# Global Assessment of the National Statistical System of the Republic of Georgia

Final Report 28 June 2019

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## List of Abbreviations

| AGA     | Adapted Global Assessment                                  |
|---------|------------------------------------------------------------|
| AGRIS   | Agricultural Integrated Survey                             |
| ASS     | Annual Structural Survey                                   |
| ASELC   | Annual Survey on Earnings and Labour Costs                 |
| ASYCUDA | Automated System for Customs Data                          |
| BoP     | Balance of Payment                                         |
| BPM     | Balance of Payments Manual                                 |
| BR      | Business Register                                          |
| CAPI    | Computer assisted personal interview                       |
| CASI    | Computer assisted self-interviewing                        |
| COICOP  | Classification of Individual Consumption by Purpose        |
| СРА     | Classification of Products by Activity                     |
| CPI     | Consumer Price Index                                       |
| CIF     | Cost Insurance Freight                                     |
| CIS     | Commonwealth of Independent States                         |
| CUATM   | Classification of administrative-territorial units         |
| CVTS    | Continuing Vocational Training Survey                      |
| DQAF    | Data Quality Assessment Framework                          |
| DCFTA   | Deep and Comprehensive Free Trade Area                     |
| DG      | Director General                                           |
| DLP     | Data Loss Prevention                                       |
| EEA     | European Environment Agency                                |
| EFTA    | European Free Trade Association                            |
| ESCoP   | European Statistics Code of Practice                       |
| EC      | European Commission                                        |
| ED      | Executive Director                                         |
| ENP     | European Neighbourhood Policy                              |
| ESA     | European System of Accounts                                |
| ESMS    | Euro-SDMX Metadata Structure                               |
| ESS     | European Statistical System                                |
| ESSPROS | European System of Integrated Social Protection Statistics |
| ESQRS   | ESS Standard for Quality Reports Structure                 |
| EU      | European Union                                             |
| EU-SILC | European Survey of Income and Living Conditions            |
| FAO     | Food and Agriculture Organisation of the United Nations    |
| FDI     | Foreign Direct Investment                                  |
| FISIM   | Financial Intermediation Services, Indirectly Measured     |
|         |                                                            |

| FOB    | Free on Board                                                           |
|--------|-------------------------------------------------------------------------|
| FTE    | Full Time Equivalents                                                   |
| GA     | Global Assessment                                                       |
| GBAORD | Government budget appropriations or outlays on research and development |
| GDP    | Gross Domestic Product                                                  |
| GFS    | Government Finance Statistics                                           |
| GFSM   | Government Finance Statistics Manual                                    |
| GIS    | Geographic Information System                                           |
| GPS    | Global positioning system                                               |
| GRP    | Gross Regional Product                                                  |
| GSBPM  | Generic Statistical Business Process Model                              |
| GLOS   | Generic Law on Official Statistics                                      |
| HICP   | Harmonized Index of Consumer Prices                                     |
| HIES   | Household Income and Expenditure Survey                                 |
| HQ     | Headquarters                                                            |
| IAEG   | Interagency expert group                                                |
| IASD   | International Accounts Statistics Division                              |
| ICT    | Information and Communication Technologies                              |
| IEA    | International Energy Agency                                             |
| IIF    | Integrated Information Flow                                             |
| ILO    | International Labour Organisation                                       |
| IHS    | Integrated Household Survey                                             |
| IMF    | International Monetary Fund                                             |
| IPI    | Industrial Production Index                                             |
| ISCED  | International Standard Classification of Education                      |
| ISFR   | Informational Service for Financial Reporting                           |
| ITD    | Information Technologies Division                                       |
| ITRS   | International Transactions Reporting System                             |
| JSC    | Joint-Stock Company                                                     |
| LEPL   | Legal entity of public law                                              |
| LBS    | Labour Cost Survey                                                      |
| LFS    | Labour Force Survey                                                     |
| LLC    | Limited Liability Company                                               |
| LOS    | Law on Official Statistics                                              |
| MCC    | Main Computing Centre                                                   |
| NCDC   | National Centre for Disease Control                                     |
| MEJS   | Mobility of Employees and Jobs Survey                                   |

| MEPA     | Ministry of Environmental Protection and Agriculture                                                      |
|----------|-----------------------------------------------------------------------------------------------------------|
| MICS     | Multiple Indicators Cluster Survey                                                                        |
| MoLHSA   | Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs |
| MoU      | Memorandum of Understanding                                                                               |
| MSF      | Master Sample Frame                                                                                       |
| NCDC     | National Centre for Disease Control and Public Health                                                     |
| NGO      | Non-Governmental Organisation                                                                             |
| NSI      | National Statistical Institute                                                                            |
| NSS      | National Statistical System                                                                               |
| NUTS     | Classification of Territorial Units for Statistics                                                        |
| OECD     | Organisation for Economic Co-operation and Development                                                    |
| ONA      | Other National Authorities producing official statistics                                                  |
| PAR      | Public Administration Reform                                                                              |
| PC       | Personal Computer                                                                                         |
| PIN      | Personal Identification Number                                                                            |
| PPP      | Purchasing Power Parity                                                                                   |
| PPI      | Producer Price Index                                                                                      |
| PSA      | Public Services Agency                                                                                    |
| PSDA     | Public Service Development Agency                                                                         |
| PRODCOM  | List of Products of the European Community                                                                |
| QSE      | Quarterly Survey on Earnings                                                                              |
| R&D      | Research and Development                                                                                  |
| (RS/MoF) | Revenue Service of the Ministry of Finance of Georgia                                                     |
| ROSC     | Report on the Observance of Standards and Codes                                                           |
| RSD      | Reporting and Statistics Department                                                                       |
| PSU      | Primary sampling unit                                                                                     |
| (SA/MIA) | Service Agency of the Ministry of Internal Affairs of Georgia                                             |
| SAQ      | Self-Assessment Questionnaires                                                                            |
| SBR      | Statistical Business Register                                                                             |
| SBS      | Structural Business Statistics                                                                            |
| SDDS     | Special Data Dissemination Standard                                                                       |
| SDGs     | Sustainable Development Goals                                                                             |
| SDNSS    | Strategy for the Development of the National Statistical System                                           |
| SEIS     | Shared Environmental Information System                                                                   |
|          | 5                                                                                                         |
| SIDA     | Swedish International Development Cooperation Agency                                                      |
|          | -                                                                                                         |

| SPAERS | Strategic Plan for Agricultural, Environmental and Rural Statistics                 |
|--------|-------------------------------------------------------------------------------------|
| SRAP   | Statistical Register of Agricultural Producers                                      |
| SRP    | State Register of the Population                                                    |
| SSP    | State Statistical Programme                                                         |
| SSU    | Secondary sampling unit                                                             |
| STAC   | Statistics in Action                                                                |
| STS    | Short-term statistics                                                               |
| SVG    | Scalable Vector Graphics                                                            |
| TAIEX  | Technical Assistance and Information Exchange Instrument of the European Commission |
| TSA    | Tourism Satellite Account                                                           |
| TFQM   | Task Force on the implementation of a Quality Management system                     |
| UN     | United Nations                                                                      |
| UNCTAD | United Nations Conference on Trade and Development                                  |
| UNDP   | United Nations Development Programme                                                |
| UNECE  | United Nations Economic Commission for Europe                                       |
| UNESCO | United Nations Educational, Scientific and Cultural Organisation                    |
| UNIDO  | United Nations Industrial Development Organisation                                  |
| UNFPA  | United Nations Population Fund                                                      |
| UNSD   | United Nations Statistics Division                                                  |
| USDA   | United States Department of Agriculture                                             |
| VTES   | Vocational Training of Employees Survey                                             |
| WHO    | World Health Organisation                                                           |
|        |                                                                                     |

### Preface

The Global Assessment (GA) of the National Statistical System (NSS) of the Republic of Georgia was undertaken within the framework of the Eurostat funded project 'Assessment of the statistical systems and selected statistical areas of the enlargement and ENP countries'. ICON-INSTITUT in consortium with Statistics Lithuania, contracted by Eurostat, organised all activities and tasks related to the GA. Eurostat initiated the GA following a request by the National Bureau of Statistics (NBS) of Georgia, Geostat.

The assessment was conducted by the following experts (Assessment Team): Mr Gerry O'Hanlon (independent consultant) who was the leading expert, Ms Bronislava Kaminskiene (independent consultant), Mr Steinn Steinsson (Eurostat), Mr Volker Täube (European Free Trade Association [EFTA]), Mr Dario Florey (Swiss Federal Statistical Office, supported by EFTA), Mr Steven Vale (United Nations Economic Commission for Europe [UNECE]) and Ms Malgorzata Cwiek (UNECE).

The assessment findings are based on an extensive review performed during the assessment missions that took place on 24-28 September 2018 and 19-22 February 2019 in Tbilisi.

Prior to the first mission, the NBS staff completed self-assessment questionnaires (SAQ) and returned them with other relevant supporting documents that served as a starting point for the assessment. The results of the assessment are based on the analysis of the documents provided by the NBS, documents available on their website, and information collected and discussed during the in-country missions. Missing documentation was also provided by the NBS after both missions in electronic format.

The collaboration between the assessment experts and the team of the NBS was constructive throughout all phases of the GA.

#### **Executive summary**

The main goal of the Global Assessment (GA) of the National Statistical System (NSS) of Georgia is to evaluate the level of conformity with European statistical standards, with particular reference to compliance with the European statistics Code of Practice (ESCoP) and, for specified sectors, with the Eurostat Statistical Requirements Compendium.

Since the previous GA of the NSS of Georgia in 2012, several improvement recommendations issued during that assessment have been implemented and have supported the National Statistics Office of Georgia (Geostat) to increasingly comply with European and international standards in a number of statistical domains. Geostat and other producers of official statistics are confronted with an increasing demand from the Government, the business sector, international organisations and the public at large for timely, reliable, and internationally comparable statistics for monitoring economic, social, and environmental policies. Geostat, as the main producer of official statistics and the coordinating body of the NSS, is committed to maintaining trust and public confidence in official statistics by producing them in a professionally independent manner. This report provides an assessment of the state of development of official statistics in Georgia, the progress achieved during recent years and provides recommendations for further improvement in the near and longer term.

The results of the GA confirm that the NSS of Georgia and, in particular, Geostat comply to a significant extent with international and European standards. The recommendations provided by the Assessment Team will support Geostat on its way to full compliance and aim at further improvement of the NSS overall.

#### **Compliance with ESCoP**

#### **Principle 1 – Professional independence**

In general, the Assessment Team found that there is a good understanding of, and adherence in practice to, the principle throughout Geostat. However, the Team is of the opinion that the legal underpinning of the principle in the Law on Official Statistics (LOS) could be improved and aligned more closely with the relevant guidelines of the Generic Law on Official Statistics (GLOS) that was adopted by the Conference of European Statisticians in April 2016.

Most of the Team's recommendations relate to the status, role, tenure and appointment/dismissal of the Executive Director (ED). In particular, it needs to be specified in the LOS that the ED has sole responsibility for statistical standards and methodology, including the content and timing of statistical releases. In this regard, the current provisions in the LOS that assign responsibilities to the Board of Geostat for approving statistical standards and methods should be repealed. Furthermore, there is a need to separate the recruitment and appointment process for the ED from that of other Board members and for the process for the ED to be based on relevant professional competences only in line with indicator 1.8 of the ESCoP. Finally, the reasons for dismissing the ED by the Prime Minister should be specified in the LOS and these should explicitly exclude any that might compromise statistical principles.

#### **Recommendations**

- 1. The LOS should be revised to explicitly include the concept of "professional independence".
- 2. The status of the ED of Geostat should be enhanced so that he/she is at the level of the highest (non-political) public servants in Georgia.

- 3. The ED of Geostat should be assigned sole responsibility for deciding on statistical methods, standards and procedures and for the content and timing of statistical releases.
- 4. The role and mandate of the Board of Geostat should be revised to accord more closely with the statistical governance recommendations of the GLOS and to clarify the respective competences of the Board and the ED. In particular, the Board of Geostat should not retain its current competence, as set down in Article 13 paragraph d of the LOS, in respect of the approval of statistical methodology.
- 5. The recruitment and appointment of the ED should be separated from appointments to the board of Geostat and should be undertaken in a transparent manner, through a publicly announced open competition based on professional competencies only and involving an independent selection committee that includes appropriate management and professional experts.
- 6. The tenure arrangements of the ED should follow the relevant recommendations of the GLOS i.e. a fixed term renewable once.
- 7. The grounds for dismissing the ED, prior to the expiry of his/her term of office, should be set down in the LOS and should exclude explicitly any reasons that might compromise statistical principles.

#### Principle 2 – Mandate for data collection

The LOS provides an adequate mandate for Geostat for data collection, both through the conduct of direct statistical surveys and the accessing of administrative sources for statistical purposes. Geostat can also seek to apply sanctions on legal entities and administrative bodies that refuse to cooperate with mandatory inquiries. In the case of personal and household surveys, only the Census of Population is mandatory.

In some cases, confidentiality and secrecy provisions in other legislation have been invoked to block the granting of full access to Geostat to relevant administrative data for statistical purposes. The LOS should be amended, in line with the Generic Law, to clarify that such provisions cannot be used to block full access for statistical purposes unless the legislation specifically excludes such access.

Also, the current legal provisions do not cover the accessing of administrative type data held by private enterprises, such as telephone companies, for statistical purposes. It is recommended that the LOS should be amended to facilitate such access by Geostat. Furthermore, the Assessment Team would recommend that the current system for applying sanctions on nonrespondents to mandatory inquiries should be reviewed and streamlined in order to make it more effective.

#### **Recommendations**

- 8. The LOS should be amended to clarify, in line with the GLOS, that confidentiality and secrecy provisions in other legislation cannot be invoked to prevent full access to administrative data for statistical purposes unless such access is explicitly excluded in the legislation.
- 9. The LOS should be amended to grant Geostat access for statistical purposes to relevant administrative data held by private enterprises, for instance telephone companies.
- 10. The current arrangements for imposing sanctions for non-compliance with mandatory demands from Geostat for data for statistical purposes should be reviewed and streamlined.

#### Principle 3- Adequacy of resources

The Assessment Team was impressed that Geostat, as a relatively small NSI with limited IT and other resources, has managed to develop and maintain a fairly impressive programme of official statistics for Georgia. The Team believes that this reflects to a significant extent the productivity and expertise of the staff employed. However, it would have concerns about the sustainability of the current system and, in particular, Geostat's capacity to undertake new statistical activities or to improve the quality of existing outputs in line with international best practice and standards. Accordingly, the Team would consider that there is a need to significantly increase the staffing, IT and other resources available to Geostat to fulfil its mandate. On specific issues, the Team would recommend that the current and future accommodation needs of Geostat should be reviewed and shortcomings addressed. Finally, it would stress the necessity of ensuring that Geostat is competitive in attracting and retaining staff with the necessary skills and expertise that are required in a modern statistical office.

#### **Recommendations**

- 11. Geostat is encouraged to develop and submit to Government, as an urgent priority, a costed strategic plan for the development of official statistics in Georgia to take account of current and emerging national and international demands.
- 12. The Government of Georgia is encouraged to recognise the need to significantly increase the staff, financial and information technology resources available to Geostat to meet current and emerging needs for improved statistics in a sustainable manner.
- 13. The accommodation needs of Geostat should be reviewed as a matter of urgency and the available accommodation should be improved as necessary to take account of any current shortcomings and to provide, in particular, for the increased staffing numbers that will be needed in good time for the conduct of the upcoming Censuses of Population and Agriculture.
- 14. Geostat is encouraged to continue to improve, with the support of the Georgian Government, the current salary levels of its staff to align them more closely with those of officials in other areas of the public service, notably in the Ministries.

#### Principle 4 – Commitment to quality

Since the last GA, Geostat has commenced work on the development of an integrated quality management system. Initiatives have included: the establishment of a small methodology and quality management division within Geostat; the preparation of a number of quality related policy documents (e.g. on confidentiality and revisions); the commencement of procedures for the documentation and mapping of statistical processes; and the adoption of European Statistical System (ESS) methods for monitoring and reporting on quality. In addition, an interagency working group has been established for handling quality issues in the wider NSS while training courses on quality have been organised that were attended by staff from Geostat and other organisations engaged in the production of official statistics.

The Assessment Team welcomes these initiatives but is of the view that more needs to be done to develop an integrated system and to foster a culture for quality within Geostat. The Team recognises that resources are very limited, and objectives should, therefore, be both realistic and pragmatic. A high-level committee should be established to oversee the implementation of the quality management system. All statistical divisions should undertake a quality selfassessment of their statistical outputs on a regular basis while statistical quality audits should be conducted in targeted areas, having regard to available audit resources and statistical priorities.

#### **Recommendations**

Geostat is encouraged to:

- 15. Continue with the development of an integrated quality management system with realistic objectives and to ensure that adequate resources are available for its implementation.
- 16. Establish a high-level committee on quality to oversee the implementation of the quality management system, with a particular focus on setting priorities for quality initiatives and on reviewing progress in the implementation of resultant action plans.
- 17. Establish a system whereby all statistical divisions undertake a quality self-assessment of their statistical outputs on a regular basis. The results of the self-assessments, together with resultant action plans, should be submitted to the high-level committee on quality.
- 18. Prioritise areas for the conduct of detailed statistical quality audits, having regard to available audit resources and statistical priorities.

#### **Principle 5 – Statistical confidentiality**

Legal, methodological, technical and logical measures are in place in Geostat to ensure data confidentiality. For example, confidentiality policy documents and guidelines have been developed. The methodology and quality management division has also developed "Guidelines on the protection of tabulated business data" and "Guidelines on the protection of tabulated personal data" to guard against disclosure in the dissemination of results. Furthermore, a confidentiality commitment is signed by all staff, while the interagency quality group has addressed statistical confidentiality issues.

The Assessment Team identified a number of issues for attention. First, procedures should be put in place to systematically monitor adherence to the confidentiality guidelines. Secondly, the LOS should be amended to exclude the reference in Article 28 to the potential use of confidential data for non-statistical purposes. Thirdly, the reference to a time restriction on the storage of confidential data in electronic form, in Article 26 of the LOS, should be removed or qualified so that the ability to generate historical statistical analyses is not impaired. Finally, the LOS should be amended to permit access to confidential data for research purposes and Geostat should develop appropriate rules and procedures to facilitate such access.

#### **Recommendations**

- 19. Geostat is encouraged to prepare and implement procedures for systematically monitoring adherence to its confidentiality guidelines.
- 20. The LOS should be amended to exclude the current reference in Article 28.2 to the potential use of confidential data for non-statistical purposes i.e. delete "but for the exceptions envisaged under Georgian legislation".
- 21. Article 26 of the LOS, on Access to the Statistical Data and their Storage, should be reviewed and any time restriction on the storage of confidential data in electronic form should be removed or qualified so that the ability to generate historical statistical analyses is not impaired.
- 22. The LOS should be amended to permit access to confidential data for research and Geostat should develop appropriate rules and procedures, in line with international best practice, to guard against any unlawful disclosure of confidential returns in facilitating such access.

#### Principle 6 – Impartiality and objectivity

The LOS stipulates as a basic principle, in Article 4, that official statistics must be produced and disseminated in an impartial manner. Geostat has many policies and procedures in place to ensure adherence to this requirement in practice. For example, Geostat closely follows the calendar for statistical production and dissemination.

The Assessment Team would recommend that Geostat should codify its current practices and prepare and publish guidelines for assuring impartiality and objectivity in the production and dissemination of official statistics. It is also recommended that Geostat should prepare and publish a policy on the treatment of errors and their correction and that the dates of major revisions should be signalled in advance in the release calendar.

#### **Recommendations**

Geostat is encouraged to:

- 23. Prepare and publish guidelines for assuring impartiality and objectivity in the production and dissemination of official statistics.
- 24. Prepare and publish a policy on the treatment of errors and their correction.
- 25. Include details on the publication dates of major revisions in the release calendar.

#### Principle 7 – Sound methodology

Geostat, with the assistance of international partners, has made significant progress in improving methodologies and in adopting international statistical standards. More work is still required and there is a need to improve the documentation of procedures and standards and to ensure that they are implemented systematically throughout the organisation.

As already mentioned under Principle 3, the recruitment and retention of skilled staff is a major challenge. Continued collaboration with international partners and the fostering of greater collaboration with the statistical community can help in addressing any shortcomings in this regard.

#### **Recommendations**

Geostat is encouraged to:

- 26. Ensure that standards for the documentation of procedures and methodologies are prepared and implemented systematically throughout the organisation.
- 27. Continue work, in collaboration with international partners, to further implement international standards, guidelines and best practices in the implementation of the statistical programme.
- 28. Foster greater collaboration with the scientific community in order to improve statistical methodology through the development of more effective tools and procedures.

#### **Principle 8 – Appropriate statistical procedures**

The LOS provides a concrete basis for Geostat to adopt appropriate statistical procedures in the production and dissemination of its statistical outputs. Geostat has made considerable progress in improving and developing its direct statistical surveys but the use of administrative data for statistical purposes is still relatively underdeveloped.

The Assessment Team would recommend that Geostat should develop and implement a broadbased strategy to improve its use of administrative data for statistical purposes. Geostat should also consider the introduction of appropriate structures for managing and coordinating the use of administrative data in a uniform manner throughout the organisation.

With regard to its household surveys, the Team would encourage Geostat to develop measures for adjusting for differential non-response and also for imputing values for missing variables. The adjustment for differential non-response is particularly important as there are significant differences between response rates in Tbilisi and the rest of Georgia.

Geostat is also encouraged to introduce a policy for producing and publishing seasonally adjusted series for all relevant indicators. Finally, in the context of introducing a Nomenclature of territorial units for statistics (NUTS) classification for Georgia, procedures should be developed for the production of a wider range of relevant statistics at regional level.

#### Recommendations

Geostat is encouraged to:

- 29. Develop and implement a strategy for achieving full access to all relevant administrative data at micro level (including individual identification information, as necessary) and for developing the use of such data for statistical purposes in all relevant statistical domains. The strategy should include the following elements:
  - Obtaining the support of Government and all data holders to Geostat exercising its legal mandate for using administrative data for statistical purposes and, in particular, in ensuring full access to all relevant administrative data sources;
  - Co-operation agreements with holders of administrative data to ensure the quality of the basic data; and
  - The development of data linkage and other methodologies to maximise the use of administrative data for statistical purposes.
- 30. Introduce appropriate structures for managing and co-ordinating the use of administrative data in a uniform manner throughout the organisation.
- 31. Develop measures for adjusting survey results for differential non-response in its household surveys, in particular to adjust for the large differences in response rates recorded between Tbilisi and the rest of Georgia.
- 32. Introduce imputation to a greater extent in household surveys, where relevant for example, for working hours in the Labour Force Survey (LFS).
- 33. Develop and implement a policy for publishing seasonally adjusted series for all relevant indicators.
- 34. Explore the development of procedures and methodologies for the production of a wider range of statistics at regional level. This initiative might be advanced in the context of introducing a NUTS classification system in Georgia.

#### Principle 9 – Non-Excessive burden on respondents

The annual statistical work programme defines statistical outputs and describes data sources. This helps to avoid duplication. Time taken to complete survey forms is generally recorded for most household surveys and there are plans to introduce measures of burden for business surveys. Computer assisted personal interview (CAPI) and online forms have been introduced and are gradually being rolled-out to cover more surveys. Geostat undertakes some limited testing of questionnaires to ensure that they are as clear as possible for respondents. Feedback from interviewers is also considered when questionnaires are reviewed.

However, despite these actions and initiatives, there are no formal plans or policies in place to systematically manage or reduce the response burden. The Assessment Team would encourage Geostat to develop an appropriate action plan with this objective.

#### **Recommendations**

35. Geostat is encouraged to develop an action plan for the systematic reduction of the burden on respondents, with a particular focus on the greater use of administrative data for statistical purposes. The plan should include the development of metrics for monitoring the burden.

#### **Principle 10 – Cost effectiveness**

Geostat accomplishes many tasks with very limited financial and human resources, particularly when compared to national statistical offices in other European countries. Therefore, in overall terms, cost-effectiveness is assessed as high.

There are plans to introduce a cross-government standard approach for employee performance management. However, these plans are currently on hold. A self-evaluation exercise was conducted in 2013, with support from Statistics Sweden. The evaluation identified some training needs. However, the training provision is currently more opportunistic than systematic, depending mainly on training opportunities offered by partner agencies in the context of technical cooperation projects. Statistical staff have varying degrees of IT knowledge. A systematic training programme to improve IT skills for all staff would help reduce the burden on the IT Department.

There are no formal knowledge management systems in place, with most information being kept "in the heads" of specialists. This creates risks for business continuity and makes internal mobility of staff more difficult.

#### Recommendations

Geostat is encouraged to:

- 36. Put in place a knowledge management strategy and consider mechanisms to facilitate greater internal mobility of staff.
- 37. Prepare a training strategy, starting with a skills audit or training needs study, in order to put training on a more systematic basis. The strategy should have a particular focus on developing the IT skills of staff throughout the organisation.
- 38. Consider the introduction of a performance evaluation system.

#### Principle 11 – Relevance

Geostat has made efforts to increase engagement with various user groups and to improve its image and brand. However, more is required in this area and Geostat is also encouraged to be more active in promoting the use of statistics, particularly in the context of facilitating evidence-informed policy making.

Users from the scientific and research community feel that there is scope to increase collaboration in several areas and would welcome, in particular, more input from Geostat experts in the delivery of university courses.

Geostat's release calendar was perceived as helpful, particularly by the mass media who use it as a planning tool. However, the Assessment Team noted that there is currently no policy on how to deal with unplanned changes to the release calendar, for example in cases where a release is delayed due to unforeseen quality issues.

#### **Recommendations**

Geostat is encouraged to:

- 39. Continue to develop its image and brand and, more generally, that of official statistics in Georgia, in order to increase public recognition and trust in statistics.
- 40. Promote more actively the use of statistics, in particular for the facilitation of greater evidence-informed policy making.
- 41. Develop further its partnerships with universities and researchers to improve mutual understanding of needs and capabilities.
- 42. Consider adding a policy for revisions to the published release calendar for the rare cases when this may be necessary for quality reasons.

#### Principle 15 – Accessibility and clarity

Since the previous GA, Geostat has made considerable efforts to improve the accessibility and clarity of the information it provides. Users are consulted about the most appropriate forms of dissemination and seem to welcome the changes introduced so far. However, as reflected in the recommendations below, users would welcome further improvements. These include: the facilitation of greater access by researchers to microdata; further improvement of the website; improved metadata in line with international standards; and the introduction of improved procedures for handling major breaks in statistical series.

Some users commented that Geostat published data that are sometimes different to those published by other agencies. Examples in the areas of Foreign Direct Investment (FDI) and wood fuel were quoted. Users would welcome explanations for the differences.

Related to this point, users felt that Geostat could also do more to improve statistical literacy, including the provision of training courses for the media and other user groups as well as increasing the use of official statistics in schools and other education institutes.

#### **Recommendations**

Geostat is encouraged to:

- 43. Set up facilities for researchers to encourage the greater use of data for research purposes.
- 44. Continue to improve its website and make it more user friendly.
- 45. Improve information for users on the methods and quality of all outputs, based on international standards (e.g. the Special Data Dissemination Standard (SDDS) and the Single Integrated Metadata Structure (SIMS), incorporating the Euro-SDMX Metadata Structure (ESMS) and the ESS Standard for Quality Reports Structure (ESQRS)"Inform users of the implications of significant breaks in statistical series (for example, following the availability of the results of the 2014 Census of Population) and systematically prepare and publish back-casted statistics.
- 46. Reconcile any significant differences between its statistics and those of other producers (for example, current differences between sources of statistics on FDI and wood fuel) and, as a minimum, publish explanatory information about the reasons for the differences.
- 47. Complete its efforts to make all published data available in electronic format through the PC-Axis dissemination platform.

- 48. Consider reducing its current programme of paper publication in the context of developing a greater focus on electronic dissemination.
- 49. Increase its efforts to improve statistical literacy, for example through organising training for media and selected users and collaboration with education authorities to promote a greater focus on statistical literacy in the educational system.

#### Organisation of the National Statistical System

#### **Organisation** of Geostat

Geostat is a legal entity of public law (LEPL). It is responsible for the coordination of the NSS in Georgia which includes the development, production, and quality assurance of official statistics. The LOS of Georgia, the Charter of the National Statistics Office of Georgia as well as the Law of Georgia on Personal Data Protection constitute the legislative basis for the organisation and operations of Geostat. The LOS of Georgia was amended in 2015 and 2016 to address some of the recommendations of previous international assessments. At the time of the GA, Geostat had just finished a reorganisation towards a new structure.

The most substantial changes include the establishment of an Advisory Board, as recommended by the previous GA, reducing the number of Deputy EDs from three to two, restructuring the Department of Strategic Planning, Coordination and Communication, and increasing the number of regional offices from eight to eleven. The number of staff members in regional offices varies between two and six depending on the region size, which is rather low given the traditional data collection methods employed. The regional offices also employ subcontractors as interviewers and enumerators.

Geostat is still mainly organised by statistical domains except for the structural units. Each Deputy ED supervises several domains according to their competence.

As a result, related areas may not be supervised by the same person, e.g. the Social Statistics Department and the Census of Population and Demographic Statistics Department were under different Deputy Eds at the time of the Assessment. One of the Deputy EDs is also in charge of all regional offices.

This domain-based organisation structure may prevent Geostat from maximising the efficiency of its operations. Other statistical organisations are implementing or considering more process-based organisation structures in line with the Generic Statistical Business Process Model (GSBPM) and enabled by standardised IT systems and methodologies.

The Assessment Team considers that the current IT infrastructure of Geostat is inadequate. The IT solutions are often fragmented and heavily dependent on generic software packages or self-developed tools. There is no consolidated IT strategy and the reuse of self-developed tools is limited because of the lack of standardisation of the processes. Investment in IT equipment is insufficient and was undertaken in recent years mostly for the Population and Housing Census. IT should be recognised as a key enabler for increasing the efficiency and quality of statistical production. Re-engineering the IT processes would be a key step in a transition towards a process-based organisational structure and should be planned in this wider context. An external review to identify priorities would be useful. This should involve IT experts from countries considered to be about 3-5 years ahead of Georgia, rather than from the most advanced countries.

Currently, there is no intranet in Geostat which would be a useful tool for knowledge management and could increase the efficiency of operations and synergies between the tasks carried out by different units.

#### **Recommendations**

Geostat is encouraged to:

- 50. Consider moving towards a more process-based organisational structure, in line with the GSBPM.
- 51. Pursue the development of its IT resources as a strategic priority and as a first step commission, in cooperation with international partners, a sector review/peer review/ expert visit to evaluate the capacity and sustainability of its current IT systems.
- 52. Install an intranet for sharing and storing information (including educational and work-related material) in order to improve communications and to foster greater sharing of knowledge within the organisation.

#### Coordination of the National Statistical System

The NSS in Georgia can be considered as comprising Geostat, the National Bank of Georgia and the Ministry of Finance, as the main producers of official statistics, as well as various other ministries and agencies as data suppliers. However, the distinction between producers of official statistics and data suppliers does not always seem to be clear, particularly to some of the data suppliers. The annual statistical programme is used by some countries to manage this distinction. In those cases, an output is only considered to be official statistics if it is in the programme.

Current coordination mechanisms include the representation of the National Bank of Georgia and the Ministry of Finance on the Board of Geostat, and an inter-agency working group on quality that brings together the main producers of statistics and providers of data. There are also many bilateral memorandums of understanding and similar agreements, both formal and informal.

Relations and cooperation between the three main producers of official statistics seem to be good, but there is no formal mechanism for coordinating economic statistics outputs. With the exception of a formal agreement between Geostat and the National Bank of Georgia on data inputs for the estimation of GDP, cooperation is mostly ad-hoc, based on personal relations, rather than institutionalised.

The Sustainable Development Goals (SDGs) are providing an impetus for greater crossgovernment collaboration on statistics and data. In many countries this is leading to ideas and policies to create national data infrastructures. As they are experts in managing data, national statistical offices are usually playing a leading role in these initiatives. This could be an opportunity for Geostat to increase its visibility within government and to improve coordination of data and statistics at the national level.

#### **Recommendations**

Geostat is encouraged to:

- 53. Play a more active central role in coordinating official statistics and, in conjunction with relevant ministries and other public authorities, in advocating for and developing a national data infrastructure in Georgia.
- 54. Establish criteria for clearly and systematically identifying other producers of official statistics and their outputs and these criteria should be included in any future revision of Georgian statistical legislation.
- 55. Introduce procedures for the coordination of other producers of official statistics, for example by including their outputs in the annual statistical programme and agreeing

memorandums of understanding between Geostat and all other producers of official statistics or providers of data.

#### Coordination of international cooperation and donors

Geostat has greatly benefited from international cooperation, both through twinning projects and other collaboration with national statistical offices from other countries, and through support from international organisations. The positive impacts of this cooperation since the previous GA are clear.

However, the Assessment Team noted that some of this cooperation could be considered more opportunistic than strategic. A clear plan setting out strategic priorities would be useful in this respect. It would provide a framework against which offers of cooperation could be assessed, to make sure that they would contribute to strategic objectives.

The Team also noted that many of the challenges faced by Geostat, at all levels, are similar to those in other countries, particularly in the Eastern Europe, Caucasus and Central Asia region. Some Geostat staff have developed contacts with people doing similar work in other statistical offices, but this is not systematic, and often depends on personalities and opportunities to attend relevant international meetings.

#### Recommendations

Geostat is encouraged to:

- 56. Take a more strategic and planned approach to seeking technical assistance and initiating projects funded by developmental partners. Top management should take the initiative in this regard, identifying priorities in line with the national strategy for the development of statistics.
- 57. Strengthen cooperation with colleagues in neighbouring countries to improve the exchange of ideas and knowledge.

#### SDGs and indicators

Geostat is a member of the council coordinating the implementation and monitoring of the achievement of the SDGs of the 2030 Agenda. The council is led by the office of the Prime Minister, which has completed the identification of a set of indicators tailored to the national context. Geostat participated in the process of selecting indicators. However, Geostat is currently not involved in the establishment of the national reporting platform, although the the UNSD interagency expert group (IAEG) on SDGs recommends that the statistical office should coordinate the reporting process

#### **Recommendations**

58. Geostat should use the SDGs as a catalyst and mechanism to increase its coordinating role in the provision of official statistics in the country and to international bodies.

#### **Macroeconomic Statistics**

#### National Accounts

The methodological basis used by Geostat to produce GDP and other national accounts' indicators is the System of National Accounts of 1993 (SNA1993). It is planned to switch gradually to SNA2008 from 2019 onwards. This step is welcomed by the Assessment Team and it would recommend that particular attention be paid to rationalising and developing the

information available on research and development (R&D) expenditure, which will now be recorded in the new system as an investment, in this context.

The provision of macroeconomic statistics is dispersed between Geostat, the National Bank of Georgia and the Ministry of Finance. The three agencies have good bilateral working arrangements with each other, but the Team would encourage Geostat to foster improved coordination and collaboration in the production of macroeconomic statistics through the establishment of appropriate tri-lateral arrangements.

With regard to future developments, the Team would encourage Geostat to give priority to the preparation of institutional sector accounts and the development of its measures of the unobserved economy. The production of quarterly GDP at constant prices, following the expenditure approach, is also recommended.

#### **Recommendations**

Geostat is encouraged to:

- 59. Complete the implementation of SNA2008 and to give priority to preparing background documents for users that fully explain the impact of the new system on the main macroeconomic indicators.
- 60. Rationalise and develop the information available on R&D expenditure, in line with SNA2008 guidelines, for incorporation into the rebased national accounts.
- 61. Foster improved coordination and collaboration with the National Bank of Georgia and the Ministry of Finance in the production of macroeconomic statistics.
- 62. Give priority to introducing institutional sector accounts.
- 63. Develop its measurements of the unobserved economy.
- 64. Produce quarterly GDP at constant prices following the expenditure approach.

#### **Government Finance Statistics**

The Ministry of Finance is responsible for the compilation of government finance statistics. Currently the domestic classification of the budget is based on the Government Finance Statistics Manual (GFSM) 2001. The Ministry uses bridge tables for the compilation of data according to GFSM 2014. It also subscribes to the International Monetary Fund's (IMF's) SDDS standard. The Assessment Team would encourage Geostat to formalise cooperation and work closely with the Ministry towards ensuring that the compilation of Government Finance Statistics is fully in line with the principles for official statistics as laid down in the LOS. Furthermore, the two agencies are encouraged to work together to ensure that the definition of the government sector is fully in line with international recommendations and is consistently applied. It is also recommended that steps should be taken to record incomes and expenditures on an accrual basis.

#### **Recommendations**

Geostat is encouraged to:

- 65. Formalise cooperation and work closely with the Ministry of Finance in ensuring the production and dissemination of Government Finance Statistics in accordance with the GFSM 2014 guidelines and in compliance with the principles for official statistics.
- 66. Ensure, in conjunction with the Ministry of Finance, that the definition of the government sector is in line with international recommendations and is consistently applied in the preparation of all government finances statistics.

67. Introduce, in conjunction with the Ministry of Finance, measures to record expenditures and incomes on the basis of accruals accounting.

#### **External Trade Statistics**

Statistics on external trade in goods are generally produced in good quality by Geostat in line with international recommendations, while following mainly United Nations (UN) guidelines such as the "International Merchandise Trade Statistics Compilers Manual", versions 2004 and 2010, including the compilers manual rev. 1 (IMTS 2010-CM).

Significant asymmetries have been noted in the recording of bilateral trade between Georgia and partner countries. The main source for the compilation of trade statistics on goods is the "Revenue Service of the Ministry of Finance of Georgia (RS/MoF)", which holds the database of customs declarations. Supplementary information comes amongst others from the "Service Agency of the Ministry of Internal Affairs of Georgia (SA/MIA)", which provides data about exports and imports of motor vehicles. One issue here is that "re-exports" are not properly checked by custom authorities which might lead to a situation where such re-exports are recorded as originally "domestic exports", leading to an overestimation of trade figures in the related domain. Although some problems concerning the accuracy in the recording of several fields in the customs declarations have been solved since 2017, Geostat is encouraged to continue to work closely with the RS/MoF to address these and other quality issues.

#### **Recommendations**

- 68. Geostat, in conjunction with the RS/MoF, should take appropriate steps to improve the recording and classification of re-exports in line with international guidelines in order to address asymmetries in the recording of bilateral trade between Georgia and partner countries.
- 69. Geostat is encouraged to further improve its working arrangements with the RS/MoF.

#### Balance of Payments Statistics (BoP)

The National Bank of Georgia has the responsibility to compile and publish the balance of payments statistics on a quarterly and annual basis; this division employs six persons. The methodology used is the IMF's Balance of Payments Manual (sixth revision) as well as the External Debt Statistics: guide for compilers and users (IMF 2013).

In the past there were some differences between Geostat and the National Bank in the reporting of Foreign Direct Investment transactions (especially in 2007-2008) due to different approaches to some transactions. These problems were successfully solved in 2017. From 2018, Geostat, in cooperation with the National Bank, will publish integrated data (flows and stocks) on Foreign Direct Investments, and these data will be in line with the data of the National Bank.

#### **Recommendations**

70. Geostat and the Central Bank should continue to work closely to coordinate the production of Foreign Direct Investment statistics. In particular, changes or developments should be mutually agreed so that coherence between the two sources can be maintained.

#### Consumer Price Index (including PPP and house prices)

The Consumer Price Index (CPI) is based on the methodological principles, concepts and definitions specified in the Manual on the CPI: theory and practice (2004) and the SNA 1993. The weighting basis follows the Classification of Individual Consumption by Purpose (COICOP) classification and national accounts and household budget survey estimates are used to update the weights.

Some users expressed the need for more disaggregated information, both indices and weights, and Geostat is encouraged to investigate means of meeting this need without breeching statistical confidentiality.

#### **Recommendations**

71. Geostat is encouraged to respond to user requests and publish more disaggregated information on consumer prices, both indices and corresponding weights.

#### **Business Statistics**

#### Statistical Business Register

The statistical business register held by Geostat is largely in line with international recommendations such as Eurostat's "Business registers – Recommendations manual" or United Nations Economic Commission for Europe (UNECE's) "Guidelines on Statistical Business Registers".

Currently, there are over 700,000 legal entities held in the business register of which roughly 185,000 are active units. On the other hand, not all potential units are currently included in the register and this is particularly the case in respect of local units. Moreover, there is clearly a need for a policy regarding the retention and removal of inactive units on a systematic basis.

Although information on employment is partly available for enterprises which participated in Geostat business surveys and those active enterprises which indicated employment figures to the tax agency (total number is approximately 50% of active legal entities), consideration might also be given to introducing an indicator on full-time equivalent employment in the register in order to facilitate greater analyses of the employment situation.

#### **Recommendations**

Geostat is encouraged to:

- 72. Introduce a wider range of statistical units in the statistical business register, including local units.
- 73. Consider including an indicator on full-time equivalent employment, in addition to the current employment headcount figures, in the statistical business register.
- 74. Develop and implement a policy of systematically identifying inactive units and removing them from the scope of the statistical business register.

#### Structural Business Statistics (SBS)

Business demography indicators from 2012 onwards, based on the business register, were introduced by Geostat in December 2017.

SBS, which distinguish economic activity (NACE rev., 2) size class (small, medium and large enterprises), have been published since the first quarter of 2017. A recalculation of all SBS data according to NACE Rev.2 and the new size definition was completed in December 2018. Small

enterprises are defined as those with less than 50 employees, or with an annual turnover of less than 12 million GEL. While this corresponds with the Eurostat recommendation, consideration might be given to introducing a further breakdown to distinguish "micro enterprises" with less than 10 employees given the preponderance of such entities in Georgia.

#### Recommendations

75. Geostat is encouraged to introduce a breakdown within the category "small enterprises" to distinguish micro-enterprises i.e. enterprises with less than ten employees.

#### Short-term Statistics (including PPI)

Short Term Statistics (STS) on industry and construction are produced quarterly and published on the basis of NACE, rev. 1.1 and NACE, rev. 2 on Geostat's webpage. Producer Price Index (PPI) for industrial production, construction and freight transport are available on a monthly basis. Energy statistics (production, export, import, supply) are produced monthly. Data on the consumer price of electricity and natural gas are produced on a semi-annual basis. For STS on construction, data on permits and completed projects are taken into account. Currently, no STS data on retail trade is available. Geostat's intention is to provide a larger number of STS indicators on all four domains (industry, construction, retail trade, and services) as part of the next twinning exercise. The Assessment Team welcomes the plans to produce a wider range of short-term statistics (STS), including producer price statistics.

#### Recommendations

Geostat is encouraged to:

- 76. Develop, as a priority, a wider range of short-term statistics.
- 77. Implement the planned development of producer price statistics.

#### **Social and Demographic Statistics**

#### **Population Register**

A Civil Register, maintained by the Ministry of Justice, exists in Georgia but it is neither useful for the production of statistics nor for sampling. There is some understanding of the importance of a statistical Population Register and there are good intentions to establish one. However, the task is not simple, as it depends on good cooperation and willingness to fully share data between many governmental institutions including Geostat.

The accurate recording of migration, both external and internal, is the greatest challenge in ensuring the quality of the register. The Ministry of Internal Affairs provides external migration data, but it does not release personal ID numbers. This number is necessary in order to connect migration information with the civil register, as a part of developing a statistical population register. Information on internal migration is also quite poor as there is no incentive on people to register changes of address and the Census of Population is therefore the only source that can provide good information on internal population movements within Georgia. Direct linkages between the register and individual census returns would therefore appear to be an indispensable requirement in the construction of a high-quality statistical population register.

The Assessment Team would recommend that the establishment of a population register for statistical purposes should be addressed as a strategic issue as a matter of urgency. The Census of Population will have a key role in underpinning the quality of the register and it is vital, therefore, that this is taken into account in planning the upcoming census.

#### **Recommendations**

78. Geostat is encouraged to develop as a matter of urgency a strategic plan for the construction and maintenance of a population register for statistical purposes. The plan should address: the location of the register (i.e. within Geostat or the Ministry of Justice); procedures for gaining full access to all relevant administrative data sources; and the linking of the register to the next Census of Population returns at individual and household levels.

#### **Demographic Statistics**

Demographic statistics in Georgia have improved considerably in recent years and international recommendations are followed. Electronic registration has eliminated duplications and increased the reliability of vital events. Information on migration has improved but, as indicated in the previous section, much more is required as there is effectively no registration of migration at present. The 2014 Census revealed a significant overestimation of the population. Improvement actions were undertaken and indicators over several years were back-casted based on the Census results

Geostat does not currently produce population projections and the Assessment Team would recommend that a methodology should be developed in collaboration with national and international experts.

#### **Recommendations**

Geostat is encouraged to:

- 79. Work, in conjunction with all relevant public agencies, towards the improvement of Georgian migration statistics, both internal and external, as an urgent statistical priority. The achievement of this priority is dependent on Geostat obtaining full access to all relevant administrative records including, where necessary, to personal identification particulars.
- 80. Develop a methodology for the production of population projections, in conjunction with national and international experts.

#### **Population and Housing Census**

The last Census of Population and Housing was conducted in 2014, in conjunction with the Agricultural Census, and it is anticipated that the next census will be undertaken in 2022 or 2023. The 2014 Census was conducted in accordance with international recommendations and was a major operation involving a field-force of around 12,000.

The LOS sets out rules for defining Census dates, preparation and implementation activities and plans for publishing and dissemination. The law also defines the key provisions and methods of the Census, the participation of the population and guarantees of confidentiality. Several methodological improvements are planned, including collecting Global Positioning System (GPS) coordinates for every building and using electronic data collection (CAPI) for recording the household returns.

Detailed planning of the next Census has not started, and financial support has not been ensured. The Assessment Team recommends that a costed strategic plan for the conduct of the Census should be prepared without delay and that guarantees of funding, on the basis of the plan, should be secured from Government and the international development partners to cover the entire cost of the operation. The Team would also advise that the technical and logistical challenges of introducing electronic data capture in the census should be carefully assessed before a final decision is made in this regard.

#### **Recommendations**

Geostat is encouraged to:

- 81. Develop without delay a costed strategic plan for the conduct of the next Population and Housing Census in line with international recommendations and best practices.
- 82. Seek and secure, on the basis of the strategic plan, a guarantee of funding in advance from the Government and development partners/donors to cover the entire cost of the census operation from preparatory work to the dissemination of results.
- 83. Examine carefully the advantages and disadvantages, both technical and logistical, of introducing CAPI in the collection stage of the census.

#### Labour Market Statistics

Geostat follows generally international standards in the production of labour market statistics with a few exceptions. Farmers who only produce goods for their own consumption are considered as working in Georgia and they may account for a large proportion of those classified as employed. This is inconsistent with the latest International Labour Organisation (ILO) definitions and leads to a significant overestimation of the employment rate and an underestimation of the unemployment rate in Georgia relative to other countries. There is room for methodological improvements in the LFS, such as the development of an imputation strategy for missing data as well as reviewing and documenting adjustment procedures for non-response (recommendations on these issues are included under Principle 8 of the ESCoP above). Georgia has not yet moved to ISCO-08 for coding of occupations while the job vacancy survey is not according to international standards.

Earnings statistics are derived from enterprises and organisations and based on two separate surveys. Information on non-business sectors, organisations and financial establishments are received from the survey "Data on Labour". Information on business sector enterprises (non-financial corporation survey) is received from the "Statistical Survey of Enterprises". Currently the published statistics focus on average earnings but Geostat has plans to introduce a series on median earnings, which the Team supports. Geostat is also encouraged to implement its plans to introduce a survey on the structure of earnings, to be conducted every four years.

#### **Recommendations**

Geostat is encouraged to:

- 84. Implement without further delay the resolution adopted by the 19<sup>th</sup> International Conference of Labour Statisticians (ILO, 2013<sup>1</sup>) and exclude persons engaged solely in the production of agricultural goods for own consumption from the statistics on employment. Since this will involve a large discontinuity in the employment statistics series, high priority should be given to producing a back-casted series on the new basis.
- 85. Move from ISCO-88 to ISCO-08 for the coding of occupations.
- 86. Consider launching a survey on job vacancies in line with EU standards.

<sup>&</sup>lt;sup>1</sup> https://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS\_230304/lang--en/index.htm

- 87. Implement its plan to publish statistics on median earnings in order to mitigate the impact of extreme values on the calculation of average earnings.
- 88. Further develop its statistics on the labour market through the collection of data on occupations and to publish data on the structure of labour costs.

#### Living Conditions Statistics

Living conditions statistics in Georgia are produced from the Household Income and Expenditure Survey (HIES), which was separated from the LFS in 2017. The main focus of the HIES is to provide information on household incomes and expenditures but a range of other information on living conditions and deprivation is also collected. There are no plans at present to introduce a separate EU-SILC in Georgia. The Assessment Team would recommend that a small number of variables on material deprivation and living conditions should be included in the HIES and aligned with those normally collected in the EU-SILC.

The Assessment Team supports Geostat's plans to conduct a Time Use Survey in 2020.

#### Recommendations

Geostat is encouraged to:

- 89. Include a small number of variables on material deprivation and living conditions in its HIES in order to produce some key statistics on poverty and living conditions that are comparable to those normally derived from the EU Survey on Income and Living Conditions (EU SILC).
- 90. Progress the plans to undertake a periodic independent Time Use Survey in 2020 to complement its existing household surveys.

#### **Education Statistics**

The Ministry of Education, Science, Culture and Sport is responsible for collecting, processing and disseminating data on primary, secondary and vocational education and training. It provides Geostat with final aggregated tables. Geostat collects information about higher education through online surveys of higher education and also conducts a doctorate students survey. Geostat also collects data from municipalities on pre-school education. The international standard classification of education, ISCED 2011, is consistently followed.

Some further development is required and Geostat and the Ministry are encouraged to collaborate in addressing gaps and inconsistencies in the available statistics. In many cases, Geostat has only access to the aggregated data and this restricts its ability to assess the quality of the derived statistics. Consideration should therefore be given to providing Geostat with full access to the basic micro-data for quality checking purposes.

#### **Recommendations**

91. Geostat is encouraged, in collaboration with the Ministry of Education, Science, Culture and Sport to address some gaps and inconsistencies in the available statistics on education. Where necessary, Geostat should have access to the relevant micro-data in order to fully assure the quality of the derived aggregated statistics.

#### Health Statistics

The Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs (MoLHSA) is responsible for collecting, processing and disseminating data on health. The ministry is also responsible for the quality of health indicators. Concepts and classifications follow international standards and are consistently applied throughout in producing health statistics in Georgia. Administrative data on health is received by Geostat in aggregated form from the MoLHSA. Various health indicators are published including number of hospital beds, number of patients, number of physicians by occupation, number of paramedical personnel by basic specialities, morbidity from acute and chronic diseases by main disease groups, morbidity of patients with HIV/AIDS and emergent medical care. The Assessment Team would recommend that a wider range of health indicators, based on administrative data, should be developed and published.

There were questions on disability in the 2014 Census and some statistics were published in 2016. The Team would recommend that the questions should be repeated in the next Census of Population. Consideration might also be given to developing a question on self-assessed health status for inclusion periodically in the main household surveys.

As no information currently exists, Geostat is encouraged to give consideration to collecting and publishing data on work related illnesses and accidents at work.

The National Centre for Disease Control (NCDC) is becoming increasingly involved in checking the quality of cause of death statistics and Geostat is encouraged to work with the Centre in addressing outstanding problems in this area.

#### **Recommendations**

Geostat is encouraged to:

- 92. Develop and publish a wider range of health-related indicators.
- 93. Include again the questions on disability in the next Census of Population that were included in the 2014 Census.
- 94. Consider collecting and publishing data on work related illnesses and accidents at work.
- 95. Develop a question on self-assessed health status for inclusion periodically in its household surveys.
- 96. Work with the NCDC in addressing some existing problems in providing cause of death statistics that are fully in line with international recommendations

#### **Agricultural Statistics**

Geostat follows international guidelines in the production of agricultural statistics. In particular, the Census of Agriculture and the Sample Survey of Agricultural Holdings follow the Food and Agriculture Organisation of the United Nations (UNFAO) guidelines set down in "A System of Integrated Agricultural Censuses and Surveys – Guidelines for the World Programme of Agricultural Censuses, 2010". With the support of the FAO, Georgia was one of eight pilot countries that prepared strategic plans to put into effect the recommendations of the FAO's "Global Strategy to Improve Agricultural and Rural Statistics". This plan - the Strategic Plan for Agricultural, Environmental and Rural Statistics (SPAERS), 2016-2020 -was adopted in 2015 and has already resulted in many improvements in the system of agricultural statistics. Geostat is also actively considering the extension of its Survey of Agricultural Holdings to implement the "Agricultural Integrated Survey (AGRIS)", which was recommended by the FAO as part of its Global Strategy with a particular focus on meeting the additional data needs,

relating to the agricultural sector and the rural economy, arising from the implementation of the SDGs.

The Assessment Team considers that the 2014 Agricultural Census was a very successful operation and welcomes the intention of Geostat to organise again the next Agricultural Census in conjunction with the Census of Population as this will guarantee an exhaustive coverage of households engaged in agricultural activity.

There is no farm register in Georgia at present, neither for statistical nor administrative purposes. Geostat did, however, create a Master Sample Frame (MSF) for agricultural surveys based on the 2014 Censuses of Agriculture and Census of Population. The MSF would provide a good basis for developing a farm register for statistical purposes, but it can only be partially updated at present on the basis of statistical surveys, business registers and administrative sources. One of the objectives of the SPAERS programme is the development of a Farm Register by the Ministry of Environmental Protection and Agriculture in consultation with Geostat. The Team was informed that this will be only a partial register limited to larger holdings that are engaged in selling agricultural products to the market. Despite this limitation, the Team believes that it would be valuable to link the register with the individual holdings recorded in the next Agricultural Census. Accordingly, Geostat and the Ministry should actively pursue this objective.

The implementation of the SPAERS 2016-2020 by Geostat and the Ministry of Environmental Protection and Agriculture has resulted in notable developments to-date and it is vital that the statistical aspects of the plan be completed in full. The Assessment Team would also support the introduction of the AGRIS, recommended by the FAO in the context of the SDGs to provide additional information on the agricultural sector and the rural economy.

#### **Recommendations**

Geostat is encouraged to:

- 97. Ensure that the next agricultural census is undertaken in conjunction with the next census of population in order to ensure that all who are engaged in agricultural actively are systematically identified.
- 98. Work closely with the Ministry of Environmental Protection and Agriculture in the development of a Farm Register and, in particular, to develop linkages between the Register and the returns from the next Census of Agriculture at individual holding level.
- 99. Give high priority to the full implementation of the SPAERS 2016-2020, which was prepared in consultation with the FAO.
- 100. Extend its agricultural survey system to incorporate the AGRIS, which has been recommended by the FAO for improving the data on the agricultural and rural sectors to meet SDG and other requirements.

#### **Multi-domain Statistics**

#### **Transport Statistics**

There is a very limited range of transport statistics published by Geostat. The Business Statistics Department publishes only total economic figures for the transport of goods sector covering turnover, production value, value added, intermediate consumption, fixed assets, number of persons employed and average monthly remuneration. In addition, very summary and limited data on freight and passengers carried by mode of transport, together with summary statistics on the transport infrastructure, is included in the Annual Statistical Yearbook. These data are based on a combination of administrative data, special surveys and expert opinions.

The Assessment Team would encourage Geostat to consider developing a wider range of transport statistics for each mode of transport and, in particular, to undertake a periodic survey on road freight in line with EU guidelines.

#### **Recommendations**

Geostat is encouraged to:

- 101. Consider undertaking a periodic survey on road freight in line with EU guidelines.
- 102. Consider developing a wider range of transport statistics (relating to passenger and freight transport and transport safety) for each mode of transport (i.e. road, rail, air and sea).

#### **Tourism Statistics**

A limited range of statistics, relating to domestic and inbound tourism, is published on the Geostat website and the statistics are generally compiled in line with international recommendations. It is planned to commence the production of statistics on outbound tourism in 2019.

The Assessment Team would encourage Geostat, in conjunction with the National Tourism Agency, to further develop and coordinate the production and dissemination of statistics on tourism in line with Eurostat guidelines.

#### **Recommendations**

103. Geostat is encouraged, in conjunction with the National Tourism Agency, to further develop and coordinate the production and dissemination of statistics on tourism in line with Eurostat's methodological manual for tourism statistics (version 3.1, 2014 edition).

#### **Energy Statistics**

The methodology recommended by Eurostat and the International Energy Agency (IEA) is generally followed by Geostat in the production and dissemination of energy statistics.

Improvement actions implemented since the last GA in 2010 have resulted in:

- an improvement in the quality of energy statistics;
- the publication of price statistics for energy; and
- the preparation and publication of an energy balance.

The Assessment Team would recommend that Geostat should give priority to improving its statistics on the consumption of energy by enterprises.

#### **Recommendations**

104. Geostat is encouraged to further develop its survey on the consumption of energy by enterprises.

#### **Environment Statistics**

Geostat has been developing its environmental statistics programme, with the support of international agencies, and largely follows international recommendations. A special publication, *Natural Resources of Georgia and Environmental Protection*, is produced annually and provides a range of available statistics and indicators under the following headings: Land resources; Forest resources and protection; Protected areas; Water resources; Ambient air protection; and Natural hazards and violations of law. Work commenced on the production of environmental accounts in 2018.

Geostat is also producing UNECE environmental indicators.

Geostat is encouraged to continue these developments. The absence of waste statistics is a major omission and should be pursued, as envisaged, under the SPAERS programme. The development of relevant administrative sources by the appropriate agencies is essential if these statistics are to be produced.

#### **Recommendations**

105. Geostat is encouraged to continue its development of environmental statistics and, in the context of the SPAERS 2016-2020, to give high priority to the provision of waste statistics.

#### **Research and Development; Innovation Statistics**

Information on R&D and Innovation is collected by the Business Statistics Department using a specialised "Innovation Activity in Enterprises" survey, which is undertaken online annually in a sample of 4,000 enterprises with 10 or more employees. The Ministry of Education, Science, Culture and Sport also collects information on R&D but this is done independently of Geostat.

The information collected needs to be improved with a focus on meeting the SNA 2008 requirements for data on R&D. The Assessment Team would also recommend that Geostat should take the lead role in coordinating the collection of dissemination of statistics on R&D and that all data should be published on its website.

#### **Recommendations**

Geostat is encouraged to:

- 106. Take the lead role in coordinating the collection and dissemination of statistics on Research and Development.
- 107. Publish all available indicators on R&D on its website.

#### Information and Communication Technologies (ICT) statistics

Geostat undertakes ICT surveys of both enterprises and households with both surveys largely following European and other international guidelines. The household questionnaire should be broadened to

#### **Recommendations**

108. Geostat is encouraged to broaden the household questionnaire in line with Eurostat's ICT model questionnaire and to improve the availability of metadata, in both Georgian and English, for both ICT surveys.

# General assessment of principles, national statistical system and specific statistical domains

#### **Chapter 1: P1 – Professional independence**

#### General assessment

In the Global Assessment (GA), the extent to which Geostat is compliant with the principle of professional independence was assessed in detail by reference to the individual indicators for the principle set down in the ESCoP.

In general, the Assessment Team found that there is a good understanding of, and adherence in practice to, the principle throughout Geostat. However, the Team is of the opinion that the legal underpinning of the principle in the LOS could be improved and aligned more closely with the relevant guidelines of the GLOS that was adopted by the Conference of European Statisticians in April 2016.

Most of the Team's recommendations relate to the status, role, tenure and appointment/dismissal of the ED. In particular, it needs to be specified in the LOS that the ED has sole responsibility for statistical standards and methodology, including the content and timing of statistical releases. In this regard, the current provisions in the LOS that assign responsibilities to the Board of Geostat for approving statistical standards and methods should be repealed. Furthermore, there is a need to separate the recruitment and appointment process for the ED from that of Board members and for the process for the ED to be based on relevant professional competence only in line with indicator 1.8 of the ESCoP. Finally, the reasons for dismissing the ED by the Prime Minister should be specified in the LOS and these should explicitly exclude any that might compromise statistical principles.

#### Assessment per indicator

# ESCoP indicator 1.1: The independence of the National Statistical Institutes and Eurostat from political and other external interference in developing, producing and disseminating statistics is specified in law and assured for other statistical authorities.

Article 1 of the LOS states that the objective is to ensure the production of "*independent*, *objective and reliable statistics*" in line with the United Nations Fundamental Principles for Official Statistics and the ESCoP. Furthermore, Article 6 of the LOS on the Legal Status of Geostat states that it is an LEPL that "*independently carries out its activities based on the Georgian legislation*" With the exception of these two commendable provisions, there is no further direct reference to the principle of professional independence or an elaboration of what it might entail. In particular, there is no reference to professional independence in the Basic Principles of Official Statistics, as set down in Article 4, or in the competences or functions assigned to the ED or the Board of Geostat under the LOS.

While the Assessment Team is satisfied that Geostat is professionally independent in practice, it would recommend that in any future revision of the LOS the principle of professional independence should be explicitly included and defined in accordance with the guidelines set down in the GLOS.

# ESCoP indicator 1.2: The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have sufficiently high hierarchical standing to ensure senior level access to policy authorities and administrative public bodies. They are of the highest professional calibre.

Geostat was established as an LEPL in 2009 under the LOS in order to emphasise *inter alia* its independence in the production of official statistics. Prior to this, the State Department of Statistics produced official statistics as a subordinated body of the Ministry of Economic Development of Georgia. LEPLs are separate organisations from legislative and state governing bodies, which independently carry out political, state, social, educational, cultural and other public activities under state control. While the ED has a legally recognised high hierarchical status, the Assessment Team was informed that it would be ranked below that of a head of a ministry and that this can sometimes be a problem in gaining full co-operation and recognition for statistical activities. Accordingly, the Team is of the view that the status of the ED should be reviewed and enhanced so that it would be at the level of the highest (non-political) public servants in Georgia.

ESCoP indicator 1.3: The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner.

ESCoP indicator 1.4: The heads of the National Statistical Institutes and of Eurostat and, where appropriate, the heads of other statistical authorities have the sole responsibility for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases.

In practice, the ED has responsibility for ensuring that statistics are developed, produced and disseminated in an independent manner. However, from a legal standpoint this is not fully assured. Article 9 (section 1 b) of the LOS states that the ED shall "develop the statistical standards, classifications and methodology to be used in the course of carrying out statistical activities and submit them for approval to the Board of Geostat" Furthermore, Article 13 sets down the functions of the Board and states (Section d) that it shall "review the statistical standards, classifications and methodology to be used in the course of statistical activities, work out recommendations, and approve them, or accept the international standards and methodology". It is clear, therefore, that from a legal standpoint it is the Board of Geostat that has ultimate responsibility for statistical standards and methodology.

In addition to the ED, who acts as chairperson, the Board has seven other members of which: three are, respectively, representatives of the National Bank of Georgia, the Ministry of Economy and Sustainable Development and the Ministry of Finance; and four are non-public servants appointed by the Prime Minister, with the consent of Parliament following a public competition. The Assessment Team is clearly of the view that the assignment of legal responsibility for statistical standards and methodology to the Board of Geostat is at variance with both the letter and intention of the ESCoP, in particular with the requirements of indicator 1.4. Accordingly, the Team would recommend that the LOS should be amended to assign sole responsibility to the ED for deciding on statistical methods, standards and procedures, and on the content and timing of statistical releases; and to remove any existing provisions that assigns such responsibilities to the Board. The guidelines set down in the GLOS for the tasks to be assigned to Statistical Councils might be considered in the context of redesigning the role of the Board.

In discussions with the Board it was argued that the current arrangements are necessary in order to ensure that Geostat can undertake its functions in an independent manner. The Assessment

Team accepts that the Board has an important role in ensuring the institutional independence of Geostat within the Georgian public administration. However, this should not be confused with the objective of professional independence as elaborated by the ESCOP. This focuses on ensuring that individual statistical products are produced and disseminated by professional statisticians working under the direction of the professional head of the NSI and, in the case of Geostat, this must be the ED and not the Board.

# ESCoP indicator 1.5 Statistical work programmes are published and periodic reports describe progress made.

Multi-annual strategic plans for the development of the statistical system are prepared periodically and published on the website. In addition, detailed annual statistical programmes, which contain information on each statistical output, are prepared by Geostat and approved by the Government. The programmes, together with progress reports, are published on Geostat website.

# ESCoP indicator 1.6: Statistical releases are clearly distinguished and issued separately from political/policy statements.

Geostat has developed its own style of statistical release (with a distinctive cover page, including the office logo) for disseminating its statistics. These releases are issued directly by Geostat and do not include any political or policy statements.

# ESCoP indicator 1.7: The National Statistical Institute and Eurostat and, where appropriate, other statistical authorities, comment publicly on statistical issues, including criticisms and misuses of statistics as far as considered suitable.

Article 4, section d, of the LOS requires, as a Basic Principle of Official Statistics, that actions be taken to prevent the misuse of statistics. Under this provision statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics. Geostat has procedures in place to issue public statements, when deemed appropriate, in cases of criticism, misuse or misinterpretation of its statistics.

#### ESCoP indicator 1.8: The appointment of the heads of the National Statistical Institutes and Eurostat and, where appropriate, of other statistical authorities, is based on professional competence only. The reasons on the basis of which the incumbency can be terminated are specified in the legal framework. These cannot include reasons compromising professional or scientific independence.

The appointment process for the ED of Geostat is set down in the LOS and is quite complex in that it is linked to the appointment process for members of the Board of Geostat. In short, only Board members that have been appointed by the Prime Minister, with the agreement of Parliament following an open competition, can be considered for appointment as ED. This is quite limiting and, in the view of the Assessment Team, sub-optimal for a number of reasons. First, the appointment process links the ED too closely to the Board and, in view of the different roles and the need to distinguish between the respective responsibilities in regard to statistical standards and methodology etc. (see above), this is neither desirable or necessary. Secondly, the open competition for appointment as a Board member is limited to assessing the competencies required for such a position and may not, therefore, fully reflect the professional and managerial competencies that would normally be assessed in appointing an ED. Thirdly, serving public servants are not eligible to be appointed as members of the Board from which the ED will be selected. This means that public servants, including senior managers in Geostat, who may have the necessary qualifications and expertise, are precluded from being considered for the position of ED unless they resign from their current positions in advance. Accordingly, the Team would recommend that the recruitment and appointment of the ED should be separated from that of Board members. Furthermore, in line with international best practice, the appointment process for the ED should be undertaken in a transparent manner through a publicly announced open competition based on professional competencies only and involving an independent selection committee that includes appropriate management and professional experts.

The current tenure of the ED is four years, which is relatively short, particularly as there is no mechanism for re-appointment without going through the whole appointment process again from scratch. In line with the guidelines of the GLOS, the Team would recommend that consideration be given to introducing a system whereby the term of office may be renewed once, subject to satisfactory performance by the incumbent.

Article 14 (sections 1 and 2) of the LOS sets down the basis for the Termination of Authority of a member of the Board of Geostat and, since the ED must be a member of the Board, it follows that this applies to him also. Article 14 (section 4) of the LOS states that the ED may be dismissed by the Prime Minister and the Team was informed that the reasons for dismissal are limited to those set down in Sections 1 and 2 but this is not explicit in the current drafting of Article 14. The Team would therefore recommend that the grounds for dismal of the ED should be more explicitly specified in the LOS, in line with the ESCOP and that these should exclude explicitly any reasons that might compromise statistical principles.

#### **Recommendations**

- 1. The LOS should be revised to explicitly include the concept of "professional independence".
- 2. The status of the ED of Geostat should be enhanced so that he/she is at the level of the highest (non-political) public servants in Georgia.
- 3. The ED of Geostat should be assigned sole responsibility for deciding on statistical methods, standards and procedures and for the content and timing of statistical releases.
- 4. The role and mandate of the Board of Geostat should be revised to accord more closely with the statistical governance recommendations of the GLOS and to clarify the respective competences of the Board and the ED. In particular, the Board of Geostat should not retain its current competence, as set down in Article 13 paragraph d of the Law on Official Statistics, in respect of the approval of statistical methodology.
- 5. The recruitment and appointment of the ED should be separated from appointments to the board of Geostat and should be undertaken in a transparent manner, through a publicly announced open competition based on professional competencies only and involving an independent selection committee that includes appropriate management and professional experts.
- 6. The tenure arrangements of the ED should follow the relevant recommendations of the GLOS i.e. a fixed term renewable once.
- 7. The grounds for dismissing the ED, prior to the expiry of his/her term of office, should be set down in the LOS and should exclude explicitly any reasons that might compromise statistical principles.

## Chapter 2: P2 – Mandate for data collection

### General assessment

The LOS provides an adequate mandate for Geostat for data collection, both through the conduct of direct statistical surveys and the accessing of administrative sources for statistical purposes. Geostat can also seek to apply sanctions on legal entities and administrative bodies that refuse to cooperate with mandatory inquiries. In the case of personal and household surveys, only the Census of Population is mandatory.

In some cases, confidentiality and secrecy provisions in other legislation have been invoked to block the granting of full access to Geostat to relevant administrative data for statistical purposes. The LOS should be amended, in line with the Generic Law, to clarify that such provisions cannot be used to block full access for statistical purposes unless the legislation specifically excludes such access.

Also, the current legal provisions do not cover the accessing of administrative type data held by private enterprises, such as telephone companies, for statistical purposes. It is recommended that the LOS should be amended to facilitate such access by Geostat. Furthermore, the Assessment Team would recommend that the current system for applying sanctions on nonrespondents to mandatory enterprise inquiries should be reviewed in order to make it more effective and streamlined.

### Assessment per indicator

# ESCoP indicator 2.1: The mandate of the statistical authorities to collect information for the development, production and dissemination of European Statistics is specified in law.

Geostat is mandated under Article 25 of the LOS to request and receive from administrative bodies and from physical and legal persons "*all kinds of statistical data and other information, including confidential information and/or information containing personal data, in line with the Law on Personal Data Protection*". While this provision is very clear, the Team was informed that in some cases provisions in other legislation have been invoked to block the granting of full access to Geostat to relevant micro-data. The Team would recommend that the LOS should be amended, in line with the Generic Law, to clarify that confidentiality and secrecy provisions in other legislation cannot be invoked to prevent full access to administrative data for statistical purposes unless such access is specifically precluded.

Also, it might be noted, that an administrative body is defined (under the Administrative Code of Georgia) as relating only to public administrative bodies and institutions at state and local levels. The right of Geostat to request and receive administrative type data from private bodies (for example, telephone companies) is therefore not explicitly addressed in the LOS. In view of the increasing interest of using such data for statistical purposes, the Assessment Team would recommend that the LOS should be suitably amended to facilitate such access by Geostat.

# ESCoP indicator 2.2: The statistical authorities are allowed by law to use administrative data for statistical purposes.

Article 7 of the LOS specifically allows Geostat to "*process administrative data exclusively for statistical purposes*". Certain Government decrees and laws in specific areas (e.g. VAT, preschool education and persons with disabilities) also mention the use of data for statistical purposes. Geostat currently estimates that administrative data accounts for 37% of the source data used for statistical purposes and it is a strategic objective to increase this share in future.

# ESCoP indicator 2.3: On the basis of a legal act, the statistical authorities may compel response to statistical surveys.

The LOS enables Geostat to make it mandatory for administrative bodies and legal entities to respond to statistical inquiries. It is also mandatory for persons and households to cooperate and respond in the Census of Population but all other personal or household surveys are not mandatory. Sanctions can be applied under the Administrative Code for Georgia in the case of legal entities and administrative bodies that refuse to respond to a mandatory request. The management of Geostat indicated that the current system for applying sanctions is cumbersome and that sanctions, when imposed, are often too low to serve as a deterrent. The Team was informed that under the current system the Board of Geostat is involved in individual cases. This would appear to be both excessive and unnecessary and the Team would recommend that the Board should confine its involvement to the setting and monitoring of general principles and guidelines without engaging in individual cases. It is recommended, therefore, that the current arrangements should be reviewed and streamlined to make them more effective.

### **Recommendations**

- 8. The LOS should be amended to clarify, in line with the GLOS, that confidentiality and secrecy provisions in other legislation cannot be invoked to prevent full access to administrative data for statistical purposes unless such access is explicitly excluded in the legislation.
- 9. The LOS should be amended to grant Geostat access for statistical purposes to relevant administrative data held by private enterprises, for instance telephone companies.
- 10. The current arrangements for imposing sanctions for non-compliance with mandatory demands from Geostat for data for statistical purposes should be reviewed and streamlined.

# <u>Chapter 3: P3 - Adequacy of resources (including staff resources, recruitments, training)</u>

#### General assessment

The Assessment Team was impressed that Geostat, as a relatively small NSI with limited IT and other resources, has managed to develop and maintain a fairly impressive programme of official statistics for Georgia. The Team believes that this reflects to a significant extent the productivity and expertise of the staff employed. However, it would have concerns about the sustainability of the current system and, in particular, Geostat's capacity to undertake new statistical activities or to improve the quality of existing outputs in line with international best practice and standards. Accordingly, the Team would consider that there is a need to significantly increase the staffing, IT and other resources available to Geostat to fulfil its mandate. On specific issues, the Team would recommend that the current and future accommodation needs of Geostat should be reviewed and shortcomings addressed. Finally, it would stress the necessity of ensuring that Geostat is competitive in attracting and retaining staff with the necessary skills and expertise that are required in a modern statistical office.

#### Assessment per indicator

# ESCoP indicator 3.1: Staff, financial and computing resources, adequate both in magnitude and in quality, are available to meet current statistical needs.

In 2018 there was a total of 908 staff employed in Geostat, of which over two thirds (624) were engaged as field staff in the conduct of household surveys and the collection of agricultural statistics. Of the remainder, 214 were classified as permanent staff with a further 70 employed on a non-permanent basis as support staff. The 214 permanent staff corps includes management grades and also statistical, IT and other specialist staff and, as such, represents the central core of the organisation with primary responsibility for the organisation and delivery of the statistical programme. Three quarters (163) of the permanent staff are located in the central office in Tbilisi with the remainder (51) located in the eleven regional offices.

Since 2012 there has been an increase of almost 50% in the number of permanent staff members, from 149 to 214, and the number of field staff has also increased by over 50% from 400 to 624. Despite these increases, the number of permanent staff available to Geostat is relatively low when compared with NSIs in comparable countries. The Assessment Team was impressed at the scale of the statistical programme delivered by Geostat and considers that this reflects well on both the productivity and expertise of the staff involved. However, the Team would also consider that there is little capacity within Geostat to undertake new statistical activities or to improve the quality of the existing outputs in line with international best practice and standards.

All IT maintenance and development work is undertaken by the Information Technology Department, which consists of 14 staff at present. All permanent staff have access to a personal computer with internet access and the use of laptops for data collection in the agricultural and household surveys is increasing, while web applications have been developed for some business surveys. Furthermore, with the assistance of international donors, modern dissemination tools such as PC-AXIS have been installed for users to access Geostat databases on the website. While the Team was impressed with what has been achieved with relatively limited resources, it would have concerns that there has been significant underinvestment in this area that is critical for a modern statistical office. As a result, it would have some fears about the longer-term sustainability of the current systems and the capacity to underpin the continued modernisation of the statistical processes to align them more closely with those of more developed NSIs.

Accommodation in Tbilisi for the central office staff is very limited and there would not appear to be any capacity to expand on the site. Management indicated that the lack of office space is a major factor that has to be taken into account in it seeking to expand the number of permanent staff members to undertake new activities etc. The additional staff that will be required centrally for the conduct of the next censuses of population and agriculture will pose a particular problem as the building used for the 2014 censuses is no longer available to Geostat. The Team also considers that the current location of the office, and its general condition, is not conducive to conveying a positive public image of Geostat as a modern and progressive NSI.

The recruitment and retention of suitably qualified and experienced staff is critically important in enabling Geostat to implement the current statistical programme in an effective manner. Increasing difficulties have been experienced in this regard in recent years and there are concerns that the situation may continue to dis-improve. The Assessment Team was informed that, despite significant improvements in recent years, the salary levels in Geostat are still below those of comparators, not only in the private sector but also in many parts of the public service such as the Ministries. In an environment where there is an increasing demand in many organisations for staff with IT, numeracy and statistical skills, it is vital for the sustainability of the statistical system that Geostat is competitive in attracting and retaining staff with these attributes.

In addressing the concerns outlined in the preceding paragraphs, the Team believes that, at the outset, Geostat should develop and submit to Government, as an urgent priority, a costed strategic plan for the development of official statistics in Georgia to meet current and emerging demands. It will also be necessary to engage national and international stakeholders in convincing the Government of Georgia of the need to significantly increase the staff, financial and information technology resources required by Geostat to continue to deliver on its mandate in a sustainable manner. The Team would also point to the specific need to review and address the accommodation needs of Geostat, particularly in the context of undertaking the next censuses of population and agriculture. Finally, Geostat must ensure that it is competitive, particularly within the wider public service, in attracting and retaining staff with the skills and expertise that are vital to it in fulfilling its mandate.

#### **Recommendations**

- 11. Geostat is encouraged to develop and submit to Government, as an urgent priority, a costed strategic plan for the development of official statistics in Georgia to take account of current and emerging national and international demands.
- 12. The Government of Georgia is encouraged to recognise the need to significantly increase the staff, financial and information technology resources available to Geostat to meet current and emerging needs for improved statistics in a sustainable manner.
- 13. The accommodation needs of Geostat should be reviewed as a matter of urgency and the available accommodation should be improved as necessary to take account of any current shortcomings and to provide, in particular, for the increased staffing numbers that will be needed in good time for the conduct of the upcoming Censuses of Population and Agriculture.
- 14. Geostat is encouraged to continue to improve, with the support of the Georgian Government, the current salary levels of its staff to make them more comparable with those of officials in other areas of the public service, notably in the Ministries.

## **Chapter 4: P4 – Commitment to quality**

### General assessment

The main areas of strength with regard to Geostat's commitment to quality are the existence of a dedicated structural unit as well as the interagency working group on quality issues.

Based on the previous Adapted Global Assessment (AGA) recommendations, several policy documents and guidelines have been prepared. In addition, the following improvements have been made:

- A dedicated methodology and quality management division has been created;
- Procedures have been introduced to describe quality-related activities;
- Work has commenced on introducing a Quality Management System;
- The adoption of ESS quality parameters for monitoring and reporting on quality.

Furthermore, quality management system process mappings (quality mappings) have been conducted and evaluated for all important regular statistics production processes and a quality audit process started in April 2018. A systematic approach to make routine descriptions has been developed based on the GSBPM. The approach includes structures and templates for descriptions, places to store them as well as support to staff writing these descriptions. A systematic approach to write quality reports has been developed and it is planned to publish the reports during 2018 according to the plan. An interagency working group on quality issues has been created. Training courses on the ESCoP and quality assurance issues for other producers of statistics and data providers have been conducted.

Future plans for improving quality include:

- Self-assessment exercises to be performed by all structural units of Geostat in 2019-2020;
- Monitor the product quality on a regular basis in 2019-2020;
- Prepare quality guidelines in 2018-2019.

The Assessment Team welcomes these initiatives but is of the view that more needs to be done to develop an integrated system and to foster a culture for quality within Geostat. The Team recognises that resources are very limited, and objectives should, therefore, be both realistic and pragmatic. A high-level committee should be established to oversee the implementation of the quality management system. All statistical divisions should undertake a quality selfassessment of their statistical outputs on a regular basis while statistical quality audits should be conducted in targeted areas, having regard to available audit resources and statistical priorities.

### Assessment per indicator

# **ESCoP** indicator 4.1: Quality policy is defined and made available to the public. An organisational structure and tools are in place to deal with quality management.

Quality commitment is stated in the Article 1 of the LOS: "The goal of the law is to ensure producing independent, objective and reliable statistics in the country according to the fundamental principles of the United Nations and European Statistics Code of Practice and on the basis of internationally recognised basic principles of statistics."

A quality commitment statement (quality policy) is under development. Following the previous GA mission recommendations, the methodology and quality management division was created in May 2014 from the ED's staff.

Descriptions for the most statistical production processes have been prepared and subject matter departments use them as guidelines. These descriptions are internal documents and are not intended to be available to the public. A confidentiality policy, revision policy documents, and a public use of microdata dissemination policy are available to the public. The IT tool for quality documentation updating is under development.

Several courses have been organised within the framework of cooperation projects with Statistics Sweden. The representatives of all Geostat divisions attended these courses. Moreover, the representatives of the interagency working group on quality matters also attended these courses.

# **ESCoP** indicator 4.2: Procedures are in place to plan and monitor the quality of the statistical production process.

The methodology and quality management division systematically provides methodological and technical support on the quality assurance issues to the subject matter departments according to the action plan of the association agenda with the EU.

The descriptions of the statistical production processes are prepared. The documentation describes the statistical process coherently from the first to the final stage and contains the positions of the staff members responsible for each stage of the process. The integrated standard form describing the working processes are developed based on the GSBPM for each statistical process.

These descriptions ensure:

- Standardisation of the processes;
- Transferring the existing documents of the statistical processes to the unified system;
- Documenting the changes in the processes;
- Providing guidelines to staff;
- Availability of information about the statistical processes for the staff.

The documentation describing the working process includes the main document and the system of annexes: the instructions for filling in the questionnaires; the templates of the questionnaires; the tables and figures for publishing; the methodological guidelines; the instructions for working with computer programs, etc.

In order to facilitate the quality assurance through the whole statistical system, an interagency working group on the quality issues has been created. The interagency working group consists of the representatives of the ministries and other governmental bodies producing statistics or providing data for statistics. Workshops on the ESCoP and quality assurance issues for other producers of statistics and data providers took place.

# ESCoP indicator 4.3: Product quality is regularly monitored, assessed with regard to possible trade-offs, and reported according to the quality criteria for European Statistics.

The check lists for the statistical production processes, the logical control methods and tools for data validation are in prepared and used for quality monitoring. Procedures are not always documented. The senior management is regularly informed in order to decide on improving actions. As a rule, the senior management leads the improvement processes.

It was planned to prepare the Georgian version of the quality reports first, followed by the English version. After the completion and publication of the customer-oriented quality reports, Geostat plans to prepare the producer-oriented quality reports as well. The ESS Standard Quality Report Structure (ESQRS) will be selected as the pattern for the producer-oriented reports.

The user-oriented quality reports are under preparation. These reports (draft versions) were used during the pilot quality audit in April 2018.

The user satisfaction survey was carried out in 2013. Next survey is planned in 2019.

# ESCoP indicator 4.4: There is a regular and thorough review of the key statistical outputs using also external experts where appropriate.

An internal audit is regularly carried out according to the plan which will be adopted in 1<sup>st</sup> quarter 2019. A special pilot quality audit was carried out in April 2018. It is planned to be carried out on a regular basis starting from 2019.

Quality mapping has been introduced since 2014 and is used for all important regular statistics production processes. The list of statistical processes within the organisation has been defined and consists of 65 processes. The results of the quality mapping, including findings and agreed recommendations for improvements, were documented (29 reports in total). The recommendations were discussed and agreed with the responsible head of statistical production process.

Preparations have been made to follow up the improvements according to the recommendations made. Frequent flaws and the need of common improvements were identified.

The methodology and quality management division and internal audit department are responsible for carrying out internal audits. The first training for quality auditors took place within the cooperation project with Statistics Sweden in September 2014, the last one in May 2018. The quality reviews contain recommendations for improving the quality of statistical processes.

The user feedback is systematically taken into account during the planning activities. The development of new dissemination tools (android software), an introduction to GIS, the creation of a regional statistics portal, etc. are the means to improve statistical output.

A mission on the Observance of Standards and Codes (ROSC) was held in 2011. Different international organisations (IMF, UNFAO, World Bank, Eurostat) are actively engaged in the review of various statistical domains.

Benchmarking is regularly carried out using the different sources of information, but the processes are not always documented.

### **Recommendations**

- 15. Continue with the development of an integrated quality management system with realistic objectives and ensure that adequate resources are available for its implementation.
- 16. Establish a high-level committee on quality to oversee the implementation of the quality management system, with a particular focus on setting priorities for quality initiatives and on reviewing progress with resultant action plans.
- 17. Establish a system whereby all statistical departments undertake a quality selfassessment of their statistical outputs on a regular basis. The results of the selfassessments, together with resultant action plans, should be submitted to the high-level committee on quality.
- 18. Prioritise areas for the conducting of the detailed statistical quality audits, having regard to available audit resources and statistical priorities.

# Chapter 5: P5 – Statistical confidentiality

### General assessment

The legal, methodological, technical and logical measures to ensure data confidentiality are in place. Confidentiality policy, guidelines and recommendations have been developed. The methodology and quality management division has developed "Guidelines on the protection of tabulated business data" and "Guidelines on the protection of tabulated personal data" to ensure data confidentiality.

Clear provisions exist in the LOS, Article 4: "Basic principles of Official statistics"; Article 28: "Observing confidentiality of statistical data" and Article 29: "The obligations and responsibilities of the employees of the Geostat". The General Administrative Code Article 27 "Professional secret" states that professional secret refers to information under the categories of personal data or commercial secret and which was entrusted to a person when performing professional duties.

The confidentiality commitment is signed by all staff members. Members of the interagency working group on quality issues have been instructed on statistical data confidentiality issues.

No access to microdata for research purposes is granted due to the law restrictions. There is a lack of systematic IT audit. Full documentation of the related processes is not available.

It is planned to amend the law granting access to microdata for research purposes in 2020.

The Assessment Team identified a number of issues for attention. First, procedures should be put in place to systematically monitor adherence to the confidentiality guidelines. Secondly, the LOS should be amended to exclude the reference in Article 28 to the potential use of confidential data for non-statistical purposes. Thirdly, the reference to a time restriction on the storage of confidential data in electronic form, in Article 26 of the LOS, should be removed or qualified so that the ability to generate historical statistical analyses is not impaired. Finally, the LOS should be amended to permit access to confidential data for research purposes and Geostat should develop appropriate rules and procedures to facilitate such access

### Assessment per indicator

### ESCoP indicator 5.1: Statistical confidentiality is guaranteed in law.

Clear provisions exist in the LOS, Article 4: "Basic principles of Official statistics"; Article 28: "Observing confidentiality of statistical data", and Article 29: "The obligations and responsibilities of the employees of the Geostat". The General Administrative Code, Article 27 "Professional secret" states that professional secret refers to information under the categories of personal data or commercial secret which was entrusted to a person when performing professional duties.

### ESCoP indicator 5.2: Staffs sign legal confidentiality commitments on appointment.

In the code of ethics of Geostat, it is stated that all employees working in Geostat system are obliged to follow confidentiality issues of the statistical data. The employee is prohibited to disclose, use or disseminate confidential statistical data, for personal, academic, research, and other activity purposes.

On the basis of ED's decree No. 15 of 2 March 2017, each employee signs the confidentiality commitment. The confidentiality commitment is signed by all staff members. In case the agreement is modified, the confidentiality commitment is updated and signed again.

# ESCoP indicator 5.3: Penalties are prescribed for any wilful breaches of statistical confidentiality.

The Criminal Code of Georgia (Article 157) includes penal sanctions for violating personal information <u>https://matsne.gov.ge/en/document/download/16426/157/en/pdf</u>, also see the Article 29 and internal regulations of Geostat (Article 5.f).

The employee's obligations are not to distribute or use confidential information, which is known during the performance of his/her duties, for non- statistical (including personal) purposes. This obligation is extended after the termination of the employment relationship and its breach causes the liability under the law.

The General Administrative Code, the Article 27 "Professional secret" states that professional secret refers to information under the categories of personal data or commercial secret entrusted to a person (a person became aware of) when performing professional duties. Professional secret may not contain information which is not personal data or commercial secret of another person. The Article 44 "Personal Data Privacy" states that a public institution shall be obliged not to disclose personal data without consent of that person or statutory cases without reasoned court decision, with the exception of personal data of officials (also candidates nominated for an official position).

The LOS does not have any provision on transmission of confidential information. The Article 28 of the LOS states that "the confidential statistical data shall not be issued or disseminated or used for a non-statistical purpose".

ESCoP indicator 5.4: Guidelines and instructions are provided to staff on the protection of statistical confidentiality in the production and dissemination processes. The confidentiality policy is made known to the public.

The confidentiality policy is in place and publicly available at: <u>http://geostat.ge/cms/site\_images/Data%20Confidentiality%20Policy%20at%20Geostat\_En.p</u> <u>df</u>.

The methodology and quality management division is in charge of these activities. This division has prepared "Guidelines on the protection of tabulated business data" and "Guidelines on the protection of tabulated personal data" to ensure data confidentiality. The guidelines are expected to be adopted soon.

There are no sufficient resources to carry out research in the field of confidentiality. Risks of identification are assessed individually: usually data on less than three (business statistics) and ten (Census of Population) statistical units are not disseminated.

The respondents are informed by advance letters and by the on-line data collection system that Geostat commits to the statistical confidentiality and that data are only used for statistical purposes. Each subject matter department of Geostat ensures application of the statistical disclosure control methods during the data processing and dissemination by means of identifying outliers, analysing time-series, etc.

# ESCoP indicator 5.5: Physical, technological and organisational provisions are in place to protect the security and integrity of statistical databases.

The access to the Geostat building is restricted, the video surveillance system is in place, a server room with limited admission is isolated, the subject matter divisions use logical security measures to prevent data breaches. The processes are not fully documented. The Data protection and security policy is being developed. Geostat data security system audits are not carried out systematically because of the insufficient human and financial resources.

Servers are located in the server room, which is monitored by the security cameras. Unauthorised persons have no access to the server room. Databases are protected by the hardware firewall. Existing technical problems include the lack of biometric or security card access controls. Additionally, there is a lack of fire suppression systems in the server room and there are no software firewalls or DLP (Data Loss Prevention) systems.

The statistical databases are monitored and recorded by the Microsoft system monitor software. Several software has own monitoring and event manager tools. The user accounts are recorded in the database software and in the domain controller. It is updated daily. Geostat does not have a mechanism to track unauthorised access.

Paper questionnaires are stored in relevant subject matter departments and then are archived by a special unit. As for on-line questionnaires, methods of hiding personal data are applied.

# ESCoP indicator 5.6: Strict protocols apply to external users accessing statistical microdata for research purposes.

No research access to confidential data is granted by the LOS. Geostat makes all efforts to ensure that all safeguards are in place for protecting confidentiality. Confidentiality related guidelines are not fully prepared.

Microdata for public use are free to access (available on the website or on request). Relevant staff is responsible for ensuring that microdata does not contain information which may indirectly cause individual identification.

#### **Recommendations**

- 19. Geostat is encouraged to prepare and implement procedures for systematically monitoring adherence to its confidentiality guidelines.
- 20. Amend the LOS in order to exclude the current reference in the Article 28.2 to the potential use of confidential data for non-statistical purposes, i.e. delete "but for the exceptions envisaged under the Georgian legislation".
- 21. Review the Article 26 of the LOS on Access to the Statistical Data and their Storage and restrict the storage of confidential data in electronic form. The storage of confidential data should be removed or qualified, so that the ability to generate historical statistical analyses is not impaired.
- 22. Amend the LOS to permit access to confidential data for research purposes. Geostat should develop an appropriate rules and procedures, in line with the international best practice, to guard against any unlawful disclosure of confidential returns in facilitating such access.

## Chapter 6: P6 – Impartiality and objectivity

### General assessment

The LOS stipulates basic principles for ensuring impartiality and objectivity. In its practical work, Geostat closely follows the calendar for statistical production and dissemination.

A number of guidelines and policy documents have been prepared to comply with this principle, e.g. a revision policy, a confidentiality policy document, a confidentiality reminder (signed by all Geostat permanent and contracted staff), metadata and quality reports, improved dissemination guidelines with a fixed time (11 a.m.) for data dissemination introduced.

The producers and providers of official statistics have made efforts to improve compliance. Notable examples include the introduction of the SDMX system for data exchange by the National Bank of Georgia and improvement of data collection tools by other ministries (Ministry of Interior).

The main area of weaknesses can be considered insufficient documentation and availability of guidelines. The important weaknesses are related to the insufficient access to other producers' administrative data, methodologies used by other producers and lack of qualified personnel to produce office-wide methodological assessments.

Future plans are:

- Completion of quality reports including metadata.
- Preparation of relevant guidelines based on priorities 2019-2020.

The Assessment Team would recommend that Geostat should codify its current practices and prepare and publish guidelines for assuring impartiality and objectivity in the production and dissemination of official statistics. It is also recommended that Geostat should prepare and publish a policy on the treatment of errors and their correction and that the dates of major revisions should be signalled in advance in the release calendar.

### Assessment per indicator

# ESCoP indicator 6.1: Statistics are compiled on an objective basis determined by statistical considerations.

There are no cases of outsourcing statistical surveys or work to external partners. The sources, concepts and methods of all statistical surveys or work are based on international methodologies with extensive support from the international organisations and partners.

Dissemination activities are based on the international principles and good practices ensuring equal access and including an advance release calendar available for all statistical data.

# **ESCoP** indicator 6.2: Choices of sources and statistical methods as well as decisions about the dissemination of statistics are informed by statistical considerations.

Preparation of the Statistical Work Program (SWP) envisages preparation of the list of statistical domains and indicators with relevant sources decided by the subject matter departments and the Geostat management. The selection of sources is undertaken by the subject matter departments. Sources and statistical methods are based on the international methodologies and standards, with strong support from the international organisations and donors in most of the large areas of statistical production. Quality reports contain the information on data source (statistical survey or administrative registers), frequency of data collection, methods of data gathering, data validation and compilation etc.

Regular assessments of the most areas of statistical production are made in the frame of the international cooperation. International partners (such as Statistics Sweden, USDA Caucasus agricultural development initiatives and others) conduct regular missions and provide assessment of the existing situation and recommendations for future work. The lack of qualified staff is one of the main obstacles in making these assessments on a regular basis within the organisation internally.

There is no specific policy for non-disclosure of the data. Data release is assessed on an individual basis. The international principles (such as the United Nations Fundamental Principles for Official Statistics and the ESCoP) are present in the LOS.

The Statistical Work Program lists for all statistical indicators are produced yearly and include the data sources.

# ESCoP indicator 6.3: Errors discovered in published statistics are corrected at the earliest possible date and publicised.

The general principles for declaring errors are given in the revision policy document. The guidelines for the relevant processes are planned to be developed. The revision policy document deals with error treatment that allows data revisions due to errors.

# ESCoP indicator 6.4: Information on the methods and procedures used is publicly available.

The quality reports for all areas of the statistical production contain relevant methodological notes and metadata.

### ESCoP indicator 6.5: Statistical release dates and times are pre-announced.

The release calendar is available on the website. The calendar is fully consistent with the State Statistical Program which contains dissemination dates. Changes in the State Statistical Program, if made, are reflected in the calendar.

# ESCoP indicator 6.6: Advance notice is given on major revisions or changes in methodologies.

The major revisions are publicly available and posted on the website. They can include a brief note for the general public as well as more technical methodological notes/guidelines. The specific policy for revisions is not available. Geostat plans to include information on the major revisions in the calendar.

### ESCoP indicator 6.7: All users have equal access to statistical releases at the same time. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The United Nations Fundamental Principles for Official Statistics and the ESCoP are explicitly stipulated in the LOS. Preparations of pre-releases are not envisaged by the legislation. Statistical data are released in line with the calendar at a defined time.

All staff (including contractual staff) signed confidentiality reminders. IT restrictions are in place (passwords, data access for different user types, etc.).

# ESCoP indicator 6.8: Statistical releases and statements made in press conferences are objective and non-partisan.

Statistical releases and statements produced by Geostat contain only information related to the published indicators and the relevant methodologies.

Press releases are published on the existing templates, taking into account good practices and examples of other countries. Special guidelines for publishing press releases do not exist.

Generally, the Geostat management and Heads of Departments communicate with the media. A special policy does not exist. Geostat does not make any political statements. Press conferences are directly linked to the important data releases in line with the calendar.

### **Recommendations**

- 23. Prepare and publish guidelines for assuring impartiality and objectivity in the production and dissemination of official statistics.
- 24. Prepare and publish a policy on the treatment of errors and their correction.
- 25. Include details on the publication dates of major revisions in the release calendar.

# **Chapter 7: P7 – Sound methodology**

### General assessment

Geostat, based on the international assessments and recommendations, has made certain progress in terms of complying with the sound methodology principle by introducing or improving methodologies in the different areas, strengthening tools and methods for updating registers, collaborating with different international partners, retaining key staff with much higher knowledge and experience and better opportunities for recruiting new staff.

The level of compliance with principle the 7 has significantly improved, whereas different public institutions devote much more attention to the improvement of methodologies, recruitment and retention of staff.

A lack of qualified human resources (such as methodologists, IT personnel, etc.) is the main area of weakness. Continued collaboration with international partners and the fostering of greater collaboration with the statistical community can help in addressing any shortcomings in this regard.

Future plans include:

- Continue working with international partners to further harmonise methodologies used with the international/European standards. EU twinning project will be implemented by the EU MS partner Statistics Denmark in partnership with other EU NSI's. Geostat as a beneficiary will take part in the programme.
- Until the end of 2019, filling in the gaps in the methodological document describing methodologies and operational guidelines.

### Assessment per indicator

# ESCoP indicator 7.1: The overall methodological framework used for European Statistics follows European and other international standards, guidelines, and good practices.

Documentation (routine descriptions) describing the statistical process coherently from the first to the final stage and containing the positions of the staff members responsible for each stage of process have been prepared. The integrated standard form describing the working processes based on the GSBPM has been developed for each statistical process. Routine descriptions of statistical processes ensure standardisation of the processes; transferring the existing documents of statistical processes to the unified system; document the changes in the processes; provide guidelines to staff.

Methodological documents exist but they are not complete and therefore are improved continuously. After changes in the methodology, the document is updated (revised). The subject matter departments produce the updates, while the Methodology and quality management division supervises the process. Resource problems are of general nature; consequently, the lack of qualified staff is the cause for not creating methodological documents in time.

Insufficient attention is paid to the interpretation of the methodological differences when adopting the international standards. However, such differences are minimal, since Geostat follows only international methodologies in its work.

# ESCoP indicator 7.2: Procedures are in place to ensure that standard concepts, definitions and classifications are consistently applied throughout the statistical authority.

Geostat mainly follows international concepts. Therefore, there are certain differences with the national legislation. For example, unemployment data are calculated for 15+ populations, while the minimum working age in Georgia is set to be 16 years.

Full documentation of all concepts is not available yet. References are made to international methodologies in case the relevant documentation is missing. A methodological organisational structure is not in place. Currently, the subject matter departments are responsible for defining statistical methods and implementing them.

Introducing the new surveys, users' needs are often taken into consideration (e.g. tourism surveys, ICT, and innovation surveys, etc.). Statistical processes include methodological explanations and metadata. The short methodological documents are publicly available on the website for all main surveys; the international methodologies followed are also placed there.

Geostat's staffs regularly attend seminars or workshops which are mainly international.

# ESCoP indicator 7.3: The business register and the frame for population surveys are regularly evaluated and adjusted if necessary, in order to ensure high quality.

Business Register (BR) data are updated on a monthly basis, mainly using administrative data sources such as the Revenue Service (tax office) and the public registry databases. The different businesses surveys (quarterly and annual) are also used in order to update the BR. Gaps in the BR are corrected by computer assisted telephone interviews. Methodological manuals and guidelines related to the BR are available on Geostat website. Since December 2017, business demography indicators are available in the BR.

See also chapter 16.1

# ESCoP indicator 7.4: Detailed concordance exists between national classifications systems and the corresponding European systems.

Only international classifications are used by Geostat: Classification of Economic Activities (based on NACE, rev. 2); Classification of Countries and Regions (Based on ISO 3166-1); Classification of Currencies (ISO 4217). National versions of two more classifications, CPA-2008 and ISCO-08, are under preparation.

### ESCoP indicator 7.5: Graduates in the relevant academic disciplines are recruited.

In line with the national legislation, all staff is recruited on a basis of open competition. Job requirements include provisions for necessary qualifications (such as degree in statistics, economics, mathematics or related disciplines).

Every vacancy is announced on the government portal **hr.gov.ge** including necessary requirements and qualifications.

# **ESCoP** indicator 7.6: Statistical authorities implement a policy of continuous vocational training for their staff.

The Geostat management takes into consideration continuous vocational training when deciding on the employees' promotions, bonuses, etc. However, formal mechanisms are not developed. The job training is provided for permanent staff, while continuous training is available for field personnel. Special training programs for Geostat employees are not available. Some plans exist to conduct special trainings for newcomers similar to Statistics Sweden "Statistics" in Action (STAC) course. These courses have been regularly offered during the last two years by Statistics Sweden experts. Participation in training courses such as STAC, software courses, etc., is encouraged. Geostat staff can attend the courses during working hours.

New areas of statistical production and other Geostat activities frequently require new skills. Consequently, formal or informal training of relevant staff is provided by national or international experts during seminars and workshops. Information about training courses is available to all staff of relevant subject matter divisions. The Geostat management and heads of divisions make the decision on participation in the trainings.

# ESCoP indicator 7.7: Co-operation with the scientific community is organised to improve methodology, the effectiveness of the methods implemented and to promote better tools, when feasible.

Geostat's Statistical Council is composed of representatives of the scientific community. Some irregular meetings take place in different formats. Close cooperation with the colleagues from different countries and international organisations exists. Methodological issues are mainly discussed with the colleagues at international level.

Participation in national and international conferences is one of the priorities of Geostat. Geostat organises some national or international conferences mostly with the help of external partners. Limited resources are the main constraint for such activities.

Geostat regularly addresses international partners to conduct assessments of the methods used in the different statistical areas. Important examples include Eurostat's Sector Review on business statistics (2016) and the Technical Assistance and Information Exchange Instrument of the European Commission (TAIEX) missions in various statistical domains (latest missions on LFS and the population register).

### **Recommendations**

- 26. Ensure that standards for the documentation of procedures and methodologies are prepared and implemented systematically throughout the organisation.
- 27. Continue work, in collaboration with international partners, to further implement international standards, guidelines and best practices in the implementation of the statistical programme.
- 28. Foster closer collaboration with the scientific community in order to improve statistical methodology through the development of more effective tools and procedures.

### Chapter 8: P8 – Appropriate statistical procedures

### General assessment

The LOS and the Charter of the National Statistics Office of Georgia (decree of the Government of Georgia No. 406, December 31, 2013) define the institutional and legal set-up for statistical production: the functions and competencies of producers of official statistics; the principles of statistical production and dissemination (United Nations Fundamental Principles for Official Statistics and ESCoP); the mandate for data collection in line with the Statistical Work Programme and organisational structure of Geostat.

Geostat's strengths are mainly in the areas where Geostat is not dependent on administrative data providers. In the last five years, significant progress has been achieved establishing procedures for descriptions of survey design, data editing and imputation, preparation of different guidelines, revision policies and in cooperation with the administrative data owners.

A number of government agencies have strengthened their compliance with this principle by creating and improving guidelines, according to the international standards, by creating new databases or platforms for data collection and analysis (e.g. the National Bank's SEB-stat system, the Ministry of Interior's new platform on crime statistics).

Formal mechanisms or procedures for dealing with the administrative data owners are not established. The lack of resources impedes assessing the quality of all administrative data or providing feedback on the administrative forms.

Geostat plans to improve the procedures for the use of or access to the administrative data, including more detailed description in the legal acts and plans to consult the administrative bodies in preparation of the administrative forms, etc.

The Assessment Team would recommend that Geostat should develop and implement a broadbased strategy to improve its use of administrative data for statistical purposes. Geostat should also consider the introduction of appropriate structures for managing and coordinating the use of administrative data in a uniform manner throughout the organisation.

With regard to its household surveys, the Team would encourage Geostat to develop measures for adjusting for differential non-response and also for imputing values for missing variables. The adjustment for differential non-response is particularly important as there are significant differences between response rates in Tbilisi and the rest of Georgia.

Geostat is also encouraged to introduce a policy for producing and publishing seasonally adjusted series for all relevant indicators. Finally, in the context of introducing a Nomenclature of territorial units for statistics (NUTS) classification for Georgia, procedures should be developed for the production of a wider range of relevant statistics at regional level.

#### Assessment per indicator

# ESCoP Indicator 8.1: When European statistics are based on administrative data, the definitions and concepts used for the administrative purposes are a good approximation to those required for statistical purposes.

Administrative data are provided in the form of microdata (e.g. civil and public registration data, Ministry of Finance revenue service data) and aggregated data (health, education, crime statistics data). The degree of data processing and data analysis varies according to the two types of data provision. Resources for processing of administrative data at Geostat are limited.

When occasional consultation on administrative data takes place, Geostat is not involved in the discussion of the content of the administrative data collection forms.

Processing statistical data, specificities of the official statistical indicators, calculated according to the methodologies, are taken into account. The procedures are not documented in all cases. When administrative data are fully provided (e.g. BR data, data on VAT taxpayers' turnover, etc.) such data are assessed and checked for quality taking into account alternative information and using control procedures. However, the basic validation mechanisms are not applicable for data provided in the aggregated form.

Differences between the administrative and statistical concepts are always taken into account and dealt accordingly (e.g. definition of turnover for administrative and statistical purposes).

# ESCoP Indicator 8.2: In the case of statistical surveys, questionnaires are systematically tested prior to the data collection.

Geostat is making efforts to fully assess and approve questionnaires. However, no documented policy for such validation exists. The procedures to assess and approve questionnaires are presented but they need to be formalised and documented. Questionnaires and survey manuals are submitted to the Geostat Board for approval. Documents are sent at least one week before the Board meeting. Usually the questionnaires are fully accepted and adopted, infrequently the Board members have certain comments which are taken into account.

# ESCoP Indicator 8.3: Survey designs, sample selections and estimation methods are well based and regularly reviewed and revised as required.

Administrative functions related to production of statistical information are performed centrally. Regional offices are involved only at the data collection stage. The IT department supports production of statistical information by maintaining the unified online data collection system, by creating special reporting templates and maintaining CAPI surveys. The organisational unit dealing with the preparation of guidelines, methodologies and examination of the methods used does not exist. The Methodology and Quality division deals with more general quality framework issues. A sampling specialist is contracted for all sampling work, except for agricultural statistical surveys. Due to the international technical assistance (World Bank, Swedish International Development Cooperation Agency (SIDA), FAO), sampling design methodologies are mostly documented. Geostat publicly provides information on sample selection and estimation methods, introduced with the international assistance and detailed reports on sampling design prepared by the international experts. Due to the lack of human resources, relevant publication and documentation standards are not prepared yet.

Activities related to the development of survey design, sample selection, and renewal of sample designs are based on the standard methods. Survey sampling descriptions usually are prepared with the international support.

# ESCoP Indicator 8.4: Data collection, data entry and coding are routinely monitored and revised as required.

There is no organisational unit dealing with the preparation of guidelines, methodologies and examination of the methods used. These tasks are partly delegated to the Methodology and Quality division in terms of quality audit; however, the assessment of methodologies is not carried out. Most of these activities such as the introduction of technologies (online tools for data collection), reducing the response burden, improving quality, provision of advance information letters to responding households or companies are mainly performed by the subject matter departments.

Monitoring of data collection, providing interviewers with manuals and instructions for most surveys, documentation of data coding methods, conducting trainings for specific surveys, support for respondents' households or companies, allocation of a hotline for answering to respondents' requests and complaints belong to the subject matter departments and the internal audit division.

# **ESCoP** Indicator 8.5: Appropriate editing and imputation methods are used and regularly reviewed, revised or updated as required.

Preparation of guideline methodologies and examination of the methods used for editing and imputation are delegated to the subject matter departments. Data cleaning and data analysis is performed by the respective subject matter departments using its own cleaning and validation rules.

Sharing of editing and imputation techniques is enhanced by the same IT platform used for different surveys; however, editing and imputation remains specific of each survey and harmonisation is still needed.

Documentation of editing techniques is not complete for all surveys.

# ESCoP Indicator 8.6: Revisions follow standard, well-established and transparent procedures.

Principles related to the revisions are given in the approved revision policy. Guidelines are planned to be developed. The revision policy document is placed on the website. Work on revision procedures has recently started; thus, there is room for further improvement.

All revisions are accompanied by appropriate methodological notes which are disseminated publicly.

# **ESCoP** Indicator 8.7: Statistical authorities are involved in the design of administrative data in order to make administrative data more suitable for statistical purposes.

Changes, e.g. the introduction of personal information requirements in regulations and legal acts, are introduced on a case-by-case basis. Some contacts with the administrative data owners take place in order to discuss recommendations on the design of the administrative data. However, administrative forms are mostly created and revised independently of Geostat.

Investigation concerning potential administrative data sources is made by the subject matter departments based on their needs (e.g. inclusion of border police data for migration and tourism statistics, VAT taxpayers' data for monthly GDP flash estimates, etc.). However, no formal procedures are in place.

Administrative data owners are consulted and possibilities of using administrative data are discussed with the relevant authorities.

# ESCoP Indicator 8.8: Agreements are made with owners of administrative data which set out their shared commitment to use of these data for statistical purposes.

SWP lists administrative data to be provided to Geostat for statistical purposes. In a number of cases, bilateral MoUs on the exchange and use of data are signed between Geostat and other authorities.

The SWP as well as the MoUs specify details related to the provision of data files and relevant deadlines. Mostly, no documentation describing the structure, content, and production process of the administrative data is provided.

# ESCoP Indicator 8.9: Statistical authorities co-operate with owners of administrative data to ensure data quality.

The use of data solely for statistical purposes is explicitly provided in the LOS, Article 16 "Official statistics produced by the Administrative bodies". Geostat provides feedback on quality issues to administrative data owners through regular communication, as there are mostly close working relations between Geostat staff and their counterparts. In certain cases, Geostat provides available tools for improving administrative data quality (e.g. provision of software to the Revenue Service for coding NACE activities).

### **Recommendations**

- 29. Develop and implement a strategy for achieving full access to all relevant administrative data at micro level (including individual identification information, as necessary) and for developing the use of such data for statistical purposes in all relevant statistical domains. The strategy should include the following elements:
  - Obtaining the support of Government and all data holders to Geostat exercising its legal mandate for using administrative data for statistical purposes and, in particular, in ensuring full access to all relevant administrative data sources;
  - Co-operation agreements with holders of administrative data to ensure the quality of the basic data; and
  - The development of data linkage and other methodologies to maximise the use of administrative data for statistical purposes.
- 30. Introduce appropriate structures for managing and co-ordinating the use of administrative data in a uniform manner throughout the organisation.
- 31. Develop measures for adjusting survey results for differential non-response in its household surveys, in particular to adjust for the large differences in response rates recorded between Tbilisi and the rest of Georgia.
- 32. Introduce imputation to a greater extent in household surveys, where relevant for example, for working hours in the LFS.
- 33. Develop and implement a policy for publishing seasonally adjusted series for all relevant indicators.
- 34. Explore the development of procedures and methodologies for the production of a wider range of statistics at regional level. This initiative might be advanced in the context of introducing a NUTS classification system in Georgia.

### **Chapter 9: P9 – Non-excessive burden on respondents**

### General assessment

The annual statistical work programme defines statistical outputs and describes data sources. This helps to avoid duplication. However, there are no formal plans or policies to manage or reduce the response burden. Time taken to complete survey forms is generally recorded for most household surveys and there are plans to introduce measures of burden for business surveys. CAPI and online forms have been introduced and are gradually being rolled-out to cover more surveys.

Geostat undertakes some limited testing of questionnaires to ensure that they are as clear as possible for respondents. Feedback from interviewers is considered when questionnaires are reviewed.

However, despite these actions and initiatives, there are no formal plans or policies in place to systematically manage or reduce the response burden. The Assessment Team would encourage Geostat to develop an appropriate action plan with this objective.

### Assessment per indicator

# ESCoP indicator 9.1: The range and detail of Official Statistics demands is limited to what is absolutely necessary.

Budget constraints and the coordination of official statistics through the annual statistical work programme ensure that no data are collected unnecessarily.

# ESCoP indicator 9.2: The reporting burden is spread as widely as possible over survey populations.

There are plans to introduce measures of the response burden for business surveys; this will be the first step towards managing the spread of the response burden.

# ESCoP indicator 9.3: The information sought from businesses is, as far as possible, readily available from their accounts and electronic means are used where possible to facilitate its return.

Geostat has introduced electronic reporting for enterprises and is encouraging greater use of this by businesses. Approximately 80% of the responses to the SBS survey are currently submitted online.

# ESCoP indicator 9.4: Administrative sources are used whenever possible to avoid duplicating requests for information.

Geostat is making increasing use of data from administrative sources (see also Chapter 8). The right of access to administrative data is included in the LOS. However, it is not always easy to obtain data in practice, particularly microdata. Agreements are in place with some providers, such as the Revenue Service. Before finally agreeing on the data requirements for the inbound tourism survey, Geostat staff regularly worked with the Ministry of Interior on their databases related to border crossings.

# ESCoP indicator 9.5: Data sharing within statistical authorities is generalised in order to avoid multiplication of surveys.

Data sharing is executed to some extent within Geostat. However, it could be facilitated by better descriptions of variables and data sets.

# ESCoP indicator 9.6: Statistical authorities promote measures that enable the linking of data sources in order to reduce reporting burden.

Data collected via CAPI, using tablets, include geographic coordinates. This will facilitate data integration. The use of common unit identifiers is promoted.

#### **Recommendations**

35. Geostat is encouraged to develop an action plan for the systematic reduction of the burden on respondents, with a particular focus on the greater use of administrative data for statistical purposes. The plan should include the development of metrics for monitoring the response burden.

## **Chapter 10: P10 – Cost-effectiveness**

### General assessment

Geostat accomplishes many tasks with very limited financial and human resources, particularly when compared to national statistical offices in other European countries. Therefore, in overall terms, cost-effectiveness is assessed as high.

There are plans to introduce a cross-government standard approach for employee performance management. However, these plans are currently on hold. A self-evaluation exercise was conducted in 2013, with support from Statistics Sweden. The evaluation identified some training needs. However, the training provision is currently more opportunistic than systematic, depending mainly on training opportunities offered by partner agencies in the context of technical cooperation projects. Statistical staff have varying degrees of IT knowledge. A systematic training programme to improve IT skills for all staff would help reduce the burden on the IT Department.

There are no formal knowledge management systems in place, with most information being kept "in the heads" of specialists. This creates risks for business continuity and makes internal mobility of staff more difficult.

# ESCoP indicator 10.1: Internal and independent external measures monitor the statistical authority's use of resources.

Indicators on the use of human and financial resources are maintained centrally within Geostat and are regularly reported to top managers. There is some flexibility to reallocate resources. However, there are restrictions to which extent budget lines can be reallocated and to which extent salaries can be increased.

There is an internal audit process in place to check the work of the interviewers, with strong penalties for interviewers who make up data. These measures are effective and have improved overall quality. In general, human and financial resources are managed and monitored according to public service legislation and procedures. A new public service law is under preparation, which will regulate human resources matters and introduce processes for regular performance reviews.

# ESCoP indicator 10.2: The productivity potential of information and communications technology is being optimised for data collection, processing and dissemination.

Processes are in place to keep the IT infrastructure updated to the extent possible given the budget constraints. The introduction of more automated data collection has been a major priority in recent years. IT issues are considered further in Chapter 13.

# ESCoP indicator 10.3: Proactive efforts are being made to improve the statistical potential of administrative data and to limit recourse to direct surveys.

Yes - see Chapter 9, indicator 9.4.

# ESCoP indicator 10.4: Statistical authorities promote and implement standardised solutions that increase effectiveness and efficiency.

Statistical production processes are being documented according to the GSBPM, with about 80% completed at the time of the AG. This documentation will be used to standardise processes where possible and will support the production of standardised quality reports.

### **Recommendations**

- 36. Put in place a knowledge management strategy and consider mechanisms to facilitate greater internal mobility of staff.
- 37. Prepare a training strategy, starting with a skills audit or training needs study in order to put training on a more systematic basis. The strategy should have a particular focus on developing the IT skills of staff throughout the organisation.
- 38. Consider the introduction of a performance evaluation system.

## Chapter 11: P11 – Relevance

### General assessment

Geostat has made efforts to increase engagement with various user groups and to improve its image and brand. However, more is required in this area and Geostat is also encouraged to be more active in promoting the use of statistics, particularly in the context of facilitating evidence-informed policy making.

Users from the scientific and research community feel that there is scope to increase collaboration in several areas and would welcome, in particular, more input from Geostat experts in the delivery of university courses.

Geostat's release calendar was perceived as helpful, particularly by the mass media who use it as a planning tool. However, the GA team noted that there is currently no policy on how to deal with changes related to the release calendar, in case a release is delayed due to unforeseen issues with quality.

# ESCoP indicator 11.1: Processes are in place to consult users, monitor the relevance and utility of existing statistics in meeting their needs, and consider their emerging needs and priorities.

Regular meetings are held with various user groups, including non-governmental organisations, businesses, international organisations, students and local government. The use of statistics and mentions of Geostat in various types of media (television, radio, press and internet) is monitored. The figures show a persistent increase for all types of media.

### ESCoP indicator 11.2: Priority needs are being met and reflected in the work programme.

Users confirmed that Geostat generally meets their priority needs, although they made requests for more detail, longer time series, and improved timeliness. Some users from ministries would welcome more statistics to support evidence-informed decision making, e.g. in the areas of culture and sports. Users from the mass media welcomed the recent increase in the number of press conferences and considered Geostat to be an independent and credible source. However, several users commented that Geostat did not always have sufficient resources to meet their needs.

# ESCoP indicator 11.3: User satisfaction is monitored on a regular basis and is systematically followed up.

The last survey of users was conducted in 2013. However, Geostat plans to conduct a new survey in 2019. The survey will include questions about Geostat's service and data quality and will seek to measure trust in Geostat's outputs.

#### **Recommendations**

- 39. Continue to develop its image and brand and, more generally, that of official statistics in Georgia, in order to increase public recognition and trust in statistics.
- 40. Promote more actively the use of statistics, in particular for facilitating greater evidenceinformed policy making.
- 41. Develop further its partnerships with universities and researchers to improve mutual understanding of needs and capabilities.

42. Consider adding a policy for revisions to the published release calendar for the rare cases where this may be necessary for quality reasons.

# **Chapter 12: P15 – Accessibility and clarity**

### General assessment

Since the previous GA, Geostat has made considerable efforts to improve the accessibility and clarity of the information it provides. Users are consulted about the most appropriate forms of dissemination and seem to welcome the changes introduced so far. However, as reflected in the recommendations below, users would welcome further improvements.

Some users commented that Geostat published data that are sometimes different to those published by other agencies. Examples in the areas of FDI and wood fuel were quoted. Users would welcome explanations for the differences.

Related to this point, users felt that Geostat could also do more to improve statistical literacy, including the provision of training courses for the media and other user groups as well as increasing the use of official statistics in schools and other education institutes.

# ESCoP indicator 15.1: Statistics and the corresponding metadata are presented, and archived, in a form that facilitates proper interpretation and meaningful comparisons.

Geostat has made considerable efforts to improve the presentation of statistics, including the introduction of PC-AXIS tools to disseminate data in user-defined tables. Users welcomed the greater use of visualisations and infographics, although some users also complained that some older data are still only available in PDF documents.

# ESCoP indicator 15.2: Dissemination services use modern information and communication technology and, if appropriate, traditional hard copy.

Users from the mass media welcomed the recent improvements in the graphical presentation of data. Several users commented that Geostat website has improved over the last years. However, further improvements are needed to make statistics and information easier to find. Several publications that are currently produced on paper could be gradually transferred to electronic format only. This would reduce costs and give users better access to up-to-date information.

# ESCoP indicator 15.3: Custom-designed analyses are provided when feasible and the public is informed.

Geostat provides custom-designed analyses where possible. However, resources available for this task are severely restricted due to the lack of resources.

# ESCoP indicator 15.4: Access to microdata is allowed for research purposes and is subject to specific rules or protocols.

Please also see Chapter 5. The LOS forbids the release of confidential data; however, publicuse microdata files are released to researchers. This is subject to the provisions of a public-use microdata dissemination policy which was produced as a result of the previous GA.

# ESCoP indicator 15.5: Metadata are documented according to standardised metadata systems.

The ESMS, version 2, is being used as a basis for quality and metadata descriptions. Statistical production processes are being documented according to the GSBPM. Around 80% of processes have so far been documented in this way.

# ESCoP indicator 15.6: Users are kept informed about the methodology of statistical processes including the use of administrative data.

Users from ministries, the mass media as well as academic and scientific communities confirmed that Geostat was open to questions on methodology and that it was quite easy reach

the relevant experts. However, several users said that more information on the reasons for breaks in time series and more metadata in general would be welcomed.

# **ESCoP** indicator 15.7: Users are kept informed about the quality of statistical outputs with respect to the quality criteria for Official Statistics.

A system of quality reporting is being put in place, please also see Chapter 4.

### **Recommendations**

- 43. Set up facilities for researchers to encourage the greater use of data for research purposes.
- 44. Continue to improve its website and make it more user friendly.
- 45. Improve information for users on the methods and quality of all outputs, based on international standards (e.g. the Special Data Dissemination Standard (SDDS) and the Single Integrated Metadata Structure (SIMS), incorporating the Euro-SDMX Metadata Structure (ESMS) and the ESS Standard for Quality Reports Structure (ESQRS)"Inform users with regard to the implications and systematically prepare and publish back-casted statistics, in case significant breaks occur in statistical series (e.g. following the 2014 Census of Population) and systematically prepare and publish back-casted statistics.
- 46. Reconcile any significant differences between its statistics and those of other producers (e.g. current differences between sources of statistics on FDI and wood fuel) and, as a minimum, publish explanatory information about the reasons for the differences.
- 47. Complete its efforts to make all published data available in electronic format through the PC-AXIS dissemination platform.
- 48. Consider reducing its current programme of paper publication in the context of developing a greater focus on electronic dissemination.
- 49. Increase its efforts to improve statistical literacy, for example via organising trainings for the media and selected users and collaboration with education authorities in order to promote a greater focus on statistical literacy in the educational system.

# **Chapter 13: Organisational and structural aspects**

### 13.1 Organisation of the National Statistical Institute

### General assessment

Geostat is a LEPL. It is responsible for the coordination of the NSS in Georgia which includes development, production, and quality assurance of official statistics. The LOS of Georgia, the Charter of the National Statistics Office of Georgia as well as the Law of Georgia on Personal Data Protection constitute the legislative basis for the organisation and operations of Geostat. The LOS of Georgia was amended in 2015 and 2016 to address some of the recommendations of previous international assessments. At the time of the GA, Geostat had just finished a reorganisation towards a new structure, as illustrated in Figure 1.

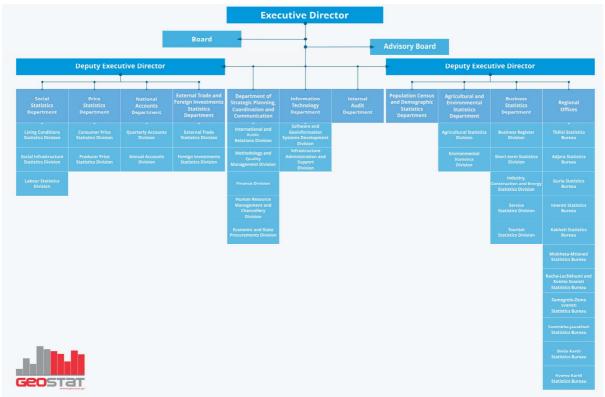


Figure 1. Organisational structure of Geostat as of September 2018.

The most substantial changes include the establishment of the Advisory Board, as recommended by the previous GA, reducing the number of Deputy ED from three to two, restructuring the Department of Strategic Planning, Coordination and Communication, and increasing the number of regional offices from eight to eleven.

After the reorganisation, Geostat is headed by an ED with two deputies. As during the previous assessment, the ED is elected by the members of the Board and serves also as its chairman. Geostat has ten departments with 23 divisions and eleven regional offices. Geostat employs 214 permanent staff members (163 in the central office and 51 in the regional offices) and 624 field interviewers. A few highly specialised staff members are also employed as subcontractors, e.g. as sampling specialists. Permanent staff are recruited through open competitions.

The staff members of Geostat are not public servants and their compensation is lower than in other ministries, although the gap has decreased since 2012, and there was a significant rise at the start of 2019. The low level of remuneration causes a high turnover of staff that leaves

Geostat for jobs at ministries and in the private sector. Currently, there is no performance management scheme and the salary does not depend on staff's performance. It is foreseen that Geostat's staff will become public servants, though the application of The Law on Public Service has been postponed for Legal Entities of Public Law, such as Geostat. If this proposed change happens, it would align the remuneration scheme with that for other public servants and allow additional rewards for higher performing staff. This is generally perceived by staff as a positive development. However, it would also facilitate the movement of staff from Geostat to the ministries because they will be able to keep their rank.

Geostat is still mainly organised by statistical domains except for the structural units. Each Deputy Executive Director supervises several domains according to their competence. As a result, related areas may not be supervised by the same person, e.g. the Social Statistics Department and the Census of Population and Demographic Statistics Department were under different Deputy EDs at the time of the Assessment. One of the Deputy ED is also in charge of all regional offices.

This domain-based organisation structure may prevent Geostat from maximising the efficiency of its operations. Other statistical organisations are implementing or considering a more process-based organisation structure in line with the GSBPM and enabled by standardised IT systems and methodologies.

The IT infrastructure of Geostat is inadequate. The Information Technology Department employs 18 specialists and consists of two divisions: Infrastructure Administration and Support Division (five persons) as well as Software and Geoinformation Systems Development Division (13 persons). Five employees are temporary. The IT solutions are fragmented and include generic software packages or self-developed tools. There is no consolidated IT strategy and the reuse of self-developed tools is limited because of the lack of standardisation of the processes. Investment in IT equipment is insufficient and is undertaken mostly for the Population and Housing Census. IT should be recognised as a key enabler of increasing the efficiency and quality of statistical production. Re-engineering the IT processes would be a key step of a transition towards a process-based organisational structure and should be planned in this wider context. An external review to identify priorities would be useful. This should involve IT experts from countries considered to be about 3-5 years ahead of Georgia, rather than from the most advanced countries.

Currently, there is no intranet in Geostat which would be a useful tool for knowledge management and could increase the efficiency of operations and synergies between the tasks carried out by different units.

### **13.2. Regional structure**

Geostat has eleven regional offices, one for each region of Georgia (excluding the regions which are not under the control of the government), including one regional office for Tbilisi, with a total of 51 staff members. All staff employed in regional offices carry out data collection and some limited initial processing. The number of staff members in regional offices varies between two to six depending on the region size which is rather low given the traditional data collection methods employed. The regional offices also employ subcontractors as interviewers and enumerators.

### 13.3. Other subordinated bodies

### Managerial Board

The Managerial Board has eight members: three representing ministries and five selected through an open competition. The selection of the five Board members through an open competition was introduced following the recommendation of a previous assessment.

In the open competition, a recruitment committee verifies the applicants and submits all qualifying candidates to the Prime Minister without order or merit. The Prime Minister presents the candidates to the Parliament which votes on their appointment. The Board elects its chairman who subsequently becomes the ED of Geostat. The elections are held after the end of term of the ED which may not be at the same time as the end of term of other Board members. In line with the recommendation of the previous assessment, it is now possible for the Board members to serve more than one term, including the ED who can reapply after the end of his or her term. The applicants to the Board cannot be current Geostat employees, unless they resign from their function.

The same process serves both for the election of a Board member who is aiming at becoming the ED and those members who do not have such intention. The previous GA recommended separating the process and introducing remuneration for the members of the Board but this was not implemented.

The remaining three members of the Board are nominated from two ministries and the central bank and need to be approved by the Prime Minister and the Parliament.

The Board approves all the methodology including the questionnaire design. This process does not guarantee professional independence.

### Advisory Board

The Advisory Board was established shortly before the first assessment mission. It has twelve members including the ED of Geostat who is its chairman, unless the Board decides otherwise. The main function of the Advisory Board is to advise Geostat on the statistical activities and submit relevant recommendations within its competence. This function seems to be overlapping with the Managerial Board, although the decisions of the Advisory Board are recommendations and are not binding for Geostat.

#### **Recommendations**

- 50. Consider moving towards a more process-based organisational structure, in line with the GSBPM.
- 51. Pursue the development of its IT resources as a strategic priority and as a first step commission, in cooperation with international partners, a sector review/peer review/ expert visit to evaluate the capacity and sustainability of its current IT systems.
- 52. Install an intranet for sharing and storing information (including educational and work-related material) in order to improve communications and to foster greater sharing of knowledge within the organisation.

### **Chapter 14: Coordination**

### 14.1 Coordination of the National Statistical System

### General assessment

The NSS in Georgia can be considered as comprising Geostat, the National Bank of Georgia and the Ministry of Finance, as the main producers of official statistics, as well as various other ministries and agencies as data suppliers. However, the distinction between producers of official statistics and data suppliers does not always seem to be clear, particularly to some of the data suppliers. The annual statistical programme is used by some countries to manage this distinction. In those cases, an output is only considered to be official statistics if it is in the programme.

Current coordination mechanisms include the representation of the National Bank of Georgia and the Ministry of Finance on the Geostat Managerial Board, and an inter-agency working group on quality that brings together the main producers of statistics and providers of data. There are also many bilateral memorandums of understanding and similar agreements, both formal and informal.

Relations and cooperation between the three main producers of official statistics seem to be good, but there is no formal mechanism for coordinating economic statistics outputs. With the exception of a formal agreement between Geostat and the National Bank of Georgia on data inputs for the estimation of GDP, cooperation is mostly ad-hoc, based on personal relations, rather than institutionalised.

Relations and cooperation between the three main producers of official statistics seem to be good, but there is no formal mechanism for coordinating economic statistics outputs. Cooperation is mostly ad-hoc, based on personal relations, rather than institutionalised.

As noted in chapter 14.3 below, the SDGs are providing an impetus for greater crossgovernment collaboration on statistics and data. In many countries this is leading to ideas and policies to create national data infrastructures. As they are experts in managing data, national statistical offices are usually playing a leading role in these initiatives. This could be an opportunity for Geostat to increase its visibility within government and improve coordination of data and statistics at the national level.

### Recommendations

- 53. Play a more active central role in coordinating official statistics and, in conjunction with relevant ministries and other public authorities, in advocating for and developing a national data infrastructure in Georgia.
- 54. Establish criteria for clearly and systematically identifying other producers of official statistics and their outputs, and these criteria should be included in any future revision of Georgian statistical legislation.
- 55. Introduce procedures for the coordination of other producers of official statistics, for example by including their outputs in the annual statistical programme and agreeing memorandums of understanding between Geostat and all other producers of official statistics or providers of data.

### 14.2 Coordination of international cooperation and donors

### General assessment

Geostat has greatly benefited from international cooperation, both through twinning projects and other collaboration with national statistical offices from other countries, and through support from international organisations. The positive impacts of this cooperation since the previous GA are clear.

However, the GA team noted that some of this cooperation could be considered more opportunistic than strategic. A clear plan setting out strategic priorities would be useful in this respect. It would provide a framework against which offers of cooperation could be assessed, to make sure that they would contribute to strategic objectives. This would reduce the risk of diverting attention and resources to projects that might be more driven by the priorities of the donor than those of Geostat. In other words, Geostat should be ready to say "no" to potential donors whose proposals do not support Geostat's strategic objectives.

The GA team also noted that many of the challenges faced by Geostat, at all levels, are similar to those in other countries, particularly in the Eastern Europe, Caucasus and Central Asia region. Some Geostat staff have developed contacts with people doing similar work in other statistical offices, but this is not systematic, and often depends on personalities and opportunities to attend relevant international meetings.

### **Recommendations**

Geostat is encouraged to

- 56. Take a more strategic and planned approach to seeking technical assistance and initiating projects funded by developmental partners. Top management should take the initiative in this regard, identifying priorities in line with the national strategy for the development of statistics.
- 57. Strengthen cooperation with colleagues in neighbouring countries to improve the exchange of ideas and knowledge.

### 14.3 Sustainable Development Goal Indicators

#### General assessment

Geostat is a member of the council coordinating the implementation and monitoring of the achievement of the SDGs of the 2030 Agenda. The council is led by the office of the Prime Minister, which has completed the identification of a set of indicators tailored to the national context. Geostat participated in the process of selecting indicators. However, Geostat is currently not involved in the establishment of the national reporting platform, although the the UNSD interagency expert group (IAEG) on SDGs recommends that the statistical office should coordinate the reporting process.

The SDG indicators identified in Georgia as nationally relevant are fewer than the number of global indicators in the Global Indicator Framework and seem to be nationalised to some extent. Although it is acceptable to tailor the indicator set to the national context, in a sense of developing complementary indicators, the countries are also encouraged to report on global indicators. In this context, Geostat and the Council would be advised to follow the developments of international processes as guidance on the treatment and reporting of proxy indicators. This task will be expected from IAEG-SDGs soon.

Data are available for 141 out of 215 indicators but it is not clear how many of these indicators follow global methodology and how many are proxies. Two new surveys have increased the

availability of data: Multiple Indicators Cluster Survey (MICS) conducted with financial and methodological support from UNICEF (data will be available in 2019) and National Survey of Violence Against Women with financial and methodological support from UN Women (data available since May 2018).

### **Recommendations**

58. Geostat should use the SDGs as a catalyst and mechanism to increase its coordinating role in the provision of official statistics in the country and to international bodies.

## **Chapter 15: Macroeconomic statistics**

Macroeconomic statistics are described by category as follows:

- National accounts
- Government finance statistics
- Balance of payment statistics
- CPI, including purchasing power standard and housing prices

### **15.1 National accounts**

### General assessment

Compiling national accounts is under the responsibility of the national accounts department. Fourteen persons, including the head of department and two contracted persons, are involved in producing and disseminating national accounts statistics.

The methodological basis used by Geostat to produce GDP and other national accounts' indicators is the national accounts system of 1993 (SNA 1993). It is planned to switch gradually to SNA 2008 from 2019 onwards. Although the switch to SNA 2008 is not a major change in the national account's methodology, it has to be seen as an improvement and as the framework to produce national accounts for a modern open economy. This step is very welcomed by the Assessment Team.

One of the major changes in introducing SNA 2008 is to record R&D as an investment and not anymore as expenditure. To reach/achieve this requirement Geostat will expand three surveys (statistical survey of enterprises, survey of innovation activities of enterprises and survey of non-profit organizations), which will give the first results in the last quarter of 2019. Retropolation of the last five years will be ensured.

The provision of macroeconomic statistics is dispersed between Geostat, the National Bank of Georgia and the Ministry of Finance. The three agencies have good bilateral working arrangements with each other, but the Team would encourage Geostat to foster improved coordination and collaboration in the production of macroeconomic statistics through the establishment of appropriate tri-lateral arrangements.

With regard to future developments, the Team would encourage Geostat to give priority to the preparation of institutional sector accounts and the development of its measures of the unobserved economy. The production of quarterly GDP at constant prices, following the expenditure approach, is also recommended.

### Description

Annual GDP and institutional sector accounts are produced according to SNA 1993. Industries and products are classified according to the national classification of economic activities based on standards of Classification of Economic Activities in the European Community (NACE, rev. 1.1). GDP data are produced by the production, expenditure as well as income approach annually; the different approaches for estimating GDP are using different sources; therefore, different results may be displayed. Statistical Discrepancy is added to "changes in inventories" or to "household consumption expenditures" for the expenditure approach, while operating surplus is used as a balancing item for the income approach.

The compilation of GDP based on the production approach is estimated at current prices and in real terms. Geostat is using a double deflation method by types of activities. Geostat also

compiles annual GDP using the expenditure approach in real terms. It is planned to introduce Quarterly GDP using the expenditure approach in 2020.

Quarterly GDP (production approach) is produced and published with a delay of 80 days. Besides the growth in real terms, quarterly GDP data is calculated in constant prices.

Main sources for national accounts compilation are the statistical survey of enterprises, the survey of non-profit organisations, household surveys, LFS, the sample survey of agricultural holdings, the survey of price statistics, the Census of Population, government finance statistics, monetary statistics, and balance of payments statistics.

Ministries, government agencies, the National Bank of Georgia and supervision services compile many data. The cooperation with them seems good and is based on MoUs; however, Geostat should take the ownership of the methodology to ensure high quality and independence.

Furthermore, supply and use tables are compiled at current prices by types of 45 economic activities and 67 products. Documentation of the sources and the method of compilation should be provided to users.

Considering the data sources available, Geostat should consider producing sector accounts, which will allow publishing important indicators for analytical purposes.

Geostat has been supported in the national accounts area by Statistics Sweden (project ended in 2018) and the IMF. From April 2019 a large-scale assistance in the national accounts is envisaged within the TWINNING project with Statistics Denmark.

#### Recommendations

Geostat is encouraged to:

- 59. Complete the implementation of SNA 2008 and give priority to preparing background documents for users that fully explain the impact of the new system on the main macroeconomic indicators.
- 60. Rationalise and develop information available on R&D expenditures, in line with SNA 2008 guidelines, for incorporation into the rebased national accounts.
- 61. Foster improved coordination and collaboration with the National Bank of Georgia and the Ministry of Finance in the production of macroeconomic statistics.
- 62. Give priority to introducing institutional sector accounts.
- 63. Develop its measurements of the unobserved economy.
- 64. Produce quarterly GDP at constant prices following the expenditure approach.

# **15.2** Government finance statistics

#### General assessment

The Ministry of Finance is responsible for the compilation of government finance statistics. Currently the domestic classification of the budget is based on the Government Finance Statistics Manual (GFSM) 2001. The Ministry uses bridge tables for the compilation of data according to GFSM 2014. It also subscribes to the International Monetary Fund's (IMF's) SDDS standard. The Assessment Team would encourage Geostat to formalise cooperation and work closely with the Ministry towards ensuring that the compilation of Government Finance Statistics is fully in line the principles for official statistics as laid down in the LOS. The two agencies are encouraged to work together to ensure that the definition of the government sector is fully in line with international recommendations and is consistently applied. It is also

recommended that steps should be taken to record incomes and expenditures on an accrual basis.

# Description

Data source for government finance statistics are the annual budget execution reports of the central and the local governments. Independency is assured since the data sour are fully public. Annual and quarterly government finance statistics data are published for general government and central government on a cash basis, estimation on accrual basis is planned from 2020 onwards.

Although the cooperation between the Ministry of Finance and Geostat is very good, the assessment team considers that an agreement between the parties should be formalised to ensure sustainability in cooperation.

#### **Recommendations**

Geostat is encouraged to:

- 65. Formalise cooperation and work closely with the Ministry of Finance in ensuring the production and dissemination of Government Finance Statistics in accordance with the GFSM 2014 guidelines and in compliance with the principles for official statistics.
- 66. Ensure, in conjunction with the Ministry of Finance, that the definition of the government sector is in line with international recommendations and is consistently applied in the preparation of all government finances statistics.
- 67. Introduce, in conjunction with the Ministry of Finance, measures to record expenditures and incomes on the basis of accruals accounting.

# 15.3 External Trade

# General assessment

Statistics on external trade in goods are generally produced in good quality by Geostat in line with international recommendations while following mainly UN guidelines, such as the "International Merchandise Trade Statistics (IMTS) Compilers Manual", Versions 2004 and 2010 including the compilers manual revision 1 (IMTS 2010-CM). This also holds for the product classifications used in this context which are:

- Combined Nomenclature (CN) for external economic activities based on the Harmonized Commodity Coding and Description System (HS 2012 2017);
- Standard International Trade Classification (SITC, Rev. 4);
- Classification by Broad Economic Categories (BEC, Rev. 4).

These classifications are handled by the external trade statistics department in Geostat since there is no dedicated central organisational unit dealing with classifications at Geostat.

The main source for the compilation of trade statistics on goods is the "Revenue Service of the Ministry of Finance of Georgia (RS/MoF)", which holds the database of customs declarations. Supplementary information comes amongst others also from the "Service Agency of the Ministry of Internal Affairs of Georgia (SA/MIA)" which provides data about exports and imports on motor vehicles. One issue here is that "re-exports" are not properly checked by custom authorities which might lead to a situation where such re-exports are recorded as originally "domestic exports", leading to an overestimation of trade figures in the related

domain. In addition, literature studies indicate that detailed coding of imported vehicles is sometimes carried out incorrectly.

Another issue stems from comparison of data held by Eurostat's "Comext" database for the years 1995 - 2016 which shows for several years significant divergences between figures recorded from EU/EFTA countries as imports and those published by Geostat as exports to these countries. Yet, it is not clear if this stems solely from differences in referring to FOB/CIF and/or exchange rates.

Some problems with the accuracy in the recording of several fields in the customs declarations have been reported elsewhere (see Abesadze and Daushvili, 2016). Amongst other things, this relates to the filed "country of origin" in customs declarations and the field "means of transport at the border" in the cargo-customs declaration. The problem with the "means of transport" has been solved and since 2017 this field is recorded properly in customs declarations. The time series for external trade statistics by means of transportation is available since 2016. However, the authors also indicate that "problems exist in producing foreign trade price indices, the issue being that the information on foreign trade statistics is classified according to the Harmonized Commodity Description and Coding System while price indices are calculated according to the classification of types of economic activity at the 4-digit level; in filling in declarations there are frequent errors related to registration of commodity code, weight and additional units of measurement" (Ibid, p. 13).

# Description

Production of statistics on external trade in goods is handled within Geostat by the same department that is also responsible for statistics on foreign investment. Currently (2019) there are five positions in the sub-department on external trade statistics (1 Head, 1 Chief Specialist, 3 Senior Specialists).

The primary source of information for trade statistics in Georgia is custom's data on trade declarations of goods. This data is stored in a database which is held by the Revenue Service of the Ministry of Finance (RS/MoF). Supplementary data comes from the Service Agency of the Ministry of Internal Affairs (imports / exports of motor vehicles), the Georgian State Electric System (GSE) and the Electricity System Commercial Operator (JSC) (both imports / exports of natural gas). Geostat has concluded a Memorandum of cooperation with the RS/MoF on the continuous provision of customs data.

Trade data are collected under the General Trade System. Values for Georgian imports and exports are given in USD, calculated by the customs services based on official exchange rates at the moment of registration established by the Interbank Monetary Exchange.

Data on trade in goods is available on Geostat's Website for every year starting with 1995; it is published on a monthly basis and in sum (cumulative) from the beginning of each year. Trade statistics on goods cover all transactions recorded by official state agencies on Georgian territory. Excluded are transitory goods (passing through the country), temporary imports and exports, monetary gold, etc.

The valuation of imports is on a CIF (cost, insurance, freight) basis and exports are valued on a FOB (free on board) basis. Volume of goods is recorded in kilograms and in supplementary units (on request).

As concerns classifications of goods, the International Harmonised Commodity Description and Coding System (HS 2012 - 2017) is used in foreign trade statistics at 6-digit level and its national extension, Commodity Nomenclature for External Economic Activities, is used in external trade statistics. The international HS classification is also used by the Revenue Service and the Service Agency of the Ministry of Internal Affairs which assures consistency when exchanging data amongst these administrative bodies.

Other classifications used are the Standard International Trade Classification (SITC, Rev. 4), the International Classification by Broad Economic Categories (BEC, Rev. 4), and the International Standard Country Classification. For classification of countries Geostat refers to the UNSD classification.

## **Recommendations**

- 68. Geostat, in conjunction with the RS/MoF, should take appropriate steps to improve the recording and classification of re-exports in line with international guidelines in order to address asymmetries in the recording of bilateral trade between Georgia and partner countries.
- 69. Geostat is encouraged to further improve its working arrangements with the RS/MoF.

# **15.4 Balance of payments**

#### General assessment

The National Bank of Georgia has the responsibility to compile and publish the balance of payments statistics on a quarterly and annual basis; this division employs six persons.

The methodology used is the IMF's Balance of Payments Manual (sixth revision) as well as the External Debt Statistics: guide for compilers and users (IMF2013).

In the past there were some differences between Geostat and the National Bank in the reporting of Foreign Direct Investment transactions (especially in 2007-2008) due to different approaches to some transactions. These problems were successfully solved in 2017. From 2018, Geostat, in cooperation with the National Bank, will publish integrated data (flows and stocks) on Foreign Direct Investments, and these data will be in line with the data of the National Bank.

# **Description**

To compile balance of payment statistics, the National Bank of Georgia uses various sources, including data from Geostat, the Ministry of Finance, and the Department of Customs. In addition to these sources, the National Bank of Georgia also collects data from the banking sector, microfinance organisations, insurance companies, other non-bank financial institutions, the ministries and various institution and uses the international transaction reporting system (ITRS). Geostat collects and processes data for non-financial corporations and for trade of merchandise. The Ministry of Finance is involved in compiling government external debt as well as the financial services related to debt.

Additional sources, like the Ministry of Economy and Sustainable Development, are used for information concerning privatisation.

For the BoP, the coverage includes all resident institutional units undertaking foreign transactions; the international activities of households may however be under-estimated, and some questions have been added to household surveys to address this problem.

Annual and quarterly data are regularly revised, which can affect the last three years. When major methodological changes occur, the revisions affect the historical time series.

70. Geostat and the Central Bank should continue to work closely to coordinate the production of Foreign Direct Investment statistics. In particular, changes or developments should be mutually agreed so that coherence between the two sources can be maintained.

# 15.5 Consumer Price Index (CPI), including Producer Price Index (PPI) and housing prices

#### General assessment

CPI are produced under the responsibility of Geostat; five permanent staff are involved in this estimation. Furthermore, about 25 interviewers are working in six cities to collect data.

The CPI is calculated based on methodological principles, concepts and definitions specified in the Manual on the CPI: theory and practice (2004) and the SNA 1993. National accounts data and the household budget survey generate goods and services included in the consumer basket using the COICOP classification.

# Description

Prices are collected monthly in the six cities at retail sales outlets. A limited number of items are collected via the internet. Web scraping and administrative data are used for residential property prices and for international comparison prices. The consumer basket is revised annually.

Price indices are calculated at the lowest level, based on the ratio of geometric averages of comparable item prices; the national index for the item is an average weighted index of elementary indices by overall expenditures within the region.

Price indices are calculated by a chain method: at the first stage, individual price indices are calculated; at the second stage, aggregated price indices are calculated. Individual price indices are calculated for each individual good (service) in each observed trade enterprise. Composite price indices are calculated according to the modified Laspeyres formula.

If prices do not exist temporarily, price imputation is used; the missing item will be substituted by a product with predetermined characteristics.

No seasonal adjustment is foreseen for CPI.

Producer Price Indices (PPI) include the domestic producer price index for industrial products, the export price index, the import price index, the index for material inputs to construction industries, the producer price index for freight transport and construction cost index.

The sources to calculate PPI are based on surveys to enterprises. The PPI weights are calculated and updated annually based on their share of the overall production volume according to the data of national accounts, business statistics and external trade data. Elementary indices are calculated as a ratio of prices of comparable items, which are aggregated to higher level using Laspeyres formula. Weights are revised annually.

Services are not sufficiently covered but work is undertaken to overcome this lack.

Export/import price indices are essential to compile exports and imports at constant prices. In addition, it will allow compiling GDP by expenditure approach in real term.

71. Geostat is encouraged to respond to user requests and publish more disaggregated information on consumer prices, both indices and corresponding weights.

# **Chapter 16: Business statistics**

Business statistics categories are described as follows:

- Statistical business register
- Structural business/business demography statistics
- Short-term statistics

# 16.1 Statistical business register

#### General assessment

The statistical business register held by Geostat is largely in line with international recommendations such as Eurostat's "Business registers – Recommendations manual" and UNECE's "Guidelines on Statistical Business Registers".

Currently, there are over 700,000 legal entities held in the business register of which roughly 185,000 are active units. Unfortunately, for more than 55,000 units (30%) out of those active units, there is no information available about economic activity. It is not clear how Geostat handles inactive enterprises in the business register and for how long they will be kept. Geostat should also consider including local units for all enterprises.

Up to 2015, non-response posed a big problem which could only be overcome with the introduction of new legislation which foresees monetary penalties in case of businesses not providing the requested information. Since then, the non-response in surveys used for updating the business register has significantly dropped which proves the efficiency of this measure.

The revised nomenclature of economic activities (NACE Rev. 2) was introduced and the respective results first published in 2017.

Due to their size (turnover > GEL 1.5 million), approximately 4,500 enterprises are always contained in analysis of SBS.

The statistical business register contains a unique ID for each entity as well as contact information, activity code (NACE), turnover and number of employees. Currently, there is no information on employment in full time equivalents in the statistical business register. Since such information might give a more complete picture for certain parts of the working population (e.g. employment situation of women compared to men), it is recommended to include this information in the business register.

# Description

The business register is hosted within Geostat by the business register division, which is itself a part of the business statistics department. As concerns related staff resources, a total of seven people is currently working in the business register division.

The statistical business register is updated regularly from different sources, such as:

- Administrative sources (revenue service, national agency of public registry which registers all legal entities) on a monthly basis;
- CATI survey on a monthly basis;
- Business surveys conducted on a quarterly or annual basis.

All outputs from the statistical business register at Geostat are available by kind of economic activity, ownership type, legal status, and regions.

Geostat is encouraged to:

- 72. Introduce a wider range of statistical units in the statistical business register, including local units.
- 73. Consider including an indicator on full-time equivalent employment, in addition to the current employment headcount figures, in the statistical business register.
- 74. Develop and implement a policy of systematically identifying inactive units and removing them from the scope of the statistical business register.

# 16.2 Structural business statistics/business demography

#### General assessment

Since December 2017, Geostat started publishing business demography indicators: enterprise births, deaths and survivals) starting with the year 2012, based on the data from the statistical business register.

Since the first quarter of 2017, Geostat publishes SBS based on a sample survey (mostly compiled via online questionnaires). The latest NACE Rev. 2 classification of economic activity is used. At the same time, the new classification for enterprise size classes was introduced, specifying enterprises with less than 50 employees or annual turnover less than 12 Mil. GEL as "small enterprises", entities with 50-249 employees or annual turnover from 12-60 Mil. GEL as "medium sized enterprises" and such with 250 and more employees and annual turnover above 60 Mio. GEL as "large size enterprises". This classification corresponds to the one recommended by Eurostat. However, a further distinction of the category of "small enterprises" indicating the number of "micro enterprises" with less than ten employees might give a more detailed picture of the structure of Georgia's economy.

The sampling frame for SBS contains 127,000 enterprises; it is stratified by:

- Economic activity;
- Size classes of enterprises (number of employees and/or turnover);
- Regions.

A recalculation of all SBS data according to NACE Rev. 2 and the new size classification was completed in December 2018.

Three units within Geostat's business statistics department work on the production of SBS:

- The "Industry, construction and energy statistics division";
- The "Service statistics division";
- The "Short-term statistics division".

#### **Recommendations**

75. Geostat is encouraged to introduce a breakdown within the category "small enterprises" to distinguish micro-enterprises i.e. enterprises with less than ten employees.

## 16.3 Short-term statistics

#### General assessment

STS indices as defined by Eurostat usually cover four major domains: industry, construction, trade, and services. These activities are defined in relation to the statistical classification of economic activities in the European Community (NACE). For STS, industry covers Sections B to E of NACE Rev. 2, i.e. mining and quarrying, manufacturing, electricity, gas and water supply. Construction covers Section F (total construction, building, civil engineering and residential and non-residential buildings). The retail trade covers Division 47.

STS are produced by Geostat based on survey data, using the business register as a sampling frame. STS on industry and construction are produced quarterly and published by NACE Rev. 1.1 and NACE Rev. 2 on Geostat's webpage. PPIs for industrial production, construction and freight transport are available on a monthly basis. Energy statistics are produced monthly, while data on the consumer price of electricity and natural gas are produced on a semi-annual basis. For STS on construction, data on permits and completed objects are taken into account. Currently, no STS data on retail trade are available. Geostat's intention is to provide a larger number of STS indicators on all four domains (industry, construction, retail trade, and services) after the next twinning exercise. The twinning will be conducted most probably in 2019. It is recommended to further pursue the goal of producing STS for retail trade for 2019 in line with Eurostat's recommendations.

The short-term statistics division currently has five employees and is part of the business statistics department in Geostat.

#### **Recommendations**

Geostat is encouraged to:

- 76. Develop, as a priority, a wider range of short-term statistics.
- 77. Implement the planned development of producer price statistics.

# **Chapter 17: Social and demographic statistics**

# **17.1 Population Register**

# General assessment

A Civil Register exists in Georgia, but it is neither useful for production of statistics nor for sampling. There is some understanding of the importance of a statistical Population Register and there are good intentions to establish it. However, the task is not simple, as it depends on other governmental institutions. One of the obstacles for establishing the Population Register is a lack of understanding of the goal and importance of the register in some parts of the governmental system. Geostat receives migration data but it does not include personal ID numbers. This number is necessary in order to connect migration information with the civil register, as a part of developing a statistical Population Register.

# **Description**

Georgia does not have a Population Register that can be used for statistics or sampling. The development of such a register depends in many ways on other administrative authorities. Geostat receives information on births, deaths, marriages and divorces from the Public Service Development Agency (PSDA) within the Ministry of Justice. The National Centre for Disease Control and Public Health (NCDC) within the Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs provides the PSDA with data on births and deaths. Starting from 2011, the medical certificates of births and deaths have been filed electronically and automatically sent to the PSDA. Geostat has also received individual databases containing the medical certificates of births and deaths electronically from the NCDC since 2017. Using personal ID numbers eliminated duplications and improved the quality of the registration.

The Ministry of Internal Affairs has collected data on inflows and outflows of migrants since 2012. People who have been in the country of Georgia at least 183 days (more than half) of the last twelve months are considered to live there. This is in accordance with the UN recommendation of classification of usual residence. Important information on migration are still missing, such as data on purpose of migration, destination country and country of origin. Geostat does not have access to microdata on migration with ID numbers and is therefore not able to link such data to the civil register in order to develop a statistical Population Register.

The only source for addresses or distribution of the population between areas within the country is the latest Population Census. There is no administrative source which can be used to estimate the flow of internal migration. As social rights (education, health service, etc.) are not linked to municipalities where people are registered, there is no incentive to update registration when people move within the country.

The establishment of a statistical Population Register is among the future plans of Geostat. In November 2018, Geostat hosted the Experts' Mission within the framework of the TAIEX. As a result, the experts prepared report on the establishment of the population register in the country, containing a description of the current situation and recommendations based on international best practices. The success of the task depends on good cooperation with the relevant ministries and institutions within the administration. Limited technical knowledge and resources within different governmental institutions are among the obstacles that need to be overcome in this process.

78. Geostat is encouraged to develop as a matter of urgency a strategic plan for the construction and maintenance of a population register for statistical purposes. The plan should address: the location of the register (i.e. within Geostat or the Ministry of Justice); procedures for gaining full access to all relevant administrative data sources; and the linking of the register to the next Census of Population returns at individual and household levels.

## **17.2 Demographic statistics**

#### General assessment

Demographic statistics in Georgia have improved considerably in recent years. The 2014 Census revealed a significant overestimation of the population size. Improvement actions have been taken and indicators over several years were back-casted based on the Census results. Electronic registration has eliminated duplications and increased reliability of vital events. Information on migration have improved. Geostat follows international definitions in their demographic statistics, including the definition of usual residence. However, no registration is maintained for migration within the country. Geostat does not conduct population projections.

#### Description

Figures on the population of Georgia are a result of the latest Census of Population figures estimated with information on births, deaths and migration into and out of the country. Methodology of population calculations, fertility and mortality follows the recommendations of the UN and the World Health Organisation (WHO). Calculations are done for the beginning of the year and mid-year population.

The Census of Population of 2014 revealed considerable overestimation of the population in Georgia. As a result, Geostat undertook extensive back-casting to the year 1994 in order to harmonise historical data with Census results. Geostat received financial and technical support from the United Nations Population fund (UNFPA). The back-casting work was completed in the year 2017.

Geostat is currently not involved in any population projections but this is an important part of their future plans.

# **Recommendations**

Geostat is encouraged to:

- 79. Work, in conjunction with all relevant public agencies, towards the improvement of Georgian migration statistics, both internal and external, as an urgent statistical priority. The achievement of this priority is dependent on Geostat obtaining full access to all relevant administrative records including, where necessary, to personal identification particulars.
- 80. Develop a methodology for the production of population projections, in conjunction with national and international experts.

# 17.3 Population and Housing Census (previous/next)

## General assessment

The 2014 Population Census in Georgia followed mainly international standards. The Census revealed significant overestimation of Georgia's population size and extensive back-casting has been completed in order to harmonise the Census results with historical data. Data collection in Tbilisi turned out to be challenging. The next Census is planned in 2022 or 2023 but detailed planning has not started.

# Description

The 2014 Population Census was in accordance with international standards, including the definition of residence of one year in the country. For practical reasons this is different from the criteria used in demographic statistics, which is 6 months. Both standards are accepted by the UN.

About 12,000 staff members were involved and the cost was about 14.7 million GEL. The 2014 Census included Personal Identification Numbers (PIN) which simplified data entering, prevented duplications and simplified quality checking. The PIN enabled linking the Census data to the civil registry. The 2014 Census included four questionnaires: a personal questionnaire, questionnaire on dwellings, migrants, and agricultural activity.

Data collection for the Census proved to be difficult in Tbilisi and many people refused to let interviewers into their home. Response rates are not available as post enumeration survey was not conducted. Data collection in the countryside was easier. Participation in census is mandatory but there is no penalty or other instrument which can be used to force participation.

The 2014 Census revealed a considerable overestimation of the Georgian population compared to the prior Census from 2002. Work on back-casting various statistics based on the 2014 Census of Population was completed in 2017.

In order to optimise the use of resources, the Agricultural Census was conducted together with the Census of Population. The geographical information system (GIS) was used for listing dwellings and households, dividing the country for enumeration and supervision areas, fieldwork monitoring and dissemination of results.

The LOS sets out rules for defining Census dates, preparation and implementation activities as well as for publishing and dissemination. The law also defines key provisions and methods of the Census, participation of the population and guarantees of confidentiality. The next Census will be conducted in 2022 or 2023. Several methodological improvements are planned, including collecting GPS coordinates for every building. Information on GPS coordinates helps to monitor interviewers and the timing of the interviews. Electronic data collection, including the use of tablets is being considered. Geostat will take into account best practice experiences from other countries.

Detailed planning of the next Census has not started, and financial support has not been ensured. The Assessment Team recommends that a costed strategic plan for the conduct of the Census should be prepared without delay and that guarantees of funding, on the basis of the plan, should be secured from Government and the international development partners to cover the entire cost of the operation. The Team would also advise that the technical and logistical challenges of introducing electronic data capture in the census should be carefully assessed before a final decision is made in this regard.

Geostat is encouraged to:

- 81. Develop without delay a costed strategic plan for the conduct of the next Population and Housing Census in line with international recommendations and best practices.
- 82. Seek and secure, on the basis of the strategic plan, a guarantee of funding in advance from the government and development partners/donors to cover the entire cost of the Census operations from preparatory work to the dissemination of results.
- 83. Examine carefully the advantages and disadvantages, both technical and logistical, of introducing CAPI in the collection stage of the census.

# **17.4 Labour market statistics**

# General assessment

Geostat follows generally international standards in the production of labour market statistics with a few exceptions. Farmers who only produce goods for their own consumption are considered as working in Georgia. This is inconsistent with the latest ILO definitions and leads to an underestimation of the unemployment rate in the country. There is room for methodological improvements in the LFS, such as the development of an imputation strategy for missing data as well as reviewing and documenting adjustment procedures for non-response. Georgia has not yet moved to ISCO-08 for coding of occupations. The job vacancy survey is not according to international standards. In 2018, Geostat carried out a Labour Cost Survey (LCS) as a module in the annual establishment survey.

# **Description**

Labour market statistics may be divided into four main categories: LFS, job vacancy statistics, statistics on earnings and statistics on labour costs.

#### Labour Force Survey

The national definitions are generally based on the methodology, concepts and classifications of the ILO adopted at the 13th International Conference of Labour Statisticians, as well as NACE, rev. 2, ICSE-93 and ISCED-2011. Geostat still applies ISCO-88 for coding of occupations but plans moving towards ISCO-08. Classifications and definitions are used consistently within Geostat. Farmers who only produce goods for their own consumption are considered as working in Georgia while they should be considered as outside of the labour market unless they are looking for work, in which case they are considered as unemployed. Geostat is preparing updates of this methodology in accordance with the latest standards. This change can have considerable effects on the Georgian unemployment rate as there is a high percentage of subsistence farmers in the country.

An independent quarterly LFS was established in 2017 in order to reduce the respondent burden and move labour market statistics closer to EU and other international standards. Until 2017, LFS had been a part of the Integrated Household Survey (IHS).

The mode of data collection for the LFS is Paper and Pencil Interviewing (PAPI). The response rate varies between 80% and 86% and is higher in rural areas than in urban areas. Data is cross-checked by regional supervisors, by logical controls, consistency over time as well as with other sources. Imputation such as for working hours is not applied. Non-response adjustment might require some further attention. Some grossing up of the population is done but a more strategic approach to non-response adjustment could be useful.

The sampling frame is based on the 2014 Census data. A two-stage cluster design is used. The primary sampling unit (PSU) is a Census unit and the secondary sampling unit (SSU) is the address of the households. All members from the selected households, 15 years of age and older are included in the survey. Until 2016, the sample size was about 3,384 households per quarter. In 2017, the sample size was increased and again in 2019 when it was brought to 6336 households per quarter, 2880 in urban areas and 3456 in rural areas.

Since the year 2017, the rotation scheme has been 2-(2)-2, with each household interviewed for two consecutive quarters then out for two quarters and interviewed again for the final two quarters. The scheme provides 50% overlap from one quarter to the next and 50% overlap in the sample between a particular quarter and the same quarter the following year. The reference period for employment is seven days prior to the interview.

Until 2018, LFS data was disseminated annually, but since 2018, it is done on a quarterly basis. To ensure comparability over time, LFS data has been recalculated for the period 2002-2016 based on 2014 Census of Population data.

Future plans for the LFS include moving to CAPI for data collection and implementing the update of definition of self-employed farmers in calculations of unemployment.

# Job vacancy statistics

Geostat conducted a sample survey "Survey of Business Demand on Skill 2017" in cooperation with the Ministry of Economy and Sustainable Development. It was a labour demand survey which serves partly the same purpose as the job vacancy survey but was not in accordance with international standards. Geostat is considering launching a job vacancy survey according to international standards.

#### Earnings statistics

Earnings statistics are derived from enterprises and organisations and based on two separate surveys. Information on non-business sectors, organisations and financial establishments are received from the survey "Data on Labour". Information on business sector enterprises (non-financial corporation survey) is received from the "Statistical Survey of Enterprises". It includes a module on labour market aspects as well as other indicators of enterprises such as turnover and investments. The labour statistics division handles the survey "Data on Labour" and the "Statistical Survey of Enterprises" is handled by the business statistics division. The sampling frame is the Statistical Business Register (SBR). Data is collected both quarterly and annually. The sample size from the quarterly survey covers about 15,000 entities and the annual survey covers about 18,000.

The survey covers all paid employees who have a contract of employment and receive regular payments. The concept of earnings used is gross earnings, before deduction of taxes. It includes direct wages as well as irregular bonuses and premiums and the value of payments in kind. Key indicators from the survey are average monthly earnings by kind of economic activity, sex, sector (public vs. non-public and for business vs. non-business) and size of enterprise. As mean value indicators are vulnerable for extreme income values, Geostat considers publishing median values instead.

As for future plans, Geostat aims to develop labour statistics from establishing a survey to start collecting data by occupation and structure of labour cost on a four-year basis.

Geostat is encouraged to:

- 84. Implement without further delay the resolution adopted by the 19<sup>th</sup> International Conference of Labour Statisticians (ILO, 2013<sup>2</sup>) and exclude persons engaged solely in the production of agricultural goods for own consumption from the statistics on employment. Since this will involve a large discontinuity in the employment statistics series, high priority should be given to producing a back-casted series on the new basis.
- 85. Move from ISCO-88 to ISCO-08 for occupation coding in the LFS.
- 86. Consider launching a survey on job vacancies in line with EU standards.
- 87. Implement its plan to publish statistics on median earnings in order to mitigate the impact of extreme values on the calculation of average earnings.
- 88. Further develop its statistics on the labour market through the collection of data on occupations and publish data on the structure of labour costs.

# **17.5 Living Conditions Statistics**

#### General assessment

Living conditions statistics in Georgia are produced from the HIES which was separated from the LFS in 2017. Geostat aims at further aligning living conditions statistics to international standards in the coming years. Geostat has not made a decision on whether to introduce the EU-SILC in the country. The Assessment Team would recommend that a small number of variables on material deprivation and living conditions should be included in the HIES and aligned with those normally collected in the EU-SILC.

The Assessment Team supports Geostat's plans to conduct a Time Use Survey in 2019.

# **Description**

The domain of living condition statistics in Georgia covers the topics of living conditions and social protection. Concepts and definitions follow the "Handbook of Household Surveys, UN, New York 1984." Classifications used include the Classification of Individual Consumption by Purpose (COICOP) and NACE, rev. 2. Concepts and classifications concerning living conditions statistics are consistently applied throughout Geostat.

The household survey system was developed during 1994-1996 with financial aid from the World Bank and consultancy services by Statistics Canada. The field work started in the third quarter of 1996. In 2017, the IHS was separated from the LFS and received its current name "Household Income and Expenditure Survey" (HIES). It is a quarterly survey. The sampling frame is the Population Census from 2014. The sample size is 4,320 households, 2,016 in urban areas and 2,304 in rural areas. It is a two-stage cluster sample, using pre-stratification with the PSU being the Census unit and the secondary unit being the household. Stratification is based on regions of the country and urbanity (urban and rural). The sampling frame was divided into 19 strata in 2017-2018 and this is being increased to 21 strata in 2019.

Each selected household remains in the sample for maximum of 18 months. Four quarterly interviews are conducted with the selected households during this period. The scheme used is

 $<sup>^2\</sup> https://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/WCMS_230304/lang--en/index.htm$ 

2-(2)-2 which provides 50% overlap of households from one quarter to the next and also 50% overlap between a particular quarter and the same quarter in the following year.

PAPI is used to collect data through face-to-face or self-administrated interviews. Introduction of tablets is planned after they have been tested and used in the LFS. The field staff comprises of 22 regional supervisors and approximately 150 interviewers. Various quality checks are performed on the data such as double data entry and logical and arithmetical controls as well as training of personnel and field monitoring. The response rate in 2017 was 82.7%. It was not affected by splitting of the survey.

HIES is composed of seven questionnaires: two annual questionnaires, completed only at the first quarterly visit and five quarterly questionnaires completed four times. Various indicators are published from the survey, including the structure of household income, inequality indicators, the structure of household expenditures, consumption of food products, dwelling conditions, poverty indicators, the GINI coefficient and minimum subsistence. Poverty indicators are calculated based on methods of the World Bank. Absolute poverty rates are produced on annual basis as well as international poverty lines. Georgia plans to adapt their poverty statistics according to the SDG framework. Imputation is used for certain items in revenues and expenditures.

The future plans of Geostat in living conditions statistics include expanding the list of indicators towards EU standards and calculating the World Bank international poverty indicator. An EU-twinning project is planned in order to improve the HIES. Geostat is looking into the possibility of conducting the EU-SILC survey but the decision depends on available resources.

Preparations for a he Time Use Survey will be launched in 2019 according to EU standards with the objective of undertaking the fieldwork in 2020 as an independent survey.

## **Recommendations**

Geostat is encouraged to:

- 89. Include a small number of variables on material deprivation and living conditions in its HIES in order to produce some key statistics on poverty and living conditions that are comparable to those normally derived from the EU-SILC.
- 90. Progress the plans to undertake a periodic independent Time Use Survey in 2020 to complement its existing household surveys.

# **17.6 Education Statistics**

#### General assessment

The Ministry of Education, Science, Culture and Sport is responsible for collecting, processing and disseminating data on primary, secondary and vocational education and training. It provides Geostat with final aggregated tables. Geostat collects information about higher education through online surveys of higher education and also conducts a doctorate students survey. Geostat also collects data from municipalities on pre-school education. The international standard classification of education, ISCED 2011, is consistently followed.

Some further development is required and Geostat and the Ministry are encouraged to collaborate in addressing gaps and inconsistencies in the available statistics. In many cases, Geostat has only access to the aggregated data and this restricts its ability to assess the quality of the derived statistics. Consideration should therefore be given to providing Geostat with full access to the basic micro-data for quality checking purposes.

# Description

The Ministry of Education, Science, Culture and Sport is responsible for collecting, processing and disseminating data on secondary education and vocational education and training. They provide Geostat with final aggregated tables. Three permanent staff members handle education statistics in the social infrastructure division. Geostat collects information about higher education through the online surveys survey of higher education and doctorate students survey. Information on primary school education are received annually from the Ministry of Education, Science, Culture and Sport. The social infrastructure division collects data from municipalities on pre-school education. The international standard of ISCED 2011 is consistently followed.

Geostat only receives education data in aggregated form. It is checked using arithmetical and logical checks for internal consistency as well as cross-checked with other data sources. For quality purposes it is important that Geostat receives access to micro data on education. Geostat publishes a number of indicators on education but more can be done such as for number of children in early school education and number of teachers by qualification.

Among future plans of Geostat are better use of administrative data in production of education statistics and discussing the need for additional surveys with stakeholders.

# **Recommendations**

91. Geostat is encouraged, in collaboration with the Ministry of Education, Science, Culture and Sport, to address some gaps and inconsistencies in the available statistics on education. Where necessary, Geostat should have access to the relevant micro-data in order to fully assure the quality of the derived aggregated statistics.

## **17.7 Health Statistics**

#### General assessment

MoLHSA is responsible for collecting, processing and disseminating data on health. The ministry is also responsible for the quality of health indicators. Concepts and classifications follow international standards and are consistently applied throughout health statistics in Georgia. However, there is a lack of documentation of methods on health statistics.

Three permanent staff members from the social infrastructure division are working on health statistics and one person from the demographic statistics department works on causes of death coding.

Administrative data on health is received by Geostat in aggregated form from the MoLHSA. The NCDC cross checks the mortality data with other health data. Until 2011, there were quality issues concerning documentation for causes of death. Increased responsibility for registration of causes of death has been moved to the NCDC which is expected to lead to improvements.

Various health indicators are published in Georgia including number of hospital beds, number of patients, number of physicians by occupation, number of paramedical personnel by basic specialities, morbidity from acute and chronic diseases by main disease groups, morbidity of patients with HIV/AIDS and emergent medical care. There were questions on disability in the 2014 Census and some statistics were published in 2016. No information exists on accidents at work. Among future plans in the area of health statistics is the full transfer of causes of death to the NCDC.

Geostat is encouraged to:

- 92. Develop and publish a wider range of health-related indicators.
- 93. Include again the questions on disability in the next Census of Population that were included in the 2014 Census.
- 94. Consider collecting and publishing data on work related to illnesses and accidents at work.
- 95. Develop a question on self-assessed health status for inclusion in its household surveys periodically.
- 96. Work with the NCDC in addressing some existing problems in providing cause of death statistics that are fully in line with international recommendations.

# **Chapter 18: Agricultural Statistics**

# General Assessment

Agriculture is an important part of the Georgian economy and Geostat devotes considerable resources to the production and dissemination of a wide range of agricultural statistics. In 2014 the Agricultural Census was conducted as part of the General Census of Population and 640,000 households, or 60% of all households, were identified as engaged in agricultural activity, mainly for own consumption. Geostat established a master frame on the basis of the census returns for the conduct of its regular Sample Survey of Agricultural Holdings, which is the main source of ongoing information on agricultural production and related activities.

Geostat follows international guidelines in the production of agricultural statistics. In particular, the Census of Agriculture and the Sample Survey of Agricultural Holdings follow the UNFAO guidelines set down in "A System of Integrated Agricultural Censuses and Surveys – Guidelines for the World Programme of Agricultural Censuses, 2010". In consultation with and support from the FAO, Georgia was one of eight pilot countries that prepared strategic plans to put into effect the recommendations of the FAO's "Global Strategy to Improve Agricultural and Rural Statistics". This plan - the SPAERS 2016-2020 -was adopted in 2015 and has already resulted in many improvements in the system of agricultural statistics. Geostat is also actively considering the extension of its surveys of agricultural holdings to implement the AGRIS, which was recommended by the FAO as part of its Global Strategy with a particular focus on meeting the additional data needs on the agricultural sector and the rural economy arising from the implementation of the SDGs.

Overall, the Assessment Team considers that Geostat has a well-developed system of agricultural statistics that will be further enhanced by the full implementation of the SPAERS plan. The Team would encourage Geostat to implement the AGRIS survey in Georgia and also to again undertake the next agricultural census in conjunction with the census of population.

# Description

Agriculture, forestry and fishing accounts for over 8% of GDP in Georgia but this considerably understates its social and economic importance as almost 50% of those in employment indicated that they worked in the sector, while 60% of all households reported that they engaged in agricultural production in the last Census of Population.

In the central office eleven staff members are engaged in the production of agricultural statistics. This is complemented by staff in the regional offices who oversee the work of 33 contracted supervisors and 278 contracted interviewers who conduct face to face interviews five times each year in a sample of 12,000 agricultural holdings.

A wide range of statistics on the agricultural sector is published in hardcopy publications or as releases with tabular results on the website (as excel tables; and as interactive maps). Users can also access agricultural statistics databases, to generate their own tabular results, using the PC Axis software.

# **18.1 Census of Agriculture**

The second agricultural census was conducted in 2014 (the first was conducted in 2004) in conjunction with the population census and covered all areas, including cities, other than the two occupied regions of Abkhazi AR and Tskhinvali Region. The methodology was in accordance with that recommended by the FAO for the World Programme of Agricultural

Censuses, 2006-2015. Geostat received technical support from the FAO and USDA, who organised over 20 missions involving experts from other countries.

All households covered in the Census of Population in November 2014 were asked about the existence of farming activity (operating agricultural land, livestock or permanent crop tree) and a detailed questionnaire on such activity was completed by the interviewer in respect of each household that reported some activity. Approximately 640,000 family holdings were identified in this way and the coverage can be considered as exhaustive in enumerating households engaged in agricultural activity (other than in the two occupied regions).

Subsequently, in Spring 2015, enterprises engaged in agricultural activity were surveyed using an online questionnaire. These enterprises were identified from a number of statistical and administrative sources and just over 2,000 were enumerated. Finally, in Spring 2015, municipalities completed an online questionnaire to provide data on common land used for agricultural purposes.

Following the processing of the questionnaires, detailed results were released, starting in the first half of 2016, in a variety of hardcopy and electronic formats (including excel formats and interactive maps). Direct linkage with the Census of Population facilitated the linkage of farming activity with the demographic and social characteristics of the household to provide enhanced statistical analyses of the sector.

Overall, the Assessment Team considers that the 2014 Agricultural Census was a very successful operation and welcomes the intention of Geostat to organise the next census in conjunction again with the Census of Population as this will guarantee an exhaustive coverage of households engaged in agricultural activity.

# 18.2 Farm Register

There is no farm register in Georgia at present, either for statistical or administrative purposes. Geostat did, however, create a MSF for agricultural surveys based on the 2014 Census of Agriculture and Population. The MSF contains the following data:

- Data on agriculture
- Personal information on holders
- Information on dwelling
- Personal information on family members
- Personal information on emigrants
- Common land data
- Data on agricultural holdings operating aquaculture and greenhouses
- GIS data

The MSF would provide a good basis for developing a farm register for statistical purposes, but it can only be partially updated at present on the basis of statistical surveys, business registers and administrative sources. Three quarters of agricultural holdings in Georgia are quite small (less than one hectare) and it is unlikely that the updating sources would accurately capture movements in this important segment. It is estimated that between 2004 and 2014 the number of holdings declined by 21% and thus the current annual rate of decline in the number of holdings may be around 2% per annum.

One of the objectives of the SPAERS programme is the development of a Farm Register by the Ministry of Environmental Protection and Agriculture in consultation with Geostat. The Team

was informed that this will be only a partial register limited to larger holdings that are engaged in selling agricultural products to the market. It is estimated that about 100,000 (will ultimately be covered by the register i.e. less than 20% of all holdings in Georgia. Despite this limitation, the Team believes that it would be valuable to link the register with the individual holdings recorded in the next Agricultural Census. Accordingly, Geostat and the Ministry should actively pursue this objective.

# **18.3 Agricultural Statistics**

The main source of ongoing information on agricultural activity is the Sample Survey of Agricultural Holdings. In this survey 12,000 holdings are interviewed up to five times each year by Geostat interviewers (Exception is the inception interview - 4 000 holdings). Sampled holdings remain in the survey for three years i.e. there is a rotational design where one third of the holdings are replaced each year, but extremely large holdings are included every year. This survey was introduced in 2006 and the sample size was increased from 5,000 to 12,000 in 2016 while CAPI was introduced for capturing the data in 2018 (both these initiatives were undertaken as part of the SPAERS plan).

On the basis of the quarterly survey and other sources a wide range of agricultural statistics are disseminated by Geostat on the following themes at national and regional levels:

- Crop statistics
  - Sown areas, harvested areas, production and yield of annual crops
  - Production and area under permanent crops
- Use of fertilizers; Area treated by fertilizers and pesticides
- Livestock statistics
  - Number of livestock
  - > Animal production
  - Average yield
  - ➢ Litter
  - ➢ Losses
- Farm gate prices for crop production and livestock production
- Food balance sheets for main commodities (11)

The implementation of the SPAERS 2016-2020 plan by Geostat and the Ministry of Environmental Protection and Agriculture has resulted in notable developments to-date and it is vital that the statistical aspects of the plan be completed in full. The Assessment Team would also support the introduction of the AGRIS, recommended by the FAO in the context of the SDGs to provide additional information on the agricultural sector and the rural economy.

# Recommendations

Geostat is encouraged to:

97. Ensure that the next Agricultural Census is undertaken in conjunction with the next Census of Population in order to ensure that all who are engaged in agricultural actively are systematically identified.

- 98. Work closely with the Ministry of Environmental Protection and Agriculture in the development of a Farm Register and, in particular, to develop linkages between the Register and the returns from the next Census of Agriculture at individual holding level.
- 99. Give high priority to the full implementation of the SPAERS 2016-2020, which was prepared in consultation with the FAO.
- 100. Extend its agricultural survey system to incorporate the AGRIS, which has been recommended by the FAO for improving the data on the agricultural and rural sectors to meet SDG and other requirements.

# **Chapter 19: Multi-domain statistics**

Multi-domain statistics are described following the categories as shown:

- Transport statistics;
- Tourism statistics;
- Energy statistics;
- Environment statistics;
- Research and Development; Innovation Statistics;
- ICT statistics.

#### **19.1 Transport statistics**

#### General assessment

There is a very limited range of transport statistics published by Geostat. The Business Statistics Department publishes only total economic figures for the transport of goods sector covering turnover, production value, value added, intermediate consumption, fixed assets, number of persons employed and average monthly remuneration. In addition, very summary and limited data on freight and passengers carried by mode of transport, together with summary statistics on the transport infrastructure, is included in the Annual Statistical Yearbook. These data are based on a combination of administrative data, special surveys and expert opinions.

The Assessment Team would encourage Geostat to consider developing a wider range of transport statistics for each mode of transport and, in particular, to undertake a periodic survey on road freight in line with EU guidelines.

#### **Description**

Transport statistics is produced within Geostat in the Service Statistics division which is a part of the Business Statistics department. Seven employees work in the Service Statistics division. Figures on transport statistics are published by NACE, rev. 1.1 and NACE, rev. 2 for the years 2006-2018. Statistics is only provided as total figures for transport of goods on turnover, production value, value added, intermediate consumption, fixed assets, number of persons employed and average monthly remunerations. The related statistics is published on Geostat's website.

The legal basis for the collection and dissemination of transport statistics are the LOS: <u>http://geostat.ge/cms/site\_images/latest%20Law%20of%20Georgi\_2018.pdf;</u> the statistical work programme:

http://geostat.ge/cms/site\_images/Statistical%20Work%20Programme%202018-%20ENG.pdf); Geostat's data confidentiality policy:

<u>http://geostat.ge/cms/site\_images/Data%20Confidentiality%20Policy%20at%20Geostat\_En.p</u> <u>df</u>); and the Charter of the National Statistics Office of Georgia (Decree of the Government of Georgia No. 406, December 31, 2013).

Transport statistics is considered a part of business statistics. At the central level, there are seven employees (one head of unit, two chief Specialists, two senior specialists, and two specialists) financed from the Geostat's central budget. As for the regional level, all staff is involved in the business statistics survey. Data are received from the business statistics survey (NACE, rev.2, section H) and from the different relevant administrative sources as well. Logical and arithmetical control functions are used.

Methodological approaches concerning the information on turnover, production value, number of employed persons in the transport sector are the same as the overall business statistics methodology. Other data (e.g. number of passengers, fright, etc.) comes from the administrative sources. If data derive from the business statistics survey, the main definitions and concepts are turnover, production value, number of persons employed, number of employees, average monthly remuneration of employed persons, value added, intermediate consumption, personnel costs, total purchases of goods and services, purchases of goods and services for resale and investment in fixed assets.

In order to define the type of economic activity, NACE, rev. 2 is used.

In case the data come from administrative sources, freight, cargo, etc., are considered as the main definitions. Main concepts, definitions, and classifications, based on methodological documents and guidelines, are provided below:

- Statistical requirements compendium (2004 and 2009 edition, Eurostat), English version is available on Geostat's website;
- Short-term business statistics methodology associated documents (2006 edition, Eurostat);
- International recommendations for construction statistics (1997 edition, UNSD) http://geostat.ge/cms/site\_images/\_files/georgian/methodology/business/5.%20Internat ional%20Recommendations%20for%20Construction%20Statistics%20(1997%20Editi on,%20UNSD).pdf;
- Explanation notes for the survey on construction activity (Federal Statistical Office of Germany1997), English version is available on Geostat's website;
- International recommendations for trade statistics 2008 (2009 edition, UNSD) <u>http://geostat.ge/cms/site\_images/\_files/georgian/methodology/business/9.%20Internat</u> <u>ional%20Recommendations%20for%20Trade%20Statistics%202008%20(2009%20E</u> <u>dition,%20UNSD).pdf;</u>
- Road freight transport methodology (2008 edition, Eurostat) <u>http://geostat.ge/cms/site\_images/\_files/georgian/methodology/business/10.%20Road</u> <u>%20freight%20transport%20methodology%20(2008%20Edition,%20Eurostat).pdf;</u>
- Evolution of service statistics proceedings of the seminar on "Service statistics within statistics" short-term business (2002 Edition, Eurostat) <u>http://geostat.ge/cms/site\_images/\_files/georgian/methodology/business/11.%20Evolu</u>tion%20of%20service%20statistics.pdf;
- Methodology for calculation of key indicators of business statistics <u>http://geostat.ge/cms/site\_images/\_files/english/methodology/BS\_Methodology\_ENG.</u> <u>pdf;</u>

Administrative sources are widely used for the production of transport statistics, especially for checking doubtful data, for making imputation, etc. Administrative sources are crucial for the entire business statistics and their use recommended in the publication "Use of administrative sources for business statistics purposes: Handbook on good practices"

http://geostat.ge/cms/site\_images/\_files/georgian/methodology/business/15.%20Use%20of%2 Oadministrative%20sources%20for%20business%20statistics%20purposes%20Handbook%20 on%20good%20practices%20(1999%20Edition,%20Eurostat).pdf.

Accuracy and reliability of transport statistics are ensured though careful logical and arithmetical control. Results of the survey can be checked or estimated using RS declarations.

Data on business statistics are disseminated in accordance with the statistical work programme. If data come from administrative sources, they can be provided upon the user request.

Time series for turnover, production value, etc., are available since 2007. Information on the number of passengers, freight, roads, registered are available since 1980.

#### **Recommendations**

Geostat is encouraged to:

- 101. Consider undertaking a periodic survey on road freight in line with the EU guidelines.
- 102. Consider developing a wider range of transport statistics (relating to passenger and freight transport and transport safety) for each mode of transport (i.e. road, rail, air and sea).

#### **19.2 Tourism Statistics**

#### General assessment

Tourism Statistics published by Geostat are only available for domestic and inbound tourism. The figures provided in this regard seem to be in line with international recommendations.

No statistics on tourism industries are currently provided (e.g. nights spent at tourist accommodation establishments by residents/non-residents, net occupancy rate of bed places and bedrooms in hotels and similar accommodations). Geostat started to conduct an Outbound Tourism Survey in January 2019.

Geostat also plans to start working on a Tourism Satellite Account (TSA). The TSA will be addressed in the context of the forthcoming twinning project.

The relations with the National Tourism Administration as one of the main users of data on tourism should be further developed and the visibility of Geostat as the main producer of official statistics in this field should be assured also in publications done by the National Tourism Administration.

# Description

The Business Statistics Department in Geostat also comprises the Tourism Statistics Division which has actually six employees. Statistics on domestic and inbound tourism are published on Geostat's website.

The main data source for tourism statistics is administrative data coming from the Ministry of Internal Affairs. In addition, information from Surveys on inbound / domestic tourism, on hotels and hotel-types facilities, as well as information from the quarterly and annual business surveys is used.

Inbound tourism contains average numbers for inbound visitors of age 15 and older by several breakdowns (age groups, main purpose of visit, by country of citizenship, etc.).

For domestic tourism the monthly average numbers of visitors age 15 and older is presented by several breakdowns (place of residence, age groups, gender, visited regions, etc.).

In addition, the distribution of monthly average expenditure by expenditure categories is also provided for domestic and inbound tourism.

Main users for Geostat's Tourism Statistics are the Tourism Administration and regional offices on Tourism for developing Tourism.

It seems that the National Tourism Administration currently publishes Geostat figures on tourism without indicating Geostat as the source.

#### **Recommendations**

103. Geostat is encouraged, in conjunction with the National Tourism Agency, to further develop and coordinate the production and dissemination of statistics on tourism in line with Eurostat's methodological manual for tourism statistics (version 3.1, 2014 edition).

#### **19.3 Energy Statistics**

#### General assessment

Energy statistics is a part of business statistics. The methodology approved by Eurostat and the IEA is followed.

Improvement actions implemented since the last GA in 2010 have resulted in:

- an improvement in the quality of energy statistics;
- the publication of price statistics for energy; and
- the preparation and publication of an energy balance.

The Assessment Team would recommend that Geostat should give priority to improving its statistics on the consumption of energy by enterprises.

# **Description**

The legal framework for energy statistics at Geostat is the LOS <u>http://geostat.ge/cms/site\_images/latest%20Law%20of%20Georgi\_2018.pdf</u>); the statistical work programme

http://geostat.ge/cms/site\_images/Statistical%20Work%20Programme%202018-%20ENG.pdf); and the data confidentiality policy

http://geostat.ge/cms/site\_images/Data%20Confidentiality%20Policy%20at%20Geostat\_En.p df).

Energy statistics is considered a part of business statistics. The unit responsible for energy statistics is dealing with construction and industry statistics as well. The unit is based in the central office. There are eight employees in the unit, financed from Geostat's central budget. The total budget of the energy statistics' survey was 21,000 GEL in 2017.

Data are collected from different sources such as surveys and administrative sources. The collected data are analysed and evaluated in order to get the entire structure of the energy balance. For data collection from the household survey, the non-financial sector as well as import and export statistics, online questionnaires are widely used. Data sources for energy statistics comprise of administrative sources: elaborated in EUROSTAT Jodi Oil and JODI Gas questionnaires, which are filled in by Oil and gas distributor companies operating in Georgia. Derived information is crucial for the formation of the monthly energy statistics indicators.

Quality of data sources is ensured using logical and arithmetical controls. New data sources are evaluated for the business statistics survey, administrative data, SBR, etc.

For the compilation of energy balance, data are collected performing two surveys: the energy sector survey and the final consumption sector survey. The energy sector survey fully covers energy supply, production and distribution and trade enterprises. The final consumption sector survey, which is a sample survey, covers non-financial and financial corporations, non-commercial organisations, households, governmental entities, etc. The NACE, rev. 2 classification is used.

The methodology approved by Eurostat and IEA is followed.

http://geostat.ge/cms/site\_images/\_files/georgian/methodology/business/8.%20Manual%20of %20energy%20statistics%20(Eurostat,%20OECD,%20International%20Energy%20Agency). pdf.

The development of energy statistics in accordance with the Regulation (EU) 2016/1952 of the European Parliament and of the Council as well as the Regulation (EC) No 1099/2008 of the European Parliament and of the Council is closely coordinated with Eurostat and the IEA.

Accuracy and reliability of energy statistics data is ensured though careful logical and arithmetical controls. Time series are available since 2013

Data are disseminated following the release calendar and all users have equal access to statistical release at the same time (11:00 AM). <u>http://geostat.ge/index.php?action=page&p\_id=23&lang=eng;</u> energy balance of Georgia: <u>http://geostat.ge/index.php?action=page&p\_id=1895&lang=eng;</u> monthly energy statistics indicators: <u>http://geostat.ge/?action=page&&p\_id=2744&lang=eng</u>.

Data are disseminated in\_MS Excel tables and charts; press-releases in PDF format (Euro SDMX metadata structure will be available in third quarter of 2018).

# **Recommendations**

104. Geostat is encouraged to further develop its survey on the consumption of energy by enterprises.

# **19.4 Environment Statistics**

#### General assessment

Geostat takes part in the ENI-SEIS project being implemented by the European Environment Agency (EEA), financed by the European Union. The project provides assistance to Eastern Partnership countries to develop environmental statistics. Geostat permanently cooperates with the international organisations such as the United Nations Economic Commission for Europe (UNECE) and United Nations Statistics Division (UNSD).

For developing environmental statistics, Geostat cooperated with Statistics Sweden. Staff of the Ministry of Environmental Protection and Agriculture actively participated in the workshops, study visits and seminars as well. Four reports from a mission to the National Statistics Office of Georgia (Tbilisi, Georgia - Environmental-Economic Accounts; Waste Statistics; Water; Air) with assessments and recommendations are provided to Geostat and the Ministry of Environmental Protection and Agriculture.

Geostat started producing environmental accounts in 2018.

The main challenge in the area of environmental statistics is the reliability of administrative data. There are no waste statistics in the country due to a lack of administrative data. The Ministry of Environmental Protection and Agriculture is introducing a new reporting system on waste management which will create a possibility to start producing waste statistics in the country.

# Description

The legal basis for producing environment statistics are the LOS, the Charter of the National Statistics Service of Georgia (Decree of the Government of Georgia No. 406, December 31, 2013); the statistical work programme for 2018; as well as the strategic plan for agricultural, environment and rural statistics in Georgia for 2016-2020.

Geostat is responsible for the production of official environmental statistics. According to the Article 7 of the LOS, Geostat is responsible for collecting, processing and disseminating statistical data. The Environmental statistics division of Agricultural and Environmental department is responsible for the production of environmental statistics. By 2018, the number of permanent staff members at the division was 3 persons.

To produce environment statistics, Geostat uses reliable data existing at Geostat: the survey of water supply enterprises; the sample survey of agricultural holdings; the agricultural Censuses; business statistics; energy balances; external trade statistics; demography statistics; national accounts, and other relevant sources. Administrative sources existing at the Ministry of Environmental Protection and Agriculture and other respective agencies are also used: the national environmental agency; the national forestry agency; the forestry agency of Adjara; and the agency of protected areas.

Data collection methodologies for administrative sources are examined. Statistical indicators are compared with the corresponding indicators of the previous periods; statistical indicators are compared with other sources. Quality routine description is in place.

Geostat has regular communications and discussions with the Ministry of Environmental Protection and Agriculture and other respective agencies for identifying new data sources useful for production of environmental statistics. Geostat signed a Memorandum of Understanding (MoU) with the Ministry of Environment and Natural Resources Protection and the Ministry of Agriculture which includes a data exchange calendar.

Based on the official statistics and administrative data, Geostat produces various types of environmental indicators and environmental accounts, using international methodologies (UNECE/UNSD concepts, definitions, classifications, and guidelines).

Geostat is conducting a survey of water supply enterprises every year. All enterprises involved in water supply services are interviewed. Data collection is implemented using the Computer assisted self-interviewing (CASI) method (online questionnaires). Databases existing in the Ministry of Environmental Protection and Agriculture and other respective agencies are provided to Geostat upon requests/MoUs. Databases are checked and data quality is evaluated. The quality of administrative data is being permanently improved, which increases reliability of environmental statistics over time.

Routine descriptions of statistical processes include statistical output assessment and validation.

Data on environmental statistics are published in the Statistical Yearbook of Georgia 2017; as tables and charts on environment; as natural resources of Georgia and environmental protection; as regional statistics – environment; as statistical information by regions of Georgia; on social media (Facebook); and as a list of main products.

# **Recommendations**

105.Geostat is encouraged to continue its development of environmental statistics in the context of SPAERS 2016-2020 and to give high priority to the provision of waste statistics.

# 19.5 Research, Development and Innovation Statistics

#### General assessment

Geostat collects some data on R&D but improvements are needed to be in line with international standards and SNA 2008 requirements. The Ministry of Education, Science, Culture and Sport conducted a survey on R&D but neither coordinated with Geostat nor made the data available to them. Improvements in R&D data collection are planned in 2019 with the launching of a new survey and improvements to existing questionnaires.

# **Description**

The NSI is responsible for collecting, processing and disseminating data on R&D statistics. R&D statistics is considered as a part of business statistics in Georgia. Data is derived from specialized survey "Innovation Activity in Enterprises" and is collected online. R&D activities are a small part of the survey which is also used to collect data on ICT use of enterprises. The survey is done annually with a sample of 4000 active enterprises for all activities except Section O, T and U. The sample comes from the SBR data base and is stratified by size of the enterprise. Enterprises with fewer than 10 employees are excluded from the sample. The results are disseminated by size, and type of economic activity. Time series date back to the year 2005.

Information on R&D in Georgia is incomplete as well as concerns R&D data for the 2008 system of national accounts. Geostat will conduct a survey this year (2019) among scientific institutions who are involved in R&D and aim to publish data on 25th of September 2019. There is need to add questions on R&D in the annual business survey. Data is on R&D is lacking for the financial sector and non-profit organizations and partially missing for the non-financial sector. The Ministry of Education, Science, Culture and Sport has been conducting a survey on R&D for 2-3 years, following the UNESCO questionnaire, but has not coordinated with Geostat or notified them of the survey. Geostat plans to address these matters in 2019 and aims to fill data gaps in their R&D statistics by the end of the year.

The Frascati manual on R&D, which is in line with SCN's manual concerning the definition, is followed. However, the financial flows must be developed to reach the need for national accounts. This will be done through three surveys: statistical survey of enterprises; survey of innovation activities of enterprises and survey of non-profit organizations. The surveys are planned to be held during July and results will be available by the end of September.

# **Recommendations**

Geostat is encouraged to:

- 106. Take the lead role in coordinating the collection and dissemination of statistics on R&D.
- 107. Publish all available indicators on R&D on its website.

# **19.6 ICT Statistics**

# General assessment

ICT Surveys are undertaken for both enterprises and households. Metadata for the enterprise survey is available in Georgian only on the website while metadata on the household survey has recently been made available on the Geostat website.

The survey on enterprises mainly refers to the respective Eurostat ICT-Model Questionnaire. For enterprises the data collection is mainly undertaken by online data collection (more than 80% of enterprises use the online questionnaire); target population (sample frame) is defined

by territory (Georgia, excluding conflict regions), size classes (four classes - from 10 and more employees to 250+) and by NACE Rev. 2 sections. The breakdowns and the NACE sections used are mostly in line with international recommendations.

Data collection for households in mainly done by paper questionnaire which only partially corresponds to Eurostat's ICT-Model questionnaire. Geostat is invited to reflect on broadening the scope of the household ICT questionnaire so as to include also aspects such as: "Trust, Security and Privacy" or "Digital Skills", similar to Eurostat's ICT Model questionnaire for households.

# Description

ICT Enterprises Statistics for Georgia are produced by the Short-Term Statistics Division within Geostat's Business Statistics Department (total of 5 employees) while ICT household Statistics for Georgia are produced by the Living Conditions Statistics Divisions within Geostat's Social statistics Departments (total of 9 employees). ICT Surveys are conducted for enterprises (mainly online) and households (mainly paper questionnaire).

The ICT survey for enterprises mainly corresponds to Eurostat's model questionnaire.

The household ICT survey mainly covers questions related to ICT access; general internet (access, frequency of use) and some aspects of e-Commerce.

# **Recommendations**

108. Geostat is encouraged to broaden the household questionnaire in line with Eurostat's ICT model questionnaire and to improve the availability of metadata, in both Georgian and English, for the ICT surveys.