



# Quality Framework and advancements on Statistical Methodologies

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*Presentation of Project Results*

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# Quality Management Framework (QMF)

The reference framework for quality management recommended to be adopted by NBS is fully in line with the requirements of the Moldovan Statistical Law (93/2017)

It relies on:

- the European Statistics Code of Practice (adopted in 2005 and revised in 2011 and 2017);
- the Eurostat Quality Definitions;
- the ESS Quality Assurance Framework (2019).



# Quality Management Framework (QMF)

## Pillars

1

Metadata and  
Quality  
documentation

2

Increasing  
quality culture  
across the  
organisation

3

Planning,  
executing and  
assessing  
(Guidelines)

4

Users'  
satisfaction surveys

5

Measuring and  
reducing response  
burden



# QMF 1.1 Metadata and quality documentation

Two important international standards were adopted:

- ❑ **SIMS** (Single Integrated Metadata Structure)
- ❑ **GSBPM** (Generic Statistical Business Process Model)

Both were successfully tested on some statistical surveys:

**SIMS:** LFS, PRODMOLD , Beneficiaries of pensions and other social insurance benefits

**GSBPM:** LFS and PRODMOLD

**An IT metadata system** supporting the storing and re-use of the SIMS and GSBPM metadata is under development



## QMF 1.2 Metadata and quality documentation

NBS is developing SIMS reports for other statistical surveys

- 8 social statistical surveys/works
- 15 economic statistical surveys/works
- 2 agricultural statistical surveys/works

A **revision policy** was drafted. It contains guidelines and principles for the revision of statistical data

→ **better information for the users**



## QMF 2 Increasing quality culture across the organisation

**Quality is a global matter concerning the whole organisation**

Training and coaching activities increased considerably the NBS knowledge and awareness on:

- Quality aspects of the statistical production
- Quality assessment
- Process targeting quality improvements



## QMF 3 Quality Guidelines

A first full draft of the Quality Guidelines was achieved. They contain good practices for:

- Planning
- Executing
- Assessing

the quality of statistical products and processes

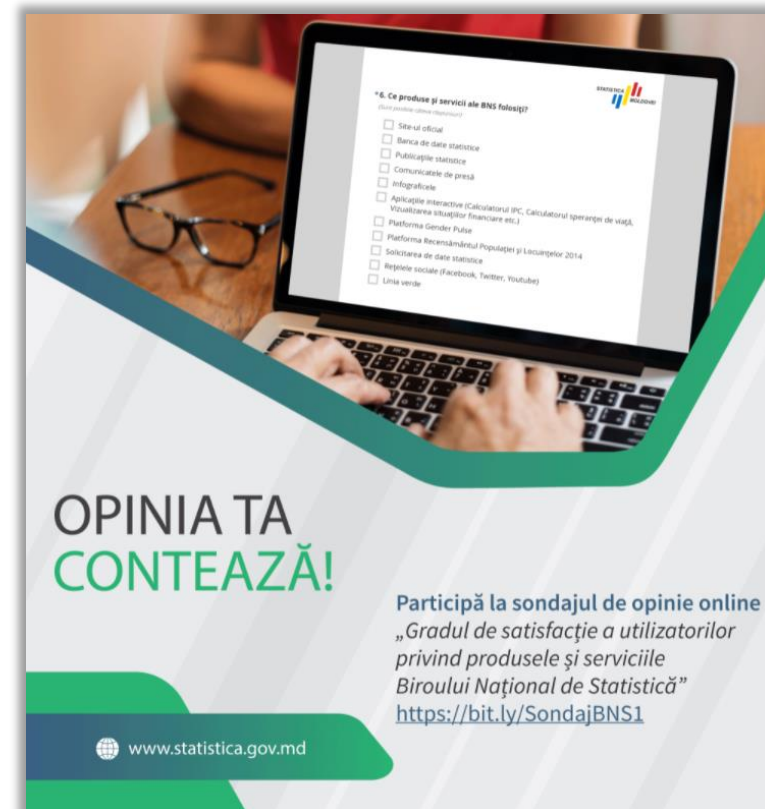
They also complement quality assurance with quality documentation, linking the guidelines to the elements of the standards for quality reporting and process mapping: the Single Integrated Metadata System (SIMS) and the Generic Statistical Business Process Model (GSBPM)



## QMF 4 Users' satisfaction survey

- ❑ First online User Satisfaction Survey (30 June-20 July 2021)
- ❑ Results published on the NBS website
- ❑ Will be conducted regularly to assess the degree of user satisfaction with the products and services provided by the NBS in order to improve their quality and adapt them to the needs of users

Overall, users showed to be satisfied with the products and services delivered by NBS



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## QMF 5 Measuring and reducing the response burden

An integrated approach for the regular measurement and follow-up of the response burden was agreed and is being implemented

The NBS is developing now a methodology to measure the **response burden** on the respondents and a policy to reduce such burden. Baseline assessing of the response burden is based on 36 statistical surveys:

- Data collection regarding spent time on data reporting
- Analysis of collected data

Some reductions were already achieved, as in the case of the trade module in the Annual Statistical Survey

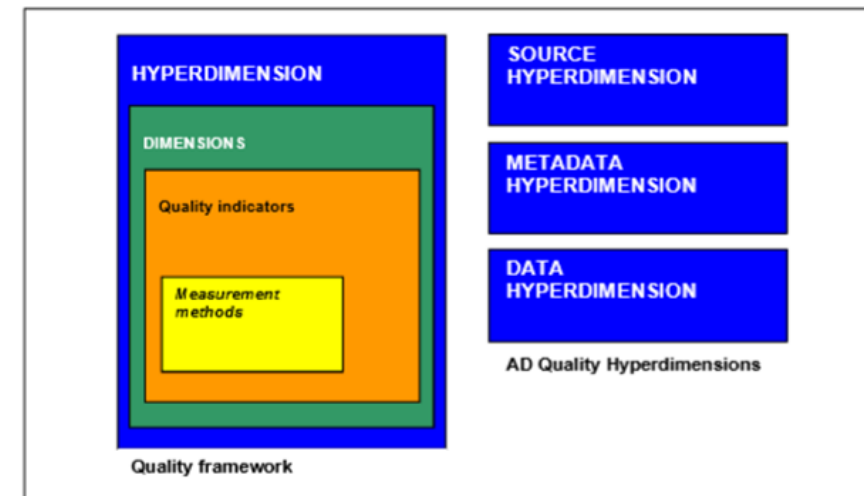


# Administrative data

NBS is now ready to use more and better the **administrative data**:

- ❑ New legal provisions were approved
- ❑ A draft methodology to evaluate the quality of administrative data is developed and now is being tested to be further adopted and implemented

The methodology - inspired by the work of the project MIAD (Methodologies for an Integrated Use of Administrative Data in the Statistical Process) - international group of seven NSI's: Australian Bureau of Statistics, Statistics Canada, Statistics Sweden, Statistics Norway, Office of National Statistics (UK), Statistics New Zealand and ISTAT (Italy)





# Statistical Disclosure Control (SDC)

The use of SDC techniques allows providing more detailed information, while limiting the risk of disclosing confidential information

- ❑ 30 NBS staff were trained from 16 to 19 February 2021 on SDC
- ❑ Procedures for data protection were documented (guidelines on data protection, including SDC)
- ❑ A Public Use File (a file prepared in such a way that individuals cannot be identified, with a minor loss of information) on LFS was prepared
- ❑ The SDC use allowed to open the access to microdata to the researchers



# Statistical Disclosure Control (SDC)



The screenshot shows the website of the National Bureau of Statistics of the Republic of Moldova. The header includes the logo and name of the bureau, a search bar, and navigation links for Home, Request for access to microdata, RSS feed, and Updated: 29.06.2022. The main content area is titled "Request for access to microdata" and contains a paragraph explaining that access to individual data is granted only for scientific research projects. It also lists several annexes related to the regulation on access to individual data for scientific purposes. A "Publishing guide" link is located at the bottom left.

Wednesday, June 29, 2022

Press releases  
Statistical databank  
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Home / Request for access to microdata

## Request for access to microdata

According to the *Law on official statistics* (art. 20), access to individual data that do not allow the direct identification of respondents (microdata) can be granted only for scientific research projects whose expected results do not refer to identifiable individual units.

The conditions under which National Bureau of Statistics (NBS) can grant access to individual data for scientific research projects are stipulated in the **Regulation on access to individual data for scientific purposes**, approved by NBS Order no. 51 of 31.12.2021. The regulation establishes the conditions under which NBS can grant access to anonymized individual data (microdata), in compliance with data confidentiality rules, for scientific research projects. In general, the regulation describes how to request access, who can request it, the necessary documents, the content of the research proposal, the terms of use and ensuring data confidentiality, the responsibilities of the research entity and researchers, the forms of granting access to individual data etc.

► [Regulation on access to individual data for scientific purposes](#)

- [Annex 1: Registration form for research entities](#)
- [Annex 2: Confidentiality undertaking](#)
- [Annex 3: Research proposal application form](#)
- [Annex 4: Individual confidentiality declaration](#)
- [Annex 5: Self-declaration of liability for completion of scientific research activities and for the destruction of scientific files provided by National Bureau of Statistics](#)

► [Publishing guide](#)

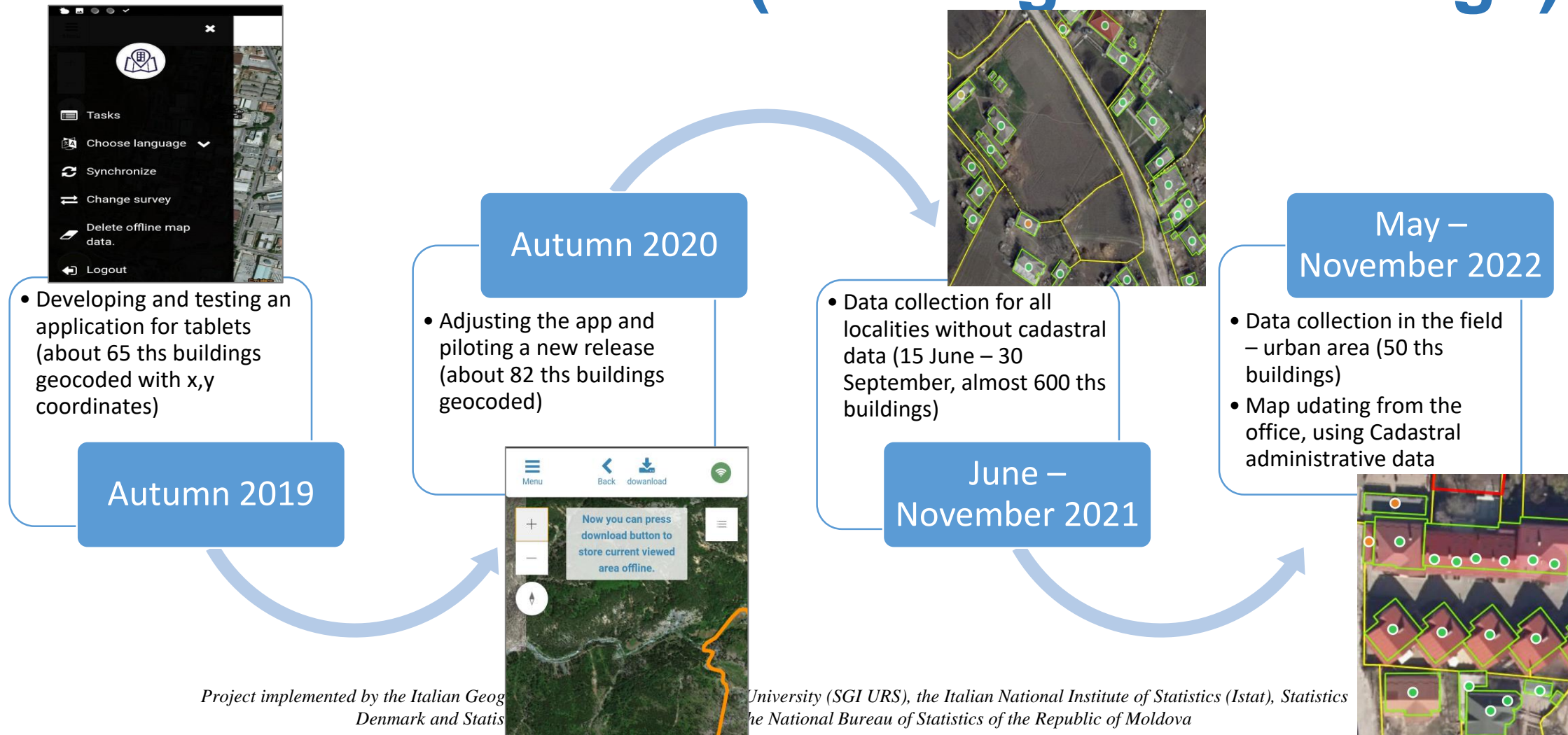




# EMDOS master sample

- ❑ Master Sample design: evaluation of different scenarios depending on decisions on the number of PSUs and on data collection network
- ❑ PSU selection for Master Sample using optimal allocation and available tools
- ❑ Analysis of the results and choosing of the compromise solution taken into consideration available resources and data collection network
- ❑ Final selection of the Master Sample
- ❑ Ensuring time series comparability over time, starting with 1.01.2023

# Georeferenced data (buildings & dwellings)





# Sampling and inference methods

- ❑ 3 NBS staff were trained from 6 to 10 May 2022 on R packages ReGenesses, SamplingStrata, R2Beat and FS4, developed by ISTAT
- ❑ Gradually the packages will be introduced into statistical production in order to be more efficient
- ❑ All sampling and inference work will be done into the same environment (R) in a standardized way
- ❑ Introduction of these packages will decentralize the statistical inference work





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# Thank you for the attention!

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