Report on sector review of the Business statistics in Moldova

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Table of contents

1	Lega	l and institutional basis	6
	1.1.	Mandate for data collection	6
	1.2.	Adequacy of resources	6
	1.3.	Commitment to Quality	7
2	Main	findings	7
	2.1.	General overview	7
	2.2.	Sound methodology	8
	2.3.	Appropriate statistical procedures	. 12
	2.4.	Non-excessive burden on respondents	. 13
	2.5.	Relevance	. 13
	2.6.	Accuracy and Reliability	. 13
	2.7.	Timeliness and Punctuality	. 14
	2.8.	Coherence and comparability	. 14
	2.9.	Accessibility and clarity	. 14
3	Intern	national organisations and activities related to the BS	.15
4	Further developments		
5	Conclusions and recommendations		
6	References 17		
A	nnexe	S	.18

List of abbreviations

BR	Business Register
BS	Business Statistics
CAEM	Classification of Economic Activities in Moldova
CFOJ	Classification of Organisational Legal Forms
CFP	Classification of Forms of Ownership
CoP	European Statistics Code of Practice
CPI	Consumer Price Index
CUATM	Classification of Administrative-Territorial Units of the Republic of Moldova
CV	Coefficient of Variation
EU	European Union
GDP	Gross Domestic Product
ILO	International Labour Organisation
IPI	Industrial Production Index
KAU	Kind-of-Activity-Unit
NA	National Accounts
NACE	Statistical Classification of Economic Activities
NSI	National Statistical Institute
NSS	National Statistical System
NUTS	Nomenclature of Territorial Units for Statistics
SAQ	Self-Assessment Questionnaire
SBS	Structural Business Statistics
SN	Statistics Norway
SR	Sector Review
STS	Short-Term Statistics
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund

Preface

- 1. The Sector Review (SR) of business statistics (BS) in Moldova 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 DevStat, contracted by Eurostat (no. 14472.2013.002-2013.694), organised all activities and tasks related to the SR. Eurostat initiated the SR following a request by the National Bureau of Statistics of the Republic of Moldova (hereinafter NBS).
- 2. The assessment covered two domains of business statistics: structural business statistics (SBS) and short-term statistics (STS).
- 3. Two experts conducted the SR: Ms Violeta Kunigeliene (leading expert) and Ms Virginia Balea (supporting expert).
- 4. Prior to the mission, NBS staff completed a self-assessment questionnaire (SAQ) assessing how well business statistics in Moldova comply with the European Statistics Code of Practice (CoP) and with specific EU Regulations for business statistics. Responses to the SAQ served as the starting point for the review, which took place in Chisinau from 16 to 19 March 2015.
- 5. The questionnaire was designed to meet the needs of the NBS. It covered the following aspects: institutional environment, statistical processes, statistical outputs and future planning.
- 6. The review findings resulted from analysis of documents provided by the NBS, documents available on the NBS website and information collected and discussed during the in-country mission.
- 7. Discussions supplemented the information provided in the questionnaire. The NBS provided an additional set of electronic documents during the in-country mission.
- 8. Collaboration between the review experts and the NBS team was constructive throughout all phases of the SR.

Executive summary

- 9. The Sector Review (SR) was tailored to the needs of the NBS. The SR's aim was to assess the alignment of Moldovan business statistics (BS) with European and international standards. The SR covered structural business statistics (SBS) and short-term statistics (STS).
- 10. The main goals of the SR were as follows:
 - to assess the administrative and technical capacity of the National Statistical System of Moldova to produce SBS and STS;
 - to assess the level of compliance with EU requirements;
 - to assess the statistical production of SBS and STS;
 - to propose a list of recommendations to improve the BS production process.
- 11. The review was based on documentation provided by the NBS and on information collected and discussed during the mission.
- 12. The SBS survey has a good methodological foundation and has been developed taking into account EU standards. Nevertheless, some developments are needed to improve data-editing processes, the economic analysis of indicators and the comparison of other business data with the corresponding structural data. The response rate of the SBS is high (approximately 97%).
- 13. STS have been organised according to EU requirements since 2011. All indicators from Annexes A, B, C and D of the relevant regulation are collected monthly and quarterly. The use of different types of statistical units in STS is established in Annexes A, B, C and D, as per the STS regulation. The kind-of-activity-unit (KAU) is used for indicators in Annexes A (industry) and B (construction) and the enterprise is used for indicators in Annexes C (retail trade) and D (other services). The NBS uses a single observation unit (i.e. enterprises) for all Annexes. NACE Rev. 2 was introduced in 2014. Unfortunately, however, there are breaks/gaps in time series because STS time series have not been recalculated according to NACE Rev. 2. All STS are based on sample surveys. Enterprises with 20 or more employees are exhaustively surveyed, whereas for the size groups of 2-9 employees and 10-19 employees, a sampling method is applied. Enterprises with fewer than two employees or with activities of two years without turnover are excluded from the survey. The Domestic Trade and Services Section, however, includes enterprises with one or two employees represents less than 90% of the total turnover. The response rate for STS is 96-97%.
- 14. The NBS receives non-aggregated annual financial statements (profit and loss account, balance sheet, etc.) from each enterprise. Further analysis is necessary to check that enterprise accounting data are consistent with SBS and national accounts (NA) data. Additional administrative data sources such as social security data should be identified and used.
- 15. STS and SBS data compiled and produced by the NBS are available free of charge on the NBS website. Users can access the data through databases or publications. Data dissemination is centralised. The NBS provides a single entry point for data requests via a dedicated email address. Data release follows a similar protocol.

1 Legal and institutional basis

1.1. Mandate for data collection

- 16. The legal basis for data collection is the Law on Official Statistics¹ No. 412-XV, dated 9 December 2004.
- 17. The Law regulates the organisation and operations of the system of official statistics. It also establishes general principles for collecting, processing, generalising, disseminating and storing statistical information used by decision makers and policy makers. The Law is also used for conducting scientific surveys and for informing the public, international bodies and other users.
- 18. Official statistical bodies consist of the central statistical body (NBS), its territorial subdivisions and the statistics departments of the central and local public authorities and of the National Bank of Moldova.
- 19. Article 4 of the Law on Official Statistics stipulates the following:

The official statistical bodies have the right to:

- a) obtain and collect for statistical purposes statistical and administrative data, including explanations, from all persons that are subjects of the present law;
- b) check the authenticity of the statistical data and, if needed, check them at the work place, production places, on the land plots of legal persons, their branches, representative offices, and subdivisions, of physical persons that carry out entrepreneurial activity, in accordance with the legislation in force;
- c) when certain inaccuracies are identified, advise the persons who submitted these data how to correct these inaccuracies.
- 20. The SR covered two domains of business statistics: structural business statistics (SBS) and short-term statistics (STS). The response to all business surveys carried out by the NBS is compulsory under the aforementioned Law.
- 21. At the EU level, SBS are compiled under Parliament and Council Regulation 295/2008 and amendments of Council Regulation 58/1997 on SBS. SBS are produced in accordance with the definitions, breakdowns, deadlines for data delivery and various quality aspects specified in Implementing Regulations 250/2009 and 251/2009.
- 22. The legal basis for European STS is Regulation 1158/2005 (previously Regulation 1165/98).
- 23. The classification of economic activities in Moldova (CAEM) is harmonised with the European classification NACE Rev 2. CAEM is based on the decision of the Board of the National Bureau of Statistics, adopted on 29 December 2009. The first year of implementation was 2014.

1.2. Adequacy of resources

- 24. According to its organisation chart, SBS staff belong to the Statistical Infrastructure Division. STS are covered by two divisions. The Industry, Energy and Constructions Statistics Division manages STS on Industry and Construction, while the External Trade and Market Services Statistics Division manages STS on Trade and Services.
- 25. The Statistical Infrastructure Division has 11 employees, 4 of whom are involved in SBS.
- 26. Twenty-three employees are involved in implementing monthly and quarterly surveys for STS.
- 27. SBS and STS data are collected by staff at the regional statistical offices.
- 28. Although the number of staff is considered adequate, the staff's responses to the SAQ reveal that staff training is needed (especially in statistics, business statistics and IT).

¹ http://www.statistica.md/public/files/despre/legi hotariri/Legea statistica oficiala en.pdf

1.3. Commitment to Quality

- 29. There is no specific BS quality policy following either the overall quality policy or a specific one related to STS or SBS. Moreover, no procedures are in place to plan and monitor the quality of the statistical production process.
- 30. The Moldovan law does not stipulate that the NBS should perform quality control for official statistics.

2 Main findings

2.1. General overview

- 31. According to the organisation chart, SBS staff belong to the Statistical Infrastructure Division, whereas STS are covered by two divisions (Industry, Energy and Construction Statistics Division and External Trade and Market Services Statistics Division).
- 32. The NBS implemented the first pilot SBS survey for small enterprises in 1997. Since then, the structural business survey has been carried out annually.
- 33. The SBS survey is a sample survey, which covers enterprises that are active within the Republic of Moldova. The survey does not collect data on enterprises whose main activity is any of the following: agriculture, public administration, finance, education, health or arts. Enterprises located on the left side of the river Nistru and in the municipality of Bender fall outside the survey's scope.
- 34. Data are collected by statistical territorial offices using the sample provided by the methodological staff at the NBS.
- 35. For the SBS survey, the statistical unit is the enterprise. The enterprise is defined as the smallest legally established unit which has decisional autonomy and is organised to carry out one or more activities in one or more places for production of goods and services. The survey also collects information on local units belonging to each enterprise. In Moldova, the enterprise is equivalent to a legal unit.
- 36. STS have been organised according to EU requirements since 2011. All indicators from Annexes A, B, C and D are collected monthly and quarterly. The observation unit is the enterprise. NACE Rev. 2 was introduced in 2014. Unfortunately, however, there are breaks/gaps in time series because time series in STS have not been recalculated according to NACE Rev. 2. All STS are based on sample surveys. Enterprises with 20 or more employees are exhaustively surveyed, whereas for the size groups of 2-9 employees and 10-19 employees, a sampling method is applied. Enterprises with fewer than two employees or with activities of two years without turnover are excluded from the survey. The Domestic Trade and Services Section, however, includes enterprises with one or two employees if the share of selected enterprises with one or two employees represents less than 90% of the total turnover. The response rate for the STS is 96-97%.
- 37. Most of the European NSIs have separate structures (divisions/departments) for SBS and STS. The NBS organises BS production by economic sector (industry, services, etc.), STS and SBS being processed by the same sectorial statistics team. This structure leads to duplication and non-consistent data collection and processing.
- 38. The NBS does not compile regional business statistics.
- 39. The NBS uses a large range of IT software. The main problem with the current IT set-up is that changes of IT specialists cause major issues when updating and maintaining customised applications.
- 40. In 2015 NBS has introduced four monthly electronic questionnaires in short-term statistics: for industry indicators (IND TS), construction indicators (CONS TS), service indicators (SERV TS,

- this questionnaire includes trade indicators as well), Labour indicators (Munca-1). Enterprises may now complete questionnaires online.
- 41. Currently, the NBS does not release any seasonal or working-day-adjusted BS data.
- 42. The business register (BR) is constantly updated using administrative data and information from statistical surveys. Key variables are used for the identification of the units, and additional variables are used for sampling. The BR contains limited information about local units.

2.2. Sound methodology

Structural business statistics

- 43. The NBS regularly produces and publishes annual statistics based on the data processed by the SBS staff. Experts in SBS are committed to producing reliable, high-quality statistics aligned with EU and international standards.
- 44. Since 1997, SBS have been produced based on data from statistical surveys. Experts from the French Statistical Institute (INSEE) developed the SBS questionnaire through a technical assistance project.
- 45. The SBS questionnaire has been revised several times. In 2012, some of the tables were slightly redesigned in order that indicators produced are harmonised with EU definitions. Additional expenditures and intermediary consumption table has been expanded in order to address National Accounts needs.
- 46. In the framework of the Project Component on Improvement of availability and reliability of regional statistics methodology to compute regional statistical data by using SBS results was developed.
- 47. The observation unit in SBS is the enterprise, which is equivalent to a legal unit. Given Moldova's total area and the structure of the Moldovan economy, this approach causes no significant error.
- 48. Coverage is the same for administrative and statistical processes. For financial reporting purposes, every enterprise in Moldova must submit financial statements to the Information Service, which is a subsidiary of the NBS. The NBS can thereby access administrative data and use them in statistical production.
- 49. The reference period is the calendar year. In a few cases, the accounting period differs (e.g. for fewer than 10 enterprises). These enterprises submit statistical questionnaires according to the survey's reference period.
- 50. The sampling frame for a structural survey for a given year t includes legally active persons that presented their bookkeeping or statistical reports in years t or t-1. Financial services and public administration enterprises are excluded, as are agricultural enterprises.
- 51. The survey uses the following classifications: The Classification of Economic Activities in Moldova (CAEM Rev. 2), the Classification of Forms of Ownership (CFP), the Classification of Organisational Legal Forms (CFOJ) and the Classification of Administrative-Territorial Units of the Republic of Moldova (CUATM).
- 52. To select the survey sample, the NBS uses main activity and number of employees as stratification criteria. Main activities are defined at the CAEM Rev. 2 class level. Four size groups of enterprises are used: enterprises with 0-4 employees, 5-9 employees, 10-19 employees and 20 employees or more. Data for 2013 were collected with reference to both CAEM Rev. 2 and CAEM Rev. 1.1. Nevman allocation was used to calculate the sample size in each stratum.
- 53. The NBS uses sampling to survey enterprises with fewer than 20 employees. Enterprises with more than 20 employees are surveyed exhaustively.
- 54. For small enterprises, non-response adjustments are made using weighting within strata.

- 55. For large enterprises, non-response adjustments were made in previous years. Imputation was considered but never carried out. Non-response is small but becomes an issue when large enterprises do not respond.
- 56. The questionnaire is designed to address SBS requirements and NA requests.
- 57. The following variables are used for SBS:
 - Average number of employees
 - Number of employed persons at the end of the year
 - Income/Turnover by types sales of merchandise and sales of goods and services
 - Capitalised production
 - Other operating revenues
 - Cost of merchandise sold
 - Cost of goods and services
 - Other operating expenses
 - Wages and salaries
 - Social security costs
 - Stocks.
- 58. The collection of additional variables enables computation of the value of production and value added at factor cost.
- 59. An important set of variables is collected for NA. Table 4.1 addresses NA requirements. Table 4.1 presents the total intermediary consumption broken down by a mixture of product aggregates and individual products. In addition, the survey requests a breakdown of expenditure. The tables used to collect data on the breakdown of expenditure illustrate the major burden placed on respondents.
- 60. SBS data for year t are published annually at the end of year t+1. This timeframe is in accordance with the release calendar. Although data could be compiled at NACE/CAEM class level, they are released at division level because of confidentiality issues.
- 61. The main SBS indicators that the NBS compiles and publishes are the following:
 - Number of enterprises
 - Average number of employees
 - Turnover
 - Production value
 - Value added at factor cost
 - Gross investment.
- 62. The NBS has not yet delivered any SBS data to Eurostat.
- 63. The NBS publishes methodological documentation containing metadata² (concepts, methods, classifications, etc.) on the NBS website.
- 64. According to SBS regulation, some series may be produced and disseminated. Existing production and dissemination is as follows:
 - Annex 1. Out of 6 series, the following series can be partially compiled:
 - 1A Annual enterprise statistics for Services
 - 1B Annual enterprise statistics by size class for Services
 - 1C Annual preliminary results for Services.

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² http://www.statistica.md/public/files/Metadate/en/Ancheta structurala anuala en.pdf

- Annex 2. Out of 12 series, the following series can be partially compiled:
 - 2A Annual enterprise statistics for Industry
 - 2B Annual enterprise statistics by size class for Industry
 - 2P Annual preliminary results for Industry.
- Annex 3. Out of 12 series, the following series can be partially compiled:
 - 3A Annual enterprise statistics for Distributive Trade
 - 3B Annual enterprise statistics by size class for Distributive Trade
 - 3P Annual preliminary results for Distributive Trade.
- Annex 4. Out of 9 series, the following series can be partially compiled:
 - 4A Annual enterprise statistics for Construction
 - 4B Annual enterprise statistics by size class for Construction
 - 4P Annual preliminary results for Construction.
- 65. Not all variables from the above series are collected or can be computed for all breakdowns (by NACE and by size).
- 66. Variables that are collected or can be computed are Number of enterprises, Turnover, Production value, Value added, Gross operating surplus, Total purchases of goods and services, Purchases of goods and services for resale in the same condition as received, Wages and salaries, Social security costs, Personnel costs, Gross investment in tangible goods and Average number of employees.
- 67. Notably, the variables *Total purchases of goods and services*, *Purchases of goods and services* for resale in the same condition as received and *Gross investment in tangible goods* are not fully harmonised with the SBS regulation.
- 68. Annexes 5 to 9 (Financial services and business demography) are not covered.
- 69. The NBS does not have any revision policy. In the case of SBS, the NBS does not compile preliminary data. The only set of the data compiled is considered final. According to the staff of NBS, there were no cases when errors in data were found and revisions were deemed necessary.

Short-term statistics

- 70. Twenty-three NBS employees are responsible for performing monthly and quarterly surveys to collect STS data. Before 2011, the NBS conducted 11 STS surveys using different definitions and timeliness of variables. All questionnaires were standardised in 2011 as per STS regulation 1165/98. The public was informed about these changes in STS. The first page of the questionnaires is the same for all domains and covers the variables *Turnover*, *Number of persons employed* and *Wages and salaries*. For industry and construction, production variables are also collected. The STS questionnaires contain more variables than necessary to collect other data required for national purposes.
- 71. New methodology was developed in 2011. The methodology division is responsible for preparing the list of active enterprises in the BR. The sample is selected in October and November using this list. Enterprises without turnover for two consecutive years and with a maximum of 3 employees are excluded from the sample frame as non-active units. If these enterprises have a turnover of 10 M Lei or more, however, they are included in the sample frame. The sample selection scheme varies by STS domain (industry, construction, domestic trade and other services). Currently, samples are not coordinated because, until now, different STS domains have each used an additional list of enterprises for surveys. Small enterprises are not rotated neither.
- 72. The coefficient of variation is not yet measured.

- 73. For Annex A, *Industry*, all variables stipulated in the EU requirements are collected:
 - Production
 - Turnover, domestic turnover, non-domestic turnover
 - Number of persons employed
 - Hours worked
 - Gross wages and salaries
 - Output prices, output prices of the domestic market, output prices of the non-domestic market.
- 74. Industrial Production Index (IPI) compilation is based on the Laspeyres-type index, which redefines the weighting structure every five years and refers to basic information for a particular reference period in relation to this base year. The value added from the NA Division is used to weight the data.
- 75. Time series for IPI are not seasonal, and working days adjusted. Data are not published with a fixed base year; the base year changes every year (2012 = 100, 2013 = 100, etc.). Data are published monthly and annually.
- 76. Monthly data on the Industrial Production Index (IPI) are provisional when disseminated first. However the revision of data is possible during the next month, when changes are reported by enterprises.
- 77. The *Turnover* variable is collected but not published. The same is true of STS labour indicators.
- 78. Three types of producer prices indices are calculated for industry: reporting month compared to the previous month, reporting month compared with previous year's corresponding month, the period from the beginning of the current year compared with previous year's same period. The NBS produces the IPI every month and calculates the following indices:
 - the current month's prices versus prices for the previous month
 - the current month's prices versus prices for December of the previous year
 - the current month's prices versus prices for the same month of the previous year or of another year
 - the current month's prices versus prices for the average of the base year (2011)
 - prices for the period from the beginning of the current year versus prices for the same period of the previous year.
- 79. The NBS collects survey data through self-reporting by economic units and through presentation in person at territorial statistical offices. Data are accepted until the 25th day of the month during which the report is made.
- 80. For Annex B, Construction, all variables stipulated in the EU requirements are collected:
 - Production, production of building construction, production of civil engineering
 - Number of persons employed
 - Hours worked
 - Gross wages and salaries
 - Construction costs (material costs, labour costs)
 - Building permits (number of dwellings, square metres of useful floor area or alternative size measure).
- 81. Data for the production of building construction and civil engineering are produced every month. Data are collected on the 15th day of the month after the reference month. These indicators are not published in the NBS database. Material costs are calculated quarterly. Since 2015, building permits have been collected quarterly. A press release is made on the 50th day following the final day of the reference period. Metadata are also published.

- 82. For Annex C, Retail trade, all variables stipulated in the EU requirements are collected:
 - Turnover
 - Number of persons employed
 - Hours worked
 - Gross wages and salaries
 - Deflated turnover or deflator of sales.
- 83. For Annex D, Other services, all variables stipulated in the EU requirements are collected:
 - Turnover
 - Number of persons employed
 - Hours worked
 - Gross wages and salaries
 - Deflated turnover or deflator of sales.
- 84. Statistical data on turnover in retail trade and services are collected every month. The deflator for the turnover indices in retail trade is the Consumer Price Index (CPI) adjusted to the structure of sales according to NACE Rev. 2. The External Trade and Market Services Statistics Division adjusts the CPI. For a given month of the current year, the NBS calculates three types of deflators for retail trade: reporting month compared to the previous month, reporting month compared with previous year's corresponding month, the period from the beginning of the current year compared with previous year's same period.
- 85. For services statistics, the NBS requests respondents to the annual questionnaire to distribute turnover by customers and to provide data on business to business, business to all and business to population for activities I, 55, 56, 79, 75, 85, 86-88, 59, 60, 90 and 91-96 of the CAEM Rev. 2.
- 86. The NBS has implemented a single questionnaire on monthly labour indicators for non-financial enterprises. This questionnaire collects data for all statistical domains and variables such as wages and salaries, number of persons employed and hours worked. Only the index of wages and salaries is published. All other data are published as raw data. The same information is collected for other business statistics, which increases the burden on respondents. A review of all statistical questionnaires on business statistics is proposed to eliminate redundant indicators and reduce the response burden.

2.3. Appropriate statistical procedures

- 87. <u>Administrative data:</u> According to the Law on Official Statistics Article 3, 'Administrative data are data obtained by the central and/or local public authorities, except the official statistical bodies, in order to exercise their administrative duties.'
- 88. Article 10 of the same Law states the following: 'The central statistical body has the right to submit to the public authorities that hold administrative data proposals on additional accumulation and manner of data submission, in order to use them subsequently for the production of statistical information.'
- 89. The Information Service for Financial Reporting division of the NBS collects and provides access to enterprises' financial statements. This is a rich data source for the NBS.
- 90. Data from these financial reports are used to update the BR and check data consistency. Data in financial reports are collected by territorial bodies. They are then verified, processed and validated.
- 91. To reduce the burden on respondents and intensively use administrative data, an Annex was included in enterprises' financial statements: 'Annex 8 Informative annex related to incomes and expenditures by type'.
- 92. Although the Law on Official Statistics provides access to administrative data, sources such as tax or social security data are not used for STS data compilation or data validation.

- 93. Non-response: In Moldova, the SBS non-response rate is low. For 2013, the non-response rate was 2.89%, and for the STS surveys, the non-response rate was 3-4%. Enterprises that could not be found were treated as non-respondents, and it was assumed that none of these enterprises were inactive or fell outside the scope of the survey. The NBS does not store different versions of survey data. Data provided by the enterprises and those corrected by the regional statistical offices are provided to the SBS team with no distinction between the two data sources.
- 94. <u>Data processing:</u> In addition to preliminary checks by regional statistical offices, SBS and STS staff members validate data by checking them against data from the previous year or crosschecking between variables. The statisticians responsible for SBS and STS apply logical and mathematical controls at the micro (enterprise) level. When differences and inconsistencies are detected, the enterprises are contacted to confirm the data.

2.4. Non-excessive burden on respondents

95. The NBS has taken several actions to minimise response burden. In recent years, the NBS has implemented sample surveys and electronic data collection and has developed standardised questionnaires for STS.

2.5. Relevance

- 96. The main user of SBS data is the NA Division. Before a new annual survey is launched, NA staff members are usually consulted regarding the model SBS questionnaire.
- 97. In recent years, the main aim of the NBS has been to harmonise the main BS with EU requirements. The NBS has made considerable efforts to integrate NACE Rev. 2 and produce all SBS variables.
- 98. Annual SBS indicators are published on the website and are available in PDF.
- 99. The last public opinion poll concerning the user satisfaction with statistical data provided by the NBS took place in 2008. Survey results appear on the website at the following address: http://www.statistica.md/public/files/despre/evaluare_opinii/Raport_OIKOS_eng.pdf
- 100. According to survey's results, respondents indicated that NBS business statistics are to some extent useful. About 31% of the users stated that industry statistics met their needs whilst trade and construction statistics are considered useful by 27.6% and 23.8% respectively.
- 101. Regarding the relevance of the NBS data, 70% of the respondents considered trade data as being relevant for their information needs.
- 102. The SAQ revealed that SBS and STS indicators are relevant for all main users such as policy makers, the media, researchers and students. The NBS could not assess the indicator relevance for business users.

2.6. Accuracy and Reliability

- 103. Coefficients of variation (CV) are computed only for SBS data.
- 104. The design effect is partially considered (the effect of non-response adjustment is not considered). The variance estimation method is Taylor linearisation using Stata software.
- 105. Measurement and processing errors are identified by comparing the data from the current period with the corresponding data from previous periods (same year or month). Data sources, intermediate results and final output are not regularly assessed or validated.

2.7. Timeliness and Punctuality

106. The NBS respects deadlines and publishes BS according to the following calendar.

	Key dates in the national production process				
Monthly/quarterly and annual results for 2013	Start date of data collection	End date of data collection	End date of quality check and weighting for statistics published in press release	Date of national publication of press release	Date of national dissemination and metadata
SBS	February	April	August	November	December
STS			days		
Industry	t+12	t+15	t+38	t+40	t+40
Construction	t+12	t+15	t+20	Q+50	Q+50
Retail trade	t+15	t+30	t+48	t+50	t+50
Services	t+15	t+30	t+48	t+50	t+50

t - month (30 days)

Q - quarter (90 days)

107. Although the NBS is able to compile SBS data at NACE class level, the NBS releases data at division level to ensure confidentiality of individual data. The STS data publication date does not fully meet EU requirements. The advance release calendar is available for the next quarter but not for the whole calendar year.

2.8. Coherence and comparability

- 108. The NBS does not apply any specific procedures or guidelines to monitor internal data coherence or consistency between preliminary and final data, micro-data and aggregated data, or annual, quarterly and monthly data.
- 109. The definition of statistical unit does not fully comply with EU standards because the statistical unit is equal to the legal unit.
- 110. As previously mentioned, not all variables and breakdowns stipulated in the SBS regulation are computed.
- 111. Until 2012, economic entities were classified according to the national activity classification harmonised with NACE Rev. 1.1. Since 2013, the revised classification NACE Rev. 2 has been used. Time series in STS have not been recalculated according to NACE Rev. 2., and data are not comparable from year to year. There are breaks in time series.
- 112. Comparability between SBS preliminary and final results is not an issue because published data are final. Provisional data are neither computed nor disseminated.

2.9. Accessibility and clarity

- 113. SBS results are disseminated through the publication 'Results of the structural survey of enterprises', which is available in PDF³. Data are also available on the website of the NBS through the StatBank⁴ database.
- 114. STS results are disseminated through monthly and quarterly press releases (e.g. the socio-economic situation of the Republic of Moldova) and through the database, etc.

³ http://www.statistica.md/public/files/publicatii_electronice/Rezult_anch_struct/ASA_2014.pdf

⁴ http://statbank.statistica.md/pxweb/Database/EN/24%20ANT/24%20ANT.asp

- 115. Metadata are documented in a standardised metadata system using the ESMS template for all variables. Currently, according to the template metadata are prepared for a few STS indicators only. The SBS and STS methodologies are available on the NBS website.
- 116. If users need more information about the survey, its methodology and available data, they can contact an NBS employee responsible for the survey. Contact information (phone, email, fax) is provided at the end of each publication.

3 International organisations and activities related to the BS

- 117. NBS implemented the 'Statistics 9' technical assistance project within the TACIS programme, which was planned for a period of 18 months (until December 2007).
- 118. On 26 February 2009, statistics Norway (SN) and the NBS signed a Memorandum of Agreement to support the development of the statistical system in Moldova between 2009 and 2012. This project was financed by the Ministry of Foreign Affairs and the Government of Norway (ref no. MDA 08/015). The objective was to support the NBS in improving the efficiency, quality and functioning of the Moldovan statistical system and thus strengthen the role of statistics in Moldova. The project covered improvement of the BR and business statistics, among other targets.
- 119. The UNDP implemented the technical assistance project 'Strengthening the National Statistical System' backed by UNDP, UNWomen, UNFPA, UNICEF and the ILO. The NBS signed the first tranche in August 2007 and the second tranche in November 2010. The objective of this project was to help to align statistics with international and EU standards, improve capacity building, deploy new statistical surveys in accordance with international methodologies and analyse results. The overall goal was to improve tools for the dissemination of statistical information.
- 120. The European Commission has been actively involved in fostering a successful socio-economic environment in Moldova.
- 121. At the end of November 2013, the Republic of Moldova committed to developing an efficient and sustainable statistical system capable of providing reliable, objective and accurate data needed to plan and monitor the process of development and reforms in Moldova. This commitment covers regional development as one of key policy areas in cooperation with the EU.
- 122. Within this context, the European Commission has launched a new assistance project for Moldova called 'Improved Regional Statistics in the Republic of Moldova'.
- 123. The main objective of this project is to support Moldova in advancing its economic, social and territorial cohesion. The project focuses on developing the policy, legal and institutional framework to build an effective development policy for Moldova's regions by:
 - improving regional statistics so that they are reliable, objective and accurate and therefore consistent with Eurostat standards;
 - validating the capacity among relevant bodies to regularly produce, disseminate and efficiently use regional statistics;
 - improving the system and sources for the production of regional accounts.

4 Further developments

- 124. The NBS should continue to pursue the goal of full compliance with STS and SBS regulations.
- 125. In SBS, the use of administrative data should be improved. Priority should be given to the analysis of additional data sources to increase the number of variables for which data are gathered.
- 126. The SBS and STS questionnaires should be redesigned to reduce the response burden.
- 127. For all STS indicators, metadata should be prepared and published on the NBS website.
- 128. The NBS should reach an agreement with holders of administrative data. The NBS can thus obtain direct access to administrative sources that can be used in the calculation of STS indicators.

5 Conclusions and recommendations

129. The main conclusions of the SR on business statistics are as follows:

- The NBS should improve the use of administrative data (besides tax data) such as social security data.
- Tables regarding intermediary consumption and expenditures should be redesigned. For example, the breakdown should match the NA breakdown and should appear either every five years or just for large enterprises.
- It is important to understand the relationship between SBS and other annual statistical reports to reduce the response burden. Reviewing all monthly statistical reports on business statistics and eliminating redundant indicators will also help to reduce the response burden.
- The NBS should start calculating the CV for STS indicators.
- The NBS should use a common BR for all sample surveys.
- STS time series should be recalculated in accordance with NACE Rev. 2. The NBS should revise metadata appearing on the website because the classification of economic activities has been updated (NACE Rev. 2 has replaced NACE Rev. 1.1).
- In addition, the NBS should prepare metadata for other STS indicators.
- Some STS definitions of indicators such as turnover are inconsistent with EU requirements.
 Revising all definitions of indicators to make them comply with EU requirements is therefore recommendable.
- The NBS should produce regional SBS indicators.
- STS and SBS data should be treated more consistently. There is currently a risk that the statistical unit may be treated differently in STS and SBS.
- To improve timeliness, increased human and financial resources are necessary. Introduction of modern data collection tools (online and electronic questionnaire) and data processing is also advisable.
- The current system of BS production leads to overlap between surveys and indicators. BS production should therefore be restructured so that work is organised by structural and short-term statistics rather than by sector.
- The NBS annual work programme should focus only on official statistics. Official statistics
 producers consist only of the NBS and institutions identified as producers of official statistics.
 The NBS should develop guidelines to explain when an institution becomes the producer of
 official statistics.

6 References

- Law on Official Statistics
- Organisation Chart of Business Statistics department
- SBS Metadata
- SBS methodology
- Description of the business register, the sampling frames and sampling design
- Metadata: Industry, Dwellings, Industrial producer prices http://www.statistica.md/pageview.php?l=en&idc=430&
- Industry, Concept and definitions, <u>http://www.statistica.md/pageview.php?l=en&idc=302&id=2257</u>
- Metadata: Construction Activity on Contract Basis http://www.statistica.md/pageview.php?l=en&idc=302&id=2257
- Retail trade and services, Concept and definitions, http://www.statistica.md/pageview.php?l=en&idc=302&id=2348

Annexes

Annex 1: Agenda of the expert mission for the Sector Review

Annex 2: List of representatives met during the SR mission in Moldova

AGENDA

Statistical Office of Moldova

Sector Review – Business Statistics

16-20 March, 2015

International Review Team

Experts: Ms Violeta Kunigeliene and

Ms Virginia Balea

Day 1, 16 March	2015	
09:30 – 10:00	Opening and welcome, introduction to the review and the review team	Business statistics unit V. Kunigeliene, V. Balea
10:00 – 10:45	Introductory meeting with the representatives of the National Bureau of Statistics of the Republic of Moldova Discussions on the general institutional framework related to the business statistics General discussions on the institutional framework related to the business statistical sector: general rules; National Bureau of Statistics of the Republic of Moldova internal organisation, roles and functions; human resources; relations with other national stakeholders and data sources (actors in the national statistical system); multiannual statistical programs; dissemination / publication issues and policies; relations with external stakeholders. Provision of related official documents / material	Director General, International cooperation office, other relevant units (e.g., Directorate of Public Relations & Information; Directorate of HR and Administrative Affairs; Directorate of Information Technology)
10:45 – 11:00	Coffee break	
11:00 – 12:00	Discussions with the responsible unit on methodological aspects with reference to the information in the assessment questionnaire. This includes: business register management, classifications and coding, sampling, main estimation procedures, quality indicators, metadata provision, IT issues, the role of regional offices	Business statistics unit, Statistical Methodologies Unit
12:15 – 12.30	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea
12:30 – 14:00	Lunch break	,
14:00 – 15:00	Discussions on methodological aspects with reference to the information in the assessment questionnaire. Continuation	Business statistics unit, Statistical Methodologies Unit
15:00 – 15:15	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea
15:15 – 15:30	Coffee break	•
15:30 – 16:30	Relations between the National Bureau of Statistics of the Republic of Moldova and other national data sources and institutions Discussions on the interaction (based on rules and praxis) between the National Bureau of Statistics of the Republic of Moldova and other data sources and institutions in the national statistical system related to the domain with reference to the information in the assessment questionnaire. Focus will be on the use of administrative data, data from other surveys, National statistical laws (obligation to respond and confidentiality), the National statistical system.	Business statistics unit, Statistical Methodology unit
16:30 – 16:45	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea

Day 2, 17 March 2015				
09:15 - 10:15	Structural business statistics (SBS)			
	Overall system of business statistics			
	Kind of surveys (direct, CATI, WEB,)			
	Classifications used			
	Survey organisation			
	Sampling criteria			
	Estimation criteria			
	Non sampling errors management			
	Quality evaluation			
	Data release policy			
	Main indicators produces and disseminated			
	Comparison with other sources			
	Feedback from main users			
10:15 – 10:30	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
10:30 - 10:45	Coffee break			
10:45 – 11:45	Continuation			
11:45 – 12:00	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
12:00 – 13:30	Lunch break			
13:15 – 14.15	Short term business statistics (STS)			
	Same list of topics of SBS			
14:15 – 14:30	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
14:30 – 14:45	Coffee break			
14:45 – 15:30	Continuation			
15:30 – 15:45	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
15:45 – 17:45	Review of the work	V. Kunigeliene, V. Balea		
	Review Team will meet separately for preparing			
	conclusions and recommendations of the first two days			

Day 3, 18 March	Day 3, 18 March 2015			
09:15 – 10:15	Data processing: entry, editing and coding Discussions with the responsible unit on data processing (entry, editing and coding): consistency and routing checks, imputation rate, imputations methods, related calculations, coding procedures, software applications used for data entry, editing and coding with reference to the information in the assessment questionnaire.	Business statistics unit		
10:15 - 10:30	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
10:30 - 10:45	Coffee break			

Day 3, 18 March 2015				
10:45 – 11:45	Compliance with European and international standards			
	Discussions with the responsible unit on compliance with European and international standards: classifications used (NACE etc.), definition of variables, norms/standards (coverage, reference period, frequency), main issues arising	Business statistics unit + other relevant directorates (e.g., Directorate of Public Relations & Information;		
	from alignment to international classifications/definitions/standards with reference to the information in the assessment questionnaire.	Directorate of Statistical Studies; Directorate of Information Technology)		
11:45 – 12:00	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
12:00 – 13:30	Lunch break			
13:15 – 14.15	Data estimation and quality Discussions with the responsible unit on the data estimation (non-response rates, weighting procedures, software packages used, level estimates for main variables, standard errors and non-sampling errors) and quality (timeliness and accuracy) with reference to the information in the assessment questionnaire.	Business statistics unit, Statistical Methodology unit		
14:15 – 14:30	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
14:30 – 14:45	Coffee break			
14:45 – 15:30	Data dissemination Discussions with the responsible unit on dissemination issues and policies: micro-datasets, bulletins, publications, calendar release, type of tables produced, data accessibility, data revision, metadata available, data transmission to external institutions / agencies and data quality (coherence) with reference to the information in the assessment questionnaire.	Business statistics unit + other relevant directorates (e.g., Directorate of Public Relations & Information)		
15:30 – 15:45	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
15:45 – 17:45	Review of the work Review Team will meet separately for preparing conclusions and recommendations	V. Kunigeliene, V. Balea		

Day 4, 19 March 2015				
09:15 – 10:00	Management of users' requests Discussions with the responsible unit on procedures adopted to manage users' requests: main users, tools for satisfying specific users' needs, time needed, tools for measuring users' satisfaction with data; major constraints and quality (relevance) with reference to the information in the assessment questionnaire	Business statistics unit		
10:00 - 10:15	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea		
10:15 – 10:30	Coffee break			

Day 4, 19 March 2	Day 4, 19 March 2015				
10:30 – 11:30	Relations with international organisations Discussions with the responsible unit on interactions between the same unit and international organisations such as EUROSTAT, OECD. Focus will be given to projects, partnerships and programs relating to BS; participation and contributions to international meetings; main issues arising from such events and suggestions for changes in BS with reference to the information in the assessment questionnaire.	Business statistics unit V. Kunigeliene, V. Balea			
11:30 – 11:45	Preliminary conclusions and recommendations	V. Kunigeliene, V. Balea			
12:00 - 13:30	Lunch break				
13:30 – 14:15	Discussions on main conclusions and recommendations on the business statistics	V. Kunigeliene, V. Balea			
14:15 – 15:30	Views of the management on the recommendations	Business statistics unit			
15:30 – 16:00	Closing of the meeting				
	Administrative rounding off: afterwards, the review Team will meet separately for collecting the list of participants (by day and topic), discussing and defining the next assessment steps, including the contents of the forthcoming summary report of findings. All collected material (institutional documents, reports, metadata, additional notes, etc.) will be ordered for following further in-depth analysis	National Bureau of Statistics of the Republic of Moldova V. Kunigeliene, V. Balea			

Annex 2: List of representatives met during the SR mission in Moldova, Chisinau, 16-19 March 2015