as well as in-depth assessments of certain statistical domains. In the area of data dissemination and user focus the project produced an automated information system, supported the re-design of the NBS's website, supported the issuing of electronic (CD-ROM) and paper publications including analytical texts and more regional breakdowns of data, and created guidelines for users and geographical presentation of data. In order to increase the visibility of the NBS and promote the understanding of statistics in mass media, as well as the dialogue between the NBS and mass media, the NBS organised a training seminar on documentation, use and interpretation of statistical data. A similar course for journalists is now being planned to be introduced at a university in order to increase the understanding of statistics by various stakeholders.
- 165. There is a Memorandum of Understanding between the NBS and Eurostat on the exchange of external trade data, based on trade data sent to Eurostat on a quarterly

- basis. The EU also supported the NBS in the implementation of the General Agriculture Census and through TAIEX (Technical Assistance and Information Exchange) in the recent past. In the past, the NBS greatly benefited from the EU TACIS (Technical Aid to the Commonwealth of Independent States) programmes in areas such as demography and social statistics, business statistics, agriculture statistics, classifications, external trade and IT development. Support from the new ENPI (European Neighbourhood and Partnership Instrument) has been more limited, but shall be requested in the future for the implementation of European standards as mentioned in the statistics chapter of the Association Agreement.
- 166. Statistics Norway has supported the NBS since 2004 and this support is on-going. This long-term assistance has brought results such as improved dissemination of statistical information through various channels, improvements in the methodology of the consumer price index and producer price indices as well as business statistics (PRODCOM) and the business register, modernisation of the IT data centre with new hard- and software, extended use of administrative data (for example State Population register) and improved methodology in demography statistics.
  - The project also supported various training courses and the conduct of various international seminars and conferences.
- 167. Romania has supported the NBS with projects in the areas of integrated short-term business statistics and labour market statistics. Technical assistance was provided for the General Agriculture census, and a project on regional statistics is being developed.
- 168. Statistics Sweden's support through SIDA will begin with a new project at the end of 2012 and will focus on statistical methods, external trade statistics, business statistics, environment statistics and national accounts.
- 169. Turkey has supported the NBS in the areas of statistical classifications and sampling techniques.
- 170. France provided technical assistance on statistical classifications.
- 171. Participation in international meetings is very restricted due to lack of resources, which hinders the NBS's acquisition of knowledge about international and European developments in statistics, as well as providing few opportunities for young experts to be trained in international and European standards and methodologies.
- 172. As a significant number of donors support the NBS in its process of modernisation, it is very important that the NBS takes on a strong coordination role so as to avoid overlap and duplication. Moreover, this coordination shall also be used to target donor assistance to the areas with most development needs.

The NBS is implementing a number of UN and Norway supported cooperation projects, but also has other projects from individual donors such as the EU, Romania, France, Turkey and Sweden. These projects have supported the NBS in developing its production capacities especially in the area of social statistics, resulting in some very specific and sophisticated data sets. These projects mainly target international standards and to a much lesser extent European standards. Moreover, some of these projects support the NBS in areas that are important for the donors, but not necessarily of the same importance for the development of the overall Moldovan statistical system. It is strongly advised that the NBS maintains a very strong coordination function of all the donor support in order to channel this support to areas most in need and in order to avoid duplication. It is also recommended that an EU-led technical assistance programme be designed to focus on the development of the NBS to adopt European standards better in order to implement the commitments taken in the chapter on statistics in the forthcoming Association Agreement.

## 4. STATISTICAL DOMAINS

#### 4.1 CLASSIFICATIONS AND REGISTERS

- 174. Within the NBS Statistical Infrastructure Division, with 10 staff members, is responsible inter alia for the development, implementation and maintenance of statistical classifications and the statistical business register.
- 175. The Law gives the NBS the task to develop and implement the main statistical classifications used for statistical purposes, adjusted to international standards (*Article 15* of the Law). The classifiers and nomenclatures are developed by the NBS, in collaboration with the interested central public authorities, and are approved by the national standardisation body, at the proposal of the NBS.
- 176. There are in general no systematic differences between major European classifications and corresponding classifications used by the NBS.
- 177. Up to now, the NBS uses an activity classification which corresponds with NACE Rev. 1.1. Internally, the NBS has already adopted an activity classification according to the NACE Rev. 2, which will be used in data collection next year. This classification must be used afterwards by all public bodies. The NBS has further developed a Statistical Classification of Products (Goods and Services) in accordance with the Statistical Classification of Products by Activity in the European Union (CPA), which is not yet adopted, however.
- 178. In order to survey industrial products and services, the National Nomenclature of Industrial Products and Services (PRODMOLD), harmonised with PRODCOM, was created, and has been put into statistical practice since 2005. Currently the Moldovan version of PRODCOM list 2006 is used; the national version of the PRODCOM 2010 list is still being developed.
- 179. The Standard International Trade Classification (SITC) and the Combined Nomenclature of goods (CN) are used in Foreign Trade Statistics, but these classifications are coordinated by the Ministry of Economy.
- 180. The Social Statistics Division is responsible for the Classification of Individual Consumption according to Purpose (COICOP).
- 181. Coordination of the Classification of Occupations (ISCO) is done by the Ministry of Labour, and coordination of the Classification of Education (ISCED) by the Ministry of Education together with the NBS.
- 182. A decision on a regional classification in line with the European NUTS regulation has not yet been taken.
- 183. According to *Article 16* of the Law, the NBS creates and manages statistical registers for the following purposes: to develop a database for statistical surveys; as a means of information while effecting the statistical analysis on the totality and demography of statistical units; and as an instrument of statistical information spreading.
- 184. The Business Register system consists of two separate registers: RENIM (Inter Administrative Register) and RENUS (Register of Statistical Units). RENIM is based on three sources: the register of the 'Chamber of Registration', kept by the

Ministry of Information Technologies and Communications; a register of non-commercial enterprises, kept by the Ministry of Justice; and a register of public administrative organisations, kept by the Ministry of Finance. RENIM contains more than 170 000 legal units, while RENUS contains 50 000 economically active enterprises.

- 185. The statistical register comprises all legal units except farms and individual entrepreneurs. RENUS is used in business statistics for the organisation of exhaustive surveys or as the sampling frame for sample surveys. Information on the demography of legal units, and modifications in the statutory documents of legal units, are renewable periodically (at request), usually on a daily basis or once every several days. The statistical register contains information about the main activity of the unit, the number of employees and turnover.
- 186. Information on the main economic activity and form of ownership is updated annually. During registration, the enterprise and its local units are assigned the same identification number and additional codes are introduced only for statistical purposes. The main statistical source for updating the statistical register is the structural business survey. An important source for updating RENUS and other business statistics are the so-called 'book-keeping reports' (also called financial reports) which all of the 50.000 total enterprises have to submit to the NBS at least annually. For further information see paragraphs 75 and 260-263.
- 187. Problems with the business register include insufficient information on local units and irregular updates of economic activity, which can only be obtained from structural business statistics after a time lag. Individuals owning a business and small businesses involved in trade are not included in the business register yet. Improvement of cooperation with the tax authority and social security organisations will improve the process of updating the register and its completeness in future.

## 188. Assessment

The NBS is making good progress towards implementing international classifications into their national system of classifications. The classification systems used are broadly consistent with international guidelines. Implementation of the NACE Rev. 2 in 2013 is strongly supported, and implementation of CPA should be targeted as soon as possible. It is recommended that the NBS coordinates all classifications used in statistics.

It is necessary to improve the quality of the statistical business register by the following means: to update the IT basis for the statistical register: to use all available administrative data sources for updating the statistical register; and to improve the coverage of local units. The NBS should make efforts to include individual entrepreneurs in the statistical business register using the information from administrative registers (such as the registers of the tax authority and the social security organisations).

The registered economic activity of entities might differ to a large extent from their actual activity, and even the location may be incorrect. Clear procedures for updating the economic activities of entities (who is responsible, which sources can be used, when is information available) must be developed and implemented.

## 4.2 DEMOGRAPHIC AND SOCIAL STATISTICS

## 4.2.1 Demographic Statistics

- 189. The reorganisation of the NBS will create nine staff positions in Demographic and Population Census Statistics Division; four staff members are in the Population and Housing Censuses Section.
- 190. Valid and accurate population statistics are important for a number of reasons, including the formulation of effective national policies and social planning. In addition to this, population figures are critical to the production of statistics, including estimation of weights applied to household surveys, as well as for having accurate denominators for age-based social indicators.
- 191. Demographic statistics in Moldova are based on both population censuses and administrative data about vital events (births, deaths, marriages, divorces) and migration. The primary source for vital statistics is the civil registration of every vital event in the country by the Ministry of Health, who issues medical certificates confirming births and deaths, and the Ministry of Justice who registers civil status documents. Although lacking data for the Transnistria region, these vital statistics seem to comply with international standards in terms of compulsory and continuous registration and confidentiality of data.
- 192. Migration statistics are derived from a number of sources, including population registers, border control statistics and household surveys. All of these sources suffer from various degrees of under coverage, however, and figures therefore vary widely at both the official and unofficial level (for example 226 000 from the 2009 HBS, 295 000 from the 2008 LFS, 600 000 from the International Organisation for Migration (IOM) estimates, and even 1 million from non-official sources)).
- 193. In addition to lack of coverage in the Transnistria region, administrative migration data sources lack incentives for the population to update address information after a move, nor are they produced following international standards (for example they do not use the concept of usual residence). In addition, some municipalities have a vested interest in keeping non-resident persons registered, as this affects the allocation of municipal funding.
- 194. Some household surveys include questions on migration, including special ad hoc modules such as that included in Moldova's 2008 Labour Force Survey. Although household surveys are somewhat limited in being able to provide estimates on the number of migrants, they are a useful source for measuring characteristics of migrants, as well as the impact the move has on both migrants themselves and households left behind.
- 195. Moldova's Ministry of Information Technologies has been developing a population register called the 'State Enterprise, State Information Resources Centre' (SE SIRC Registru). This centralised database was created in 1995 and combines data from national identity cards and other administrative sources. The Government of Norway has provided technical support to the NBS and SE 'SIRC' Registru in an effort to improve collaboration between the two agencies, drawing from their own experiences using population registers and administrative sources. The NBS receives micro-data on demographic events: births, deaths, marriages and divorces, but as yet only receives aggregate tabular data on migration.

196. This data source still suffers from a number of limitations, however, including lack of coverage for children (8-14 years old) and pensioners (62-67 years old), failure of persons to deregister when moving (for either short or long periods of time), lack of coverage in Transnistria, and quality control. It is recognised that this could be a potentially rich source of population data, including information on internal and international migration, at both the national and regional level.

#### 197. Assessment

The unknown size of Moldova's non-resident population is a major problem, making current estimates of its resident population fairly unreliable. Moldova appears to have problems in this statistical domain due to high levels of emigration (both irregular and temporary labour migration), lack of current census data and lack of data coverage for the Transnistria region.

It is very difficult to measure emigration accurately, particularly when it is of an irregular and / or temporary nature. Moldova is therefore in need of a national strategy to improve their migration statistics. A wide array of sources need to be combined in an effort to improve these estimates, including available register-based data, border control data, household surveys, ad hoc migration surveys and use of data from other countries (including country of birth data). Creative methods must be used to accentuate the strengths and overcome the inherent weaknesses of these different data sources. The planned 2014 Census will also help improve these estimates, though it will not necessarily capture information on the movement of entire households which no longer have family ties to Moldova.

The NBS needs to cooperate with the Ministry of Information Technologies and Communications in order to improve the quality and completeness of their population register, and to ensure more consistent registration of vital statistics and immigration / emigration per international standards. Currently, population data are only provided to the NBS at an aggregate, rather than individual, level. According to the Law, the NBS should be provided with individual level data to enhance their ability to use and evaluate these data sources, and eventually incorporate them into their statistical system, together with other potential administrative data sources. In turn, the NBS should collaborate with SE Registru, which is highly qualified in information technology but lacks statistical capacity, to improve data quality.

## 4.2.2 Population Census

- 198. The reorganisation of the NBS will place the Population and Housing Censuses Section within the Demographic and Population Censuses Statistics Division. This section will have four staff members.
- 199. The next Population and Housing Census will be conducted in April 2014, based on the Law on Population and Housing Census in Moldova, which was adopted by the Parliament in April 2012. The Census will collect data on people living in Moldova, as well as those who work and live abroad. While much work remains to be done in planning and developing the content of the census questionnaire, the NBS plans to collect data on the territorial distribution of its population according to their demographic characteristics, socio-economic conditions and standard of living.

- 200. A pilot census will be conducted in April 2013 to evaluate census documents, the allocation of work tasks and the technical aspects of data processing, thus reducing potential problems in 2014. Census data processing will be organised along the same lines as 2004, though data entry will be done optically, preceded by a procedure of questionnaire verification and coding. Validation procedures will use logical and arithmetical data verification methods provided by their automated system.
- 201. In preparation for their census, the NBS plans to follow the 2010 Conference of European Statisticians (CES) recommendations on the organisation and conduct of Population and Housing Censuses, and will organise both the Housing and Population Censuses at the same time. Special attention will be paid to the methods and questionnaires as per the country's legislative framework and the UNECE / Eurostat recommendations, particularly with regards to defining and measuring 'usual residence' and 'long-term migration' although this may impact the development of government policies in the field of human development and social protection in an unexpected way.
- 202. While it is not known exactly what will be asked in the 2014 census, the 2004 Population and Housing Census provided information on both internal and international migration through place of birth, place of previous residence and date of arrival in current place of residence. It also included information on temporarily absent household members living abroad, though no time restriction was placed on length of absence from the household. This meant that the previous census did not follow international definitions regarding usual resident population, including persons who had been living abroad for more than one year. There was also some concern about the enumeration of persons living in large urban areas and responses to the nationality / ethnic origin and language questions.
- 203. This coming Population and Housing Census is very important to the future of Moldova's statistical system, as it will provide a current picture of the demographic and social situation of the country and establish the foundation for future improvement of social statistics in general. The last Population and Housing Census was conducted in 2004, and given urgent data needs in Moldova, it is imperative that the 2014 Population and Housing Census be conducted as planned. This census will not only provide up-to-date information on the current national population structure of Moldova, including information about Moldovans currently living outside the country, but will also provide data at a regional level and provide a sampling frame for future household surveys. The Population and Housing Census could also serve as the basis for future population estimates and projections between censuses, though the NBS does not currently have the capacity to carry out such exercises.

Full funding for the census is required together with external support from other organisations. A large amount of work still needs to be done to plan for and conduct this census and planning needs to start immediately.

It is very important that Moldova follows current UN/UNECE recommendations regarding census methodology, including use of recommended definitions of usual residence. It is recommended that the census attempts to measure Moldova's non-usual resident population living abroad although these people are not included in the final population count.

The NBS should carry out a post-enumeration survey soon after census data collection is complete, in order to calculate coverage and gauge the quality of the census.

It is also recommended that Moldova releases data tabulations of 2014 census results in a timely manner, as well as produce micro-data files for public use, including clear guidelines on how such data can be obtained and conditions for its use.

#### 4.2.3 Social Statistics

- 205. Under the reorganisation of the NBS, the Social Services and Living Standard Statistics Division, will consist of 17 staff members including three staff members from the IT Division.
- 206. An impressive amount of work has been conducted in the Social Statistics field, covering a wide array of topics and involving effort to incorporate international standards. Statistical indicators are produced for health, education, crime, living standards, research-development and culture and sports. A significant amount of data is produced from these projects but the information seems to be based on the donor-driven nature of many projects, and much of it is not fully utilised by outside users. There are also issues of sustainability when ad hoc surveys and questionnaires are dependent on external funding.
- 207. Education Statistics are no longer provided by the Ministry of Education. The NBS therefore uses surveys of educational institutions to collect this information. The National Classification of Education was developed in 2006 in accordance with ISCED-97.
- 208. Social Protection Statistics tend to be underdeveloped on topics such as sickness / health care, disability, old age, family / children, housing and social exclusion. Some of this information is collected by the Household Budget Survey but is only used for analytical purposes, while other information (for example disability data) comes from the National House of Social Insurance and the Ministry of Labour, Social Protection and Family. The NBS has some information about pensioners and other social allowance beneficiaries and would like to begin implementation of the European System of Integrated Social Protection Statistics (ESSPROS) in the near future.
- 209. In addition to administrative and survey sources, another major vehicle for collecting information on Social Statistics is the Household Budget Survey (HBS),

first adapted to international standards in 1997. This survey collects detailed information on Moldovan income and household expenditures for consumption, self-consumption and the socio-economic environment in which households live. It also includes several specialised modules meant to measure population living standards further.

- 210. For the most part, data on occupations, economic activity, employment status and consumption expenditures are classified according to international or EU standards. The survey includes two questionnaires, one for the general characteristics of households and the other a diary of expenditures. Income information is collected by the HBS but services received in kind from the work place and social payments are not included. Data are collected by the same NBS interviewers who work on the LFS. HBS results are the basis for poverty analysis which is carried out by the Ministry of Economy.
- 211. The HBS's annual sample consists of 9768 non-institutionalised households obtained from 150 Primary Sampling Units (PSUs), extracted from household lists based on electricity users. This sample size was determined for the first time in 2006 when the questionnaire and sampling framework were revised under a master territorial sample, based on results from the 2004 Census and a database of electricity consumers. The HBS uses both face-to-face interview (main questionnaire) and self-registration techniques (diary of expenditures), with expenditures reported by each household member, or else proxy respondents are used.

## 212. Assessment

Social Statistics are relatively well developed by the NBS, covering a number of topics, and have attempted to incorporate international standards. The Household and Budget Survey (HBS) is a major source for this information. Data seem to be produced ahead of user needs, however, and are not fully utilised by external users.

The HBS suffers from high non-response (30 per cent nationally and approaching 60 per cent in the Chisinau region, with no replacement for non-response) and efforts must be made to reduce this problem. In the long term, computerisation of data collection methods from current paper and pencil methods is recommended, which would facilitate coding of data and lead to greater accuracy and centralisation of data collection. The development of ESSPROS should be started in the near future in order to close certain data gaps.

## 4.3 LABOUR FORCE STATISTICS

- 213. Under the reorganisation of the NBS, the Labour Market Statistics Division will consist of 14 staff members, including 5 individuals from the IT Division.
- 214. The primary source of Labour Force Statistics in Moldova is the national Labour Force Survey (LFS). This household survey has been effective since 1998 (4<sup>th</sup> quarter) and is compliant with most EU regulations and ILO recommendations. The survey serves to collect data about the labour force of the Republic of Moldova, such as economic activity and labour market involvement of household

- members (to measure employment and unemployment), but also includes a number of demographic questions (sex, age, family relationships and mobility).
- 215. While data are collected using face-to-face interviewing methods on a continuous basis, data are only published on a quarterly basis. Data are collected from a nationally representative annual sample of 48000 non-institutionalised households, extracted from 150 PSUs, using the same sampling frame as the HBS. In 2006, this sample size was increased from 8 000 to 12 000 households per quarter in an effort to produce monthly, regionally-based estimates.
- 216. A dwelling questionnaire collects information about dwelling and household members (including demographic questions), while an individual questionnaire collects information about labour force involvement for those 15 years and older. A number of topics are included on the regular labour force module and ad hoc modules are often added to the survey. These ad hoc modules include the 2004 module on 'decent work', the 2004-2006 modules on 'young people on the labour market', 'work organisation and working time arrangements' in 2007, 'international labour migration' in 2008, 'entry of young people into the labour market' and 'child labour' in 2009 and 'reconciliation between work and family life' in 2010. During the 4<sup>th</sup> quarter of 2012 the module 'Labour force migration and its skill dimension' will be carried out.

The NBS has done a good job of adapting international standards on labour force statistics to the national conditions of Moldova, and ad hoc modules provide additional information on a number of important topics. The main problem is the sampling frame of the LFS which will be redesigned after 2014 (based on results of the 2014 Population and Housing Census).

As data are only published at the four regional levels, it is recommended that the NBS investigates whether the current sample size can be reduced without major impact on the accuracy of its estimates. A reduction in sample size would likely still produce good estimates at the regional level, while freeing up resources to pursue other activities.

#### 4.4 MACROECONOMIC STATISTICS

## 4.4.1 National Accounts

- 218. Under the reorganisation, the National Accounts and Macroeconomic Synthesis Division, which is responsible for National Accounts, consists of 10 staff members.
- 219. The NBS compiles and disseminates annual and quarterly GDP. The annual GDP is calculated using three methods production (by economic activities), expenditure (by seven aggregates: Private Households Final Consumption, Final Consumption of General Government and of Non-Profit Institutions Serving Households, Gross Fixed Capital Formation, Changes in Inventories, Exports, and Imports) and income (disaggregation of Gross Value Added by components). The main approach for calculating GDP is the production approach. The NBS experts

stated that there are no big differences between production and expenditure side results, however.

Two methods are used for quarterly calculations: production method (total per economy – GVA and GDP; economic activities – GVA) and expenditure method, broken down by seven aggregates. Results are produced in current and comparable prices (from the previous year). Quarterly calculations are reconciled with annual calculations and recalculated in base year prices (currently 2000) and then seasonally adjusted. Work has begun to change the base year to 2010. Users mentioned the problem that the 4<sup>th</sup> quarter results are not estimated separately but are rather a residual between the result of the first three quarters and the final annual result, which present a problem for short-term economic analysis.

- 220. First estimates of GDP will be published on 15 March of the year t+1. Data are revised after compilation of the Supply and Use Table at the end of the year following the reporting period. Quarterly data are published 75 days after the reporting period.
- 221. National accounts are completely compiled with the exception of Financial Accounts. Non-financial Accounts are presented by the Account of Goods and Services, Production Account, Generation of Income Account, Primary and Secondary Distribution of Income Account, Gross Disposable Income Use Account, Redistribution of Income in Kind Account, Gross Adjusted Disposable Income Account and Capital Account. The Accounts for the 'Rest of the world' are also compiled the Goods and Services Account, Primary Income and Current Transfer Account and Capital Account.
- 222. Accounts are compiled by total per economy, economic activities and institutional sectors. Results are produced in current and comparable prices (prices of previous year). Calculations, both annually and quarterly, are adjusted for elements of the Non-Observed Economy. The corrections are based on SNA 93 methodology and OECD's 2002 'Recommendations on the Measurement of Non-Observed Economy'. Estimates are produced for economic activities and sectors (formal, informal and household production for own consumption). Currently, illegal production (sale of drugs, trafficking in human beings and weapons, etc) is not estimated. The Non-Observed Economy is estimated to be up to 22% of GDP; agriculture contributes 12% to GVA.
- 223. Data sources used in the calculation of National Accounts are statistical sources (Structural Business Survey, Short-term Business Surveys, Labour Force Survey, Household Budget Survey, sample surveys in agriculture, the specially designed National Accounts survey 'Enterprise consumption and expenditures', and the Population Census) as well as a large number of administrative sources (data from financial reports, the banking system, insurance companies, public institutions, Balance of Payments, Execution of National Public Budget, Execution of Pension Fund and State Social Insurance, National Company of Medical Insurance, further banking, monetary and crediting statistics, data of the State Tax Authority and customs data).
- 224. The classifications and sectorisation used in the compilation of National Accounts are in broad conformity with international recommendations. The 1993 SNA is followed in classifying institutional units and transactions. The production and generation of accounts elaborated by activities are compiled according to the Classification of Economic Activities of Moldova (CAEM), which is consistent with NACE Rev.1.1. (From 1993 to 2000 the Classification of Economic

Activities of Moldova (I edition, CAEM) harmonised with the ISIC Rev. III was used. From 2001 CAEM has been harmonised to the European standard NACE, from 2004 NACE Rev. 1.1.). For the purpose of surveying the physical volume of industrial production, the National Nomenclature of Industrial Products and Services PRODMOLD was produced and implemented, harmonised with the European List of Products-PRODCOM. The Classification of Individual Consumption by Purpose (COICOP) is used for private households' consumption expenditures. The Classification of Functions of Government (COFOG) has not yet been implemented. However, the existing classification of the functions of general government, used by the Ministry of Finance, is not significantly different from COFOG. In particular, the existing general government data provides the information necessary for the individual / collective split of consumption expenditures. Foreign trade data are classified according to Nomenclature of Goods, based on the Harmonised System, and also on the Combined Nomenclature.

- 225. The official dissemination of the most recent revised time series contains a short description of the results of the revision compared to the previous data. In the course of the current compilation of quarterly and annual national accounts, the direction and magnitude of revisions between the various versions are analysed. The revisions are well documented and include detailed descriptions of the adjustments.
- 226. Annually, the Supply and Use Table is compiled (in current and comparable prices), which presents the use of resources of goods and services in the national economy, as well as the production-consumption links between activities. The Table of Integrated Economic Accounts is compiled on annual basis (using current prices), which reflects basic inter-sector value flows. Based on these tables, the GDP is balanced using three methods: Production, Expenditures and Income.
- 227. The scope of macroeconomic statistics suffers due to the non-availability of data on the territory of Transnistria.

## 228. Assessment

In general, concepts and definitions used for National Accounts are methodologically sound and mainly conform to internationally accepted standards and practices. However, calculations are still based on SNA 93. Nearly all accounts are being compiled with the exception of financial accounts. A supply / use table (35 by 35 industries) is compiled annually. The annual GDP is calculated using three methods – production (by economic activities), expenditure (by the seven aggregates) and income (disaggregation of Gross Value Added by components), with quarterly GDP reported by the production and the expenditure approach. Classifications and sectorisation used in the compilation of National Accounts are in broad conformity with international recommendations. Adjustments for the informal sector are made on the basis of OECD and SNA 93 recommendations. The non-observed economy is estimated to be about 22% of GDP. An attempt to elaborate financial accounts had been undertaken in 2005–2006. However, due to resource constraints, the work was discontinued.

Timeliness of the publication of National Accounts data can be commended. First annual estimates are published at the very beginning of the year following the reporting period, and quarterly data are published after 75 days. Methodologies

and additional metadata are presented on the NBS website. Methodological notes are available in special publications, as well as in the Statistical Yearbook. The GDDS summary methodology is regularly reviewed and updated.

The main recommendation is to concentrate on the transition from SNA 1993 / ESA 1995 to SNA 2008 / ESA 2010. Further improvements that the NBS needs to consider on the scope and the quality of National Accounts compilation include the separate calculation of GDP for the 4<sup>th</sup> quarter; the improvement of seasonal adjustment methods; the implementation of chain linking method with annual overlap; the elaboration of financial accounts and of fixed capital formation in accordance with SNA requirements; and the estimation of illegal production. Increased human resources and technical assistance are necessary to achieve improvements in these areas. The improvement of price indices, in particular for service sectors and for imports and exports, is also an important area for future work.

#### 4.4.2 Government Finance Statistics

- 229. According to the annual programme of statistical works, the Ministry of Finance is responsible for the production of Government Finance Statistics in Moldova. Responsibility lies with the Division of reports on the national budget of the Ministry. Reports on the execution of the budget are presented monthly to the Parliament, the Government, the National Bank and to the NBS. Data are published monthly on the website of the Ministry of Finance and in an annual publication. Experts from the Ministry of Finance stated that data are published at the same time as they are provided to Parliament, Government, etc. Moreover, data are passed monthly to the IMF and posted in the Dissemination Standards Bulletin Board under SDDS.
- 230. Government Finance Statistics are currently calculated on the basis of the Government Finance Statistics Manual of the IMF of 1986 (GFSM 86). Transition to GFSM 2001 is in preparation. Classifications from GFSM 2001 are intended to be used in 2014 for the first time.
- 231. Data are compiled on a cash basis. There are no plans for changes to compile these on an accrual basis. The full general government sector, including territorial units and social security and health insurance funds, is included. Tables of expenditure by a functional classification close to COFOG (Classification of the Functions of Government) are also produced. Government Finance Statistics data produced by the Ministry of Finance are the main source for the compilation of general government accounts of SNA / ESA.

## 232. Assessment

The Ministry of Finance of the Republic of Moldova produces Government Finance Statistics following international rules, albeit not the most recent ones. Data are used mainly by the Ministry itself for policy purposes and for publication of statistical information on the Ministry's website. Data are also given to the NBS as sources for National Accounts compilations. It is recommended that the NBS implement GFS Manual 2001 as soon as possible and calculate data on an accrual basis instead of a cash basis.

## 4.4.3 External Trade Statistics (Goods)

- 233. The reorganisation of the NBS creates 17 staff positions in the External Trade and Market Services Statistics Division which is responsible for External Trade Statistics.
- 234. Data on external trade are collected, verified and processed by the Customs Service according to *Article 321* of the Customs Code of the Republic of Moldova. The Customs Service provides monthly data to the NBS where the data are checked, completed and entered into the NBS database for further statistical processing and dissemination.
- 235. External Trade Statistics of the Republic of Moldova are compiled according to international methodology. Exports are valued in 'free on board' (fob) prices and imports in 'cost, insurance, freight' (cif) prices. The statistical value does not include taxes received for imports and exports, such as customs tax, VAT, excises or similar taxes. The exported / imported goods are classified according to a Nomenclature of Goods, which is in compliance with the Harmonised System (HS-2007) and the Combined Nomenclature (CN).
- 236. The Standard International Trade Classification (SITC Rev. 4) is used for economic analyses. Data on the SITC are obtained from transition tables between this classification and the Nomenclature of Goods. Moreover, the Nomenclature of Countries and Territories used for External Trade Statistics of the European Union is also used.
- 237. Monthly statistical data on external trade are available approximately 40 days after the reference period. Monthly data are preliminary, being revised later as a result of modifications in the previous Custom Declarations. Final annual data are published 120 days after the end of the reference year. They are presented in the Statistical Pocket Book 'Republic of Moldova', 'Statistical Yearbook of the Republic of Moldova' and the Statistical Yearbook 'External Trade of the Republic of Moldova'. The NBS publications present a short methodological description on the production of External Trade Statistics.
- 238. Monthly, quarterly and annual time series are published on the NBS website. Quarterly, the NBS provides to Eurostat and UNSD detailed data on External Trade at the level of goods (9-digit of the Nomenclature of Goods) to be uploaded in the COMEXT and COMTRADE databases. Final annual data are sent to Eurostat, UNSD and FAO (Food and Agriculture Organisation of the UN) to be uploaded in the COMEXT, COMTRADE and Trade DATA databases.
- 239. The unit value indices and the indices of physical volume for exported / imported goods are calculated quarterly and annually at the level of goods groups of countries, groups of goods groups of countries, and for total imports / exports. The unit value indices for imported / exported goods are calculated taking into account the unit values (averages) expressed in MDL according to the Paasche formula. The basis used in the calculation of unit value indices for imported / exported goods is the corresponding period of the previous year: corresponding quarter, for quarterly indices or the previous year, when the annual indices are calculated.
- 240. The National Bank of Moldova (NBM) uses merchandise trade data produced by the NBS as a source for its Balance of Payments (BOP) statistics. As methodology

of the BOP differs from external trade statistics, the NBM needs to use initial data from the customs declarations database to make the necessary adjustments. The NBS provides information for further BOP items, such as Foreign Direct Investment (FDI) in kind, export and import of services, humanitarian aid, trade credit and arrears, etc. The trade in goods item of BOP also includes data derived from other sources, such as banking statistics (goods procured in ports by carriers, repairs on goods, etc).

## 241. Assessment

External trade statistics appear to be well developed and follow international standards. Customs declarations are the source of these data. Data, which are provided to the NBS by the customs authorities, are checked by specialists of the NBS. Unclear issues are discussed with customs and corrected, if necessary. All data are given quarterly to the National Bank for the compilation of Balance of Payments statistics.

## 4.4.4 Balance of Payments Statistics

- 242. The Balance of Payments Division (BOPD) of the National Bank of Moldova (NBM) consists of four sections and has 21 staff members, highly experienced in balance of payments methodology and compilation.
- 243. The legal provisions for producing and disseminating Balance of Payments Statistics are clearly specified. The Law on the National Bank of Moldova of 1995 and the Presidential Decree No. 35 of February 2, 1994 gave the responsibility for compiling Balance of Payments Statistics to the NBM. The Law on Official Statistics indicates NBM as a producer of official statistics.
- 244. Moldova's Balance of Payments Statistics reach high compliance with international requirements. Concepts, definitions and classifications are broadly in accordance with the IMF Balance of Payments Manual, 5<sup>th</sup> edition, 1993 BPM5. Staff of the BOP Department is working in parallel on the implementation of BPM 6.
  - Appropriate formal arrangements exist to promote data sharing and coordination among agencies that contribute to the production of Balance of Payments Statistics. Main data providers for the BOP compilation are in the NBS (in particular data on merchandise trade, external trade of services, foreign direct investment), the banking system, government institutions and various other entities, both public and private, for data on transportation, insurance and travel, and international organisations accredited in Moldova. These data are supplemented with data from the international transaction reporting system (ITRS). Estimates are applied due to limitations in data sources for some items, mainly exports and imports of services. Regarding foreign trade of goods, BPOD makes adjustments to the data on trade of physical persons on the basis of data from the banking system. Adjustments are reported quarterly to the NBS for their calculations.
- 245. A description of methodological standards and techniques of balance of payments compilation is presented both on NBM's website and in the annual edition of the balance of payments, which is in accordance with the SDDS requirements and developed countries practice. On an annual basis, the BOPD contributes to the

- revision of questionnaires used by the NBS to ensure consistency with Balance of Payments Statistics.
- 246. Balance of Payments Statistics are disseminated on the NBM's website and in the following NBM's publications: the Bank Bulletin (quarterly), the specialised weekly newspaper Economic Review, and the annual edition Balance of Payments of Moldova. All these publications are clearly identifiable as NBM's products.
- 247. The revision policy for balance of payments statistics is as follows: regular revisions of quarterly BOP data are made each quarter and can affect data for up to three preceding quarters; regular revisions of annual BOP data are made once a year (while working out the final versions) and can affect quarterly and annual data for up to three / four preceding years. The revision policy is stated in the balance of payments methodology published on the NBM website and in the Balance of Payments of Moldova annual edition.

The scope and methodology of Balance of Payments Statistics is consistent with the BPM5 with the exception of flows related to Transnistria. The balance of payments of Moldova excludes most transactions of Transnistria with non-residents. A problem seems to be that the flows of money coming in the country are higher than the exports. For the sake of the reliability of Foreign Trade and Balance of Payments Statistics it is necessary to find out the reasons for the divergences, which are increasing over time.

## 4.4.5 Consumer Price Index

- 249. Under the reorganisation of the NBS, the Price Statistics Division has 5 staff members.
- 250. The Consumer Price Index (CPI) is a chained Laspeyres index, which is compiled in accordance with the Consumer Price Index Manual, Theory and Practice, 2004. The reference population includes all private households from urban and rural areas for the entire country, except the left side of river Nistru and municipality Bender. Persons, who live in institutional units such as prisons, sanatoriums, retirement homes, hospices, etc, are not covered in the survey.
- 251. The CPI is based on the structure of average monthly expenditures of households used for purchasing goods and payment of services from the Household Budget Survey. Weights used for CPI calculations are updated each year. Prices are collected from 850 outlets (retail trade units and units rendering services to the population) from eight cities of the Republic of Moldova (no price collections in rural areas). The sample of goods and services includes more than 1200 items. The system used to classify and aggregate CPI items is the Nomenclature for CPI computation at the national level, harmonised with COICOP.
- 252. The CPI is released simultaneously to users of statistical information through the NBS publications and through posting statistical data on the NBS website within 15 days after the end of the reference month. The publications include tables with detailed information on general CPI, indices by food, non-food groups and services, as well as by main groups of products and services and their specific share in the total basket for calculation of CPI. A detailed breakdown including the weights (structure of expenditures) is published in the annual publications '*Prices*

- in the Republic of Moldova' and 'Statistical Yearbook of the Republic of Moldova', which allows users to evaluate the quality of CPI. Data are not seasonally adjusted.
- 253. Data are in principle final when first released. Exceptionally, revisions of the CPI can be made when weights are revised, but not later than March. Revised CPI data for January and February are published in April, with the data for March. Index numbers for all other months of the year are always final when first released.
- 254. The reference metadata, concepts and definitions are published on the website, under the heading '*Methodology*'. Brief details of the methodology are published also in the statistical publications.

The CPI is compiled in accordance with the Consumer Price Index Manual, Theory and Practice 2004. To improve the quality of CPI calculations it is recommended that the NBS: avoids considerable changes in weights for the sake of comparability of price indices in time: implements adjustments of prices when the quality of goods has considerably changed; and, apart from HBS data, uses additional information for the determination of weights for goods and services (for example data from retail trade survey, data of national accounts, etc).

It should also be considered to collect price data in rural areas because inflation in rural areas might be different from inflation in urban areas. Due to large changes in the coverage of goods, it is recommended to define procedures for updating the factors used for weighting of indices.

#### 4.5 BUSINESS STATISTICS

- 256. Despite a reorganisation of the office in early 2012, leading to a more streamlined structure, business statistics are still spread over various divisions of the NBS as follows: the 'Industry, Energy and Construction Statistics Division' covering industry statistics, construction statistics and energy statistics (15 staff, including 8 staff from the GITD); the 'Statistical Infrastructure Division' covering structural and short-term statistics and affiliated registers and classifications (10 staff, including 5 from the GITD); the 'Labour Market Statistics Division, unit for earnings' covering employees and earnings (7 staff, including 4 from the GITD); and the 'External Trade and Services Statistics Division, unit of transport, communication, tourism, internal trade and market services statistics' covering internal (retail) trade statistics, transport statistics, tourism statistics and ICT statistics (11 staff, including 6 from GITD). Furthermore, financial reports from enterprises are collected and processed by a separate entity close to the NBS being an important data source for business statistics.
- 257. A feature of the reorganisation was to reallocate IT staff to their corresponding statistical domains. In the case of business statistics, this means that the division for industry, construction and energy statistics experienced a staff increase from seven to fifteen persons. In addition to reinforcing the link between methodological work and data quality through work on processing and validating statistical data, this also means an increase in human resources, better integration of the different processes of data production, and a streamlining of data production.

258. The organisation of business statistics according to branches (sectors) of the economy, rather than being divided by structural and short-term statistics, is a very common feature of many statistical offices in Eastern European countries leading in some cases to duplication, inefficiency and non-consistency of indicators.

## 259. Assessment

The current system of producing business statistics leads to an overlap between surveys and indicators, system inefficiencies and inefficient use of scarce human resources. The organisation of business statistics should therefore be reconsidered with a view to organising the work around structural and short-term statistics. The focus on branches (sectors) of the economy may prevail for some time, due to how things have been done in the past, but should be slowly phased out. A change towards structural business statistics and short-term statistics will also be in line with the NBS's objective to apply European standards.

## 4.5.1 Structural Business Statistics (SBS)

- 260. A structural business survey is undertaken to a large extent in accordance with the relevant EU regulations except for the financial institutions (banks, insurances, pension funds). The survey is carried out in a unified way for all enterprises irrespective of their economic activity. It includes around 16 000 enterprises as survey units presenting enterprise information in total and for all local units. Enterprises with less than 20 employees are surveyed on a sample basis, whereas enterprises with more than 20 employees are surveyed exhaustively. Hence, the majority of the variables contained in the regulation are produced and made available on the 2-digit level of NACE. Information on financial institutions is not collected via surveys but taken from financial reports received by the NBS for all enterprises.
- 261. The task to collect financial reports from all enterprises was transferred from the Ministry of Finance to the NBS in 1997, when international accounting standards were introduced in Moldova. The reasons for which the NBS accepted this task, although not strictly a statistical activity, were the additional resources accompanying the transfer (although much fewer staff than working at the Ministry of Finance was transferred to the NBS), and access to a very rich data source for business statistics and national accounts purposes. There were around 17 000 units at that time. With the revision of the 4<sup>th</sup> and 7<sup>th</sup> accounting directives in 2008, the NBS decided to create a specific legal unit that was still part of the NBS's structure, but clearly separated from all the statistical activities. The directives also introduced the principle of transparency which required the financial reports to be made public. This in turn created a conflict with the confidentiality principle that the NBS follows in all its statistical activities. This was another reason to separate the financial reports unit clearly from the rest of the NBS structure.
- 262. Although it is still questionable whether a statistical office should be engaged in such an activity, for the time being the advantages of keeping this task in the NBS are larger than the disadvantages. The advantages clearly relate to the additional personnel engaged for this activity, as well as the rich data source at the disposal of the NBS. This is more the case as the NBS is very transparent about the non-

- statistical nature of this task: hence the fact that this reporting does not follow the basic principles of statistical work such as confidentiality of individual data.
- 263. In 2011 the NBS received financial reports from about 50 000 enterprises. Reports are delivered on a 6-month basis for 60 enterprises, whereas all other enterprises only deliver annual financial reports. Data from these financial reports are used to update the business register (individual data per enterprise), imputing data in case of missing statistical information, and for business statistics / national accounts (set of aggregated data only). Data contained in the financial reports are collected by the territorial bodies, then verified, processed and validated to the greatest extent possible. However, as in many other Eastern European countries, there is a tendency to under-report turnover and incorrectly report economic activity, which is a particular problem for the NBS. To the extent that both the financial reports and the statistical business survey data are collected by the NBS, there is a possibility of cross-checking and comparing the different data sources and consequently discovering discrepancies.
- 264. Main problems in the compilation of structural business statistics concern the need to revise and update survey forms and questionnaires as there may be overlapping questions and inconsistencies in definitions and variables. Duplications between the structural survey and specific branch surveys were also mentioned as a problem to be addressed in the future. Moreover, users have requested SBS data on the regional level and disaggregated by location of the local units compared to the location of the mother enterprise. This is a substantial undertaking as samples would have to be enlarged considerably. Better consistency between SBS and National Accounts data also needs to be addressed as SBS is not always used as a basis for the latter.

Structural business statistics seem in part to be compliant with European standards for the non-financial sector insofar as European classifications are used and the coverage of reporting units is similar. Only part of the required indicators is collected however. Moreover, under-reporting may be a problem as data in financial reports are used for tax purposes and enterprises may report less economic activities and turnover to reduce tax burden. As both, data reported by enterprises for SBS purposes and for the financial reports are the same and as the latter have a different purpose than for statistics, a risk of potential underreporting exists.

In the long run, the NBS may consider removing the non-statistical task of collecting and processing financial reports from enterprises, but this can only be done when appropriate solutions have been identified to tackle the disadvantages of removing this task from the NBS.

There seems to be a need for a revision of the whole system of annual business statistics. SBS partly duplicates information which is already available from other annual surveys.

#### 4.5.2 PRODCOM

- 266. Since 2004, the surveys of industrial production are based on the Nomenclature of Products PRODMOLD, harmonised with the European standard PRODCOM. Initially, the 2004 list was used but updated afterwards on the basis of the 2006 list. The National Nomenclature of Industrial Products PRODMOLD, based on 2006 PRODCOM List, is used for the monthly and annual surveys of industrial production and for the monthly survey of prices of industrial production.
- 267. For 2011, for the first time, annual PRODCOM data on industrial products were collected through a unified survey combining many previously conducted surveys. This survey of industrial products was based on the PRODCOM list 2006 and included all enterprises with industry as their main activity, and non-industrial enterprises with industrial production as secondary activity. Based on this survey, the NBS calculated statistical indicators on industrial output for all economic activities in Moldova on a 3 digit level of NACE and on a 4 digit level for the most relevant activities.
- 268. The Moldovan version of the PRODCOM 2006 list (PRODMOLD) is used for industrial product and price surveys. Currently, the new national PRODMOLD list (with 9 digits level) is under development, which is in accordance with the national Classification of Activities (CAEM-2), harmonised with NACE Rev. 2. It shall be introduced into the surveys in the near future.

## 4.5.3 Short-term Business Statistics

- 269. The NBS has recently undertaken a comprehensive review and restructuring of short-term statistics (STS), which led to the reduction from 11 different questionnaires that each enterprise had to respond to for each of its economic activities and labour and earning characteristics to just one monthly and one quarterly questionnaire. With the implementation of the integrated STS survey, the system of STS has been reformed in line with European standards to a significant extent, as European legislation was used as a basis for this reform. This integrated survey covers the questionnaires for the sectors of industry, construction, trade, services and earnings and labour market. The sectors of transport services and tourism are covered by other surveys. The section responsible for short-term surveys implemented all the work on survey redesign including the development of methodology, questionnaire design, part of the sampling framework (the other part being done by the sample survey section) and design of output tables and indicators. EU regulation formed the basis for the majority of the variables and indicators except for prices, which used UN recommendations as its basis, as they better reflect the economic reality of Moldova.
- 270. The new approach and methodology for short-term surveys was introduced in January 2011 with reference to the year 2011. All enterprises with more than 20 employees were surveyed exhaustively, while enterprises with less than 20 but more than 3 employees were surveyed on a sampling basis. Those with a number of employees between 1 and 3 are only surveyed if the economic activity is underrepresented in the overall coverage, meaning if the share of the surveyed enterprises represents less than 90 per cent of the total turnover of the division in the NACE classification (for example for the division 51 'retail trade and intermediaries, excluding trade with vehicles and motorcycles', all enterprises with 2 and more employees were surveyed).
- 271. For the calculation of the index of industrial production, 2010 has recently been chosen as base year because sufficient information on the structure and level of

- production was available. The SAS application used to compute these indices is flexible enough to change the base year on an annual basis if this is needed to reflect the reality of the Moldovan economy.
- 272. The integrated STS survey is used to collect monthly data on the number of employees, hours worked, wages and salaries, as well as turnover (except for those reporting units which do not have turnover such as public institutions) and quarterly data on fixed capital investment for all reporting units (common section of the questionnaire). Separate modules with differing variables are included for the industry and construction sectors.
- 273. For industry turnover (total and disaggregated by domestic and non-domestic) and new orders (total and disaggregated by domestic and non-domestic), the value of production and volumes are collected, and the index of industrial production is calculated. Output prices are also collected but are not exactly based on EU standards, as they rather follow IMF recommendations. A main task for the future is to introduce and implement NACE Rev. 2 and the latest PRODCOM list.
- 274. For construction, the value of construction works (divided by residential buildings, non-residential buildings, engineering construction), capital repair and current repair are compiled.
- 275. As for internal trade and market services, a monthly survey of the turnover for enterprises with trade (retail and wholesale) as their main activity is conducted based on NACE Rev. 1.1 on a 2 digit level. Small enterprises with 1-3 employees are not surveyed, those with 4-20 employees are surveyed on a sampling basis, and all others are surveyed exhaustively. However, if the turnover of the exhaustively surveyed enterprises and sampled enterprises is below 90% at the 2 digit level of NACE, then smaller enterprises with less than 4 employees are also surveyed on a sampling basis. The basis for the sample is the business register and the SBS.
- 276. The deflator for the turnover indices is the CPI adjusted to the structure of sales. A survey of retail trade units (sale points) is conducted annually to obtain information on the network of retail trade units and the commercial areas of these units. Normally regional offices keep track of all sale points, supermarkets and other trading units, most of which are concentrated in Chisinau. There is a comprehensive checking procedure between the territorial statistical bodies, the trade section and the business register section in order to obtain an updated list/register of traders and trading points.
- 277. Non-organised trade of natural persons is a specific problem for economies in transition. Quarterly, the value of goods sold through retail trade and the value of market services provided to the population within the non-organised sector of trade and services (based on data from the HBS) are estimated for the needs of National Accounts. CISSTAT has developed a specific methodology for non-organised trade and markets, which is estimation on the basis of HBS data and which is also applied by the NBS. In 2005 the NBS carried out a survey of the volume of goods sold through retail trade by natural persons, in the markets of the municipality of Chisinau, to study the volume of non-organised trade. The results from this survey were compared with the NBS estimations, which did not show large differences.
- 278. For transport statistics the NBS collects monthly, quarterly and annual data on road transport, railway transport (only 1 enterprise), air transport (few enterprises) and river transport (few enterprises). For road transport a significant number of operators exist in the country. Monthly and quarterly data are collected from all units of transport, though annual data are only collected from those economic units

owning 10 and more transport units. Data collected monthly on freight and passenger transportation are provided in tons and ton/km and in passengers and passengers/km. The NBS also collects data on income from transporting goods and passengers (by rail, road and water), trolleybus transportation and gas pipelines transportation. Surveys are still exhaustive because of the insufficient quality of the database of reporting units. When the sampling base is improved, a change towards sampling surveys will be implemented.

279. Tourism statistics are produced on a quarterly basis based on exhaustive statistical surveys of the activities of tourism agencies and tourism operators (380 enterprises) and tourism accommodations/facilities (250 enterprises). Data on the capacity and structures of tourism accommodation facilities are compiled on an annual basis.

## 280. Assessment

The NBS has a rather complex and exhaustive system of monthly, quarterly and annual surveys to collect business statistics. It is evident that the switch to short-term statistics has not yet been entirely completed, although a good start was made with the introduction of the integrated STS survey. Next steps should focus on the introduction of STS surveys in all concerned sectors and for all variables that are relevant for the Moldovan economy. At the same time a review of user needs should be undertaken for all survey forms on enterprise statistics, in order to identify what kind of data are needed by the users and in which areas/surveys/questionnaires efficiency gains can be made through rationalisation of surveys and variables. Sample surveys should be introduced in all business sectors when the economic conditions in Moldova will allow it.

#### 4.6 AGRICULTURE CENSUS AND AGRICULTURE STATISTICS

- 281. Agriculture is relatively important for the Moldovan economy. Almost 28 per cent of the employed population works in agriculture; the export of agricultural production represents 42 per cent of total exports; and agriculture contributes about 12 per cent of GDP.
- 282. Government decisions or laws regulate statistics on agriculture. They are centralised in the NBS with the exception of the land cadastre. The NBS is responsible for the collection and production of statistics on agriculture including macroeconomic calculations on agriculture.
- 283. In the NBS's Agriculture and Environment Statistics Division, 16 specialists are responsible for data collection, processing and dissemination of agriculture statistics and environment statistics, including four staff members from the former Agriculture Census Section (which was part of the former Censuses Division), and five staff members from the IT Division. In addition, there are specialists in all territorial statistical bodies, involved in the collection of reports and in the entry and validation of these data. About 117 persons (interviewers and supervisors), hired by the territorial statistical bodies, are engaged in the field and collect survey data of small agricultural producers.
- 284. The data sources used for statistics in agriculture are exhaustive statistical reports and the data from sample surveys of small agricultural producers. According to the NBS staff, the structure and content of reports and questionnaires are coordinated

on a regular basis with the main users of statistical information on agriculture. There are three categories of producers: agricultural holdings, farms and household plots. Farms are divided into two size groups:

- For farms with an agricultural area of 10 hectares and more, data are collected on an exhaustive basis as for the agricultural holdings
- For farms with an agricultural area under 10 hectares, data are collected on a sample basis as for the household plots.

In addition, administrative data are also used for the creation of some indicators.

285. The NBS provides a wide range of statistical information on agriculture, both in publications and on their website, using modern technologies such as PC-Axis that offers cubes and other user-friendly presentation techniques. The NBS's data sets do not include information on agriculture on the left part of the river Nistru and the municipality Bender.

With financial support from Sweden, EU and Romania an agricultural census was conducted in 2011 in line with FAO and EU guidelines and standards. It should be mentioned that the general agricultural census has been organised for the first time in Moldova: until now, there had been only specialised censuses in agriculture. The general agricultural census plays a special role in collecting reliable data about the potential of human, land and technical resources in agriculture, about the structure of agricultural producers and in particular about the activity of small agricultural producers. It is of major importance, and lays a foundation for future improvement, as it will not only complete the picture of the situation in agriculture but will also allow the creation of a register that can be used as a future sampling frame.

According to information from the NBS register, data for farms with an agricultural area of 10 hectare and more will be regularly updated; for farms of less than 10 hectares, the methodology and framework for future surveys will be redeveloped. Data on the agricultural census will soon be available.

#### 286. Assessment

The importance of the agricultural sector is declining, although it is still rather high in Moldova compared with other European countries. This importance is reflected in the statistical programme of the NBS. Exhaustive reports are collected and a huge number of surveys are undertaken in agriculture in order to guarantee the good quality of statistical data, as well as to provide the statistical information needed by decision makers.

In 2011 an agricultural census was conducted following FAO and EU guidelines and standards. Results will be available soon. This census will provide an appropriate basis for a future register of all agricultural producers.

Consequently, it is recommended that good use is made of the agricultural census, as is intended by the NBS. The future register could be used for sampling and to shift the focus from exhaustive statistical surveys to sample surveys, which would reduce response burden on big and medium economic units of the agricultural sector.

Altogether, an evaluation of agricultural statistical activities is needed, as well as a discussion with main users regarding the scope, quantity and frequency of statistical information that is to be provided. Consequently, the NBS would be able to modernise its survey and reporting systems and reduce the workload in the field of agriculture statistics.

## 4.7 Environment statistics

- 287. Whereas the production of statistics on agriculture is centralised in the NBS, more institutions are involved in the production of data in the field of environment statistics. Namely: the Moldovan Weather Forecast Company; the National Water Supply and Wastewater Agency; the Ministry of Agriculture and the Ministry of Environment.
- 288. Due to the increased need for environment statistics for monitoring progress against the Government's action programmes, international conventions and agreements on environment and climate change, the NBS and the Ministry of Environment and Territorial Development have established a Working Group that made a decision regarding environment statistics, including the collection of data and the elaboration of environmental indicators. An important result of the group's activity is the annual adoption of the reports on the collection and processing system on environment, based on the common Decree of the Ministry of Environment and the NBS. The NBS has subsequently increased the number of staff working in environment statistics (formerly only one but now two specialists in the NBS's Division of Agriculture and Environment Statistics).
- 289. Environment statistics are based on administrative data, on environmental reports collected by the Ministry on Environment and on two statistical surveys undertaken by the NBS, one on geological explorations and another on expenditure on environment and ecology. Statistical data and indicators on environmental components such as water, air and waste are provided according to international guidelines set by UNECE and the European Environment Agency (EEA), with which the NBS is collaborating. According to the NBS, activities and cooperation in environment statistics have been assessed by EEA experts in 2011 as an example of good practice.

### 290. Assessment

Following user needs and taking on board international and national obligations on monitoring progress on environment and climate change, the NBS has given focus to further development of environment statistics and indicators. Its activities have been supervised by international organisations and in particular by the EEA. It seems that the Moldovan statistical system is progressing well in the field of environment statistics.

# 5. ANNEXES

Annex 1: Agendas and persons met during assessment missions

Annex 2: Law on Official Statistics of the Republic of Moldova

Annex 3: Programme of Strategic Development of National Bureau of Statistics for 2012-2014