I. Introduction

1. We all are witnesses of the unprecedented scale of changes which take place in statistics in over the world. It makes us to think permanently and generate new ideas how to organize own statistical business process in innovative and effective manner. However, System of National Accounts, as a fundamental basis for all macroeconomic statistical systems, requires to interpret broadly own statistical goals and not to confine only to the specific statistical area.

2. It is indisputable that there are many different interpretations regarding arrangements for meeting broad statistical needs. The purpose of this paper is to show one more approach how to build own statistical capacity and at the same time help SNA and BOP compilers, as well as supervisors, to open up new data sources for their work and improve significantly their final outcomes.

II. The Statistical Goals of National Bank of Georgia

A. Duties vs Resources

3. Statistical functions of the National bank of Georgia are legally defined by the “Organic Low on National Bank of Georgia” and imply compilation and dissemination financial and external sectors data in line with the international standards. Hence, Monetary and Financial Statistics, as well as Balance of Payments, International Investment position, External Debt, Official Reserves, Money Transfers, Interest Rates, Exchange Rates statistics are under the NBG’s mandate.

4. The first effort on data structuring for Monetary and Financial Statistics in line with international standards, started in 2002. However, due the set of circumstances, such as lack of professional staff and IT resources both in Central bank and in whole banking sector, shortcomings of the appropriate experiences etc., it was quite difficult to solve all the problems we faces building statistical capacity. On

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1 The National Bank of Georgia was established in 1991.
the other hand, presumably as in many other countries like Georgia, we were limited with Excel based questionnaires, e-mail based submission, and manual processing procedures. However, abovementioned stage served as excellent prerequisites for evaluation of innovative statistical business process model with broad statistical objectives, as it initiated implementation of SNA concepts, definitions and classifications among the financial institutions.

B. Step Forward Towards Innovation and Development of Statistical Production

5. In the meantime, the idea of harmonization and standardization of comprehensive and multifunctional data matrix model had evolved, stemming from changes in SNA 2008 and related macroeconomic statistical systems, as well as from changes in international statistical requirements and domestic needs. On the other hand it was time to say “NO” to excel based questionnaires, e-mail based submission, decentralized and technologically outdated statistical procedures.

6. Our data matrix model, so called SebStat, is focused mainly on the balance sheets and profit and losses data. However, other banking and other financial institutions activities, such as money transfers statistics, foreign currency exchange operations, bank payments cards statistics etc. are also included. As the first stage, in order to define statistical data family properly, identification of the peer data groups was needed.

7. How to define data structure properly? The most relevant answer on this question can be found out just in the System of National Accounts: “Who does what, with whom, in exchange for what, by what means, for what purpose, with what changes in stocks?” Pursuing this idea, data structure, for instance, for financial statement data was defined through 17-digit keys:

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
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Each digit identifies special characteristics, such as type of financial/nonfinancial instrument, weather it is assets or liabilities, weather it is stock or flow, maturity, etc. The structure of financial statement data consists of:

- Data entries
8. Structured in such a way and attributed with detailed Code Lists the model provides large amount of information, serving for the wide range of statistical, analytical and supervisory purposes.

9. The same approaches are used for the other data families, collected from the banking sector.

III. **Why SebStat is the Best Data Model Solution**

A. **Advantages from Different Perspectives**

10. SebStat as a comprehensive statistical business process model for National Bank of Georgia is an innovative project, which is successfully implemented in the banking sector. Why it is so advanced?

First of all, SebStat is able to collect, validate, produce, disseminate, and store financial and statistical data through the unified mode. It allows streamline traditional statistical business process model considerably. No manual intervention on the validation and processing stages.

From the respondents point of view that means no paper or excel spread sheets reporting, overlapping and data inconsistency. There is no necessity for data reconciliation among the different statistical domain, submitted to the different units of the NBG, as it was practiced before.

11. From the evaluation perspectives SebStat is flexible enough to reflect any additional requirements without significant resources. This is very important from the SNA and BOP compilers, and also supervisors’ point of view, as SebStat is quite open system for further development from the cooperation point of view.
12. In this respect it is important to emphasize SebStat capability to reflect easily modifications provided by 2008 SNA, such as economic sectorization, financial asset classification and accounting rules. Data keys identifying data structure include reserve digits for any additional requirements if they are needed. The point is to identify correctly statistical needs in terms of quality, coverage, availability, and analytical usefulness of the data. In this respect cooperation with other compilers is very important to reconcile related indicators and procedures.

IV. SebStat from the Other Statistics Compilers’ Perspective

A. Cooperation Strategy

13. In fact, from the very beginning, macroeconomic consistency and close cooperation with other macroeconomic statistical systems compilers was the main idea of our statistical project. SebStat creates a comprehensive database not only for Monetary and Financial Statistics purposes. Moreover, it allows other macroeconomic statistical systems to get early data for their needs. Data consistency is achieved thanks to the using the same concepts by:

- Sectors
- Instruments
- Residency
- Recording rules.

14. As a result SebStat allows to:

- Reflect the value of the stocks of financial assets and liabilities of financial institution, at a point of time –
  - By instruments;
  - By counterpart sectors (who-to-whom approach; residency criteria, geographical distribution, etc. are provided);
  - By currencies;
  - By maturities.
- Show financial flows result from changes within a period of time –
  - Transactions;
  - Valuation changes (VC)
    - Price;
    - Exchange rate.
  - Other changes in volume of assets (OCVA).

15. So, thanks to well-structured data each financial instrument can be presented as a multidimensional variable, which allows users to get desired logical combination of information in line with the international statistical standards. Hence, existing database is fully suitable for different users, who are aware of the macroeconomic statistical systems.
16. Among many other benefits for macroeconomic statistical systems compilers, SebStat provides exhaustive statistics for calculation of indicators, which was impossible before. For example, FISIM – financial intermediation services indirectly measured. Now there is wide availability for SNA compilers to get historical data of interest rates on loans and deposits by sectors and residency, timeliness of the indicators is fully sufficient for the compilation even of monthly GDP; For the BOP compilers data for Primary Income Balance and Secondary Income Balance calculations are available also at the same level of detail, as well as by original currencies. Moreover, there is no limitation to get data by partner countries for detail analysis, etc.

17. Developing issues regarding SebStat data accessibility, now we are motivated to establish right priorities for providing indeed unquestionable merits of our database and thereby encourage high standards of statistical production and analysis in our country. In order to raise public awareness of our data model we are going to explain users “How does SebStat work?” In fact it works like well-known Rubik’s Cube, and allows users to generate step-by-step any feasible combination of data easily and quickly.

B. Future Plans Concerning Cooperation

18. Originally, SebStat was intended for covering the whole financial sector, step-by-step involving the financial institutions, depending of role and size of them. From the implementation perspective SebStat is definitely adoptable for other financial corporations. However, at this stage our resources are too limited to start SebStat implementation process among them. Because we are still continuing SebStat developments in order to design appropriate compilation techniques, based on its advantages for producing NBG’s high quality statistical outcomes, such as Sectoral Balance Sheets, Monetary Surveys, Financial Account, FSIs, and other new analytical products.

19. However, compilers of other macroeconomic statistical systems are waiting to get comprehensive data for whole financial sector of the economy from the NBG. So, we will be pleased to invite all stakeholders, including international donors to take part in expanding the functional capabilities and institutional coverage of SebStat, in form of technical or other assistance, in order to avoid a delay in time, to enrich our experience and share it with others.

V. Lessons Learned

20. a) Based on Georgian experience, it is obvious, that comprehensive multifunctional statistical data model for Central Bank is best solution in order to meet not only own statistical requirements, but also needs of other macroeconomic statistical systems compilers;

b) The right cooperation strategy with data providers is essential, to ensure project success in terms of data relevancy and quality, and readiness for boosting joint effort aimed at strengthening of statistical capacity;
c) Close cooperation with SNA, BOP and GFS compilers on the earlier stage of project designing is important to ensure data model comprehensiveness and methodological consistency.

d) In addition to high level management support, it is very important to have the backing of international partners to raising awareness of the similar achievements on the national and international level, in order to get more benefit from each other's experience and knowledge.