

**Cooperation project between National Statistics Office of Georgia  
(Geostat) and Statistics Sweden**

Progress report

1 November, 2011 – 30 April, 2012

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<b>Project:</b>	Cooperation project between National Statistical Office of Georgia (Geostat) and Statistics Sweden
<b>Project funding:</b>	Swedish International Development Cooperation Agency (Sida)
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# 1 Background

The cooperation project between National Statistics Office of Georgia (Geostat) and Statistics Sweden (SCB) covers a period of three years and started in May 2011. The project is managed by Geostat's management and the long term advisor from Statistics Sweden in cooperation and financed by Swedish International Development Cooperation Agency (Sida).

The objectives of the project are:

- Improve the competence of the staff at Geostat, to ensure production of reliable statistics
- Develop overall functioning of Geostat, including management and planning issues
- Improve the institutional competence, including policies, documentation and standardization, reputation and image of Geostat in the Georgian society

The project will focus on three main areas; support to the development of statistical methods, price statistics and national accounts. Furthermore, the project also comprises collaboration in improving business statistics, IT strategy and policy and management and human resources development issues.

This progress report will describe activities of the project for the period from 1 November 2011 to 30 April 2012.

## 2 Introduction

The project is organised in six components. Two of the components, Price statistics and Business statistics, are divided into sub-components. The components and sub-components as well as missions and study visits conducted during the follow-up period are presented in table below.

Component Number	Component	Sub-number	Sub-component	Missions in period	Study visits
1.	Price statistics	1.1	Consumers Price Index	1	1
		1.2	Producer price index	2	1
2.	National Accounts			2	
3.	Statistical methodology			3	
4.	Business statistics	4.1	Business Register	2	
		4.2	Business statistics survey	0	
5.	IT strategy			1	1
6.	Management			1	

One long term consultant (LTA), resident in Tbilisi, is assigned to the project. A local project consultant supports the project in administrative tasks, translations and interpretations. The local project consultant is financed by the project and reports to the LTA. A part time local project assistant is assigned mainly for administrative tasks and interpretations when needed.

## 3 Project review – work performed and results achieved

### 3.1 *Price statistics*

#### 3.1.1 **Producer Price index**

Two short term missions on the Producer Price Index (PPI) were conducted during the period by Mr. Marcus Friden - one in November 2011 and the other in March 2012. One combined study visit for PPI, CPI and construction price index took place in January 2012. The length of this study visit was 3 days, 3 persons from Geostat's Price division and an interpreter participated. Next mission within this area takes place in the beginning of September 2012. One of the main issues will be development of an export price index.

In the following, recommendations made by the consultant as well as the implementation of them so far, are commented:

1. During the first mission Price statistics division together with head of National Accounts division decided to use industry weights calculated by National accounts. Reliability of data from National Accounts is higher, compared to Business statistics industry weights, which have been used earlier. *Changes in methodology were carried out from the beginning of 2012.*
2. When possible, PPI should include information about enterprise turnovers, if the company is acting in more than one industry. One company might be sampled in several industrial groups. This would improve weight calculation between branches and the shares between enterprises would be more precise. *Changes were carried out in the beginning of 2012. Sampling of enterprises was conducted according to production. That gives opportunity to observe one enterprise with different products of industrial branches in the sample..*
3. Some small improvements for the questionnaires were recommended. Company should define the proportion (share) of a product in its total production for a specific industry. The same data could be obtained also with old description, but by using this new approach, we have a picture of company's production coverage share in the total output of industry. *Changes were introduced in the questionnaires in the beginning of 2012.*
4. Large companies with big weights in PPI should provide information on more than 4 items. These companies would receive 2 questionnaires, no changes in the questionnaires are required. The software should have option to register more than 4 products for one company, which is not possible for the moment. It could be solved by entering the same company twice in the same industry. *Changes were carried out in the beginning of 2012. Sampling was conducted in accordance with the actual production apart from enterprise primary activity and amount.*
5. In the long term it is necessary to use another systematic method of sampling. Since economy of Georgia is quite small, large companies will always be included in the sample. Small companies should be sampled for restricted period of time. Small and medium size companies should be rotated somehow, in order to avoid data contamination, caused by respondent fatigue. *Rotation of small and medium enterprises will be conducted for coming sample updates.*
6. A specific short term mission by an expert from the unit in Statistics Sweden responsible for the Construction Cost Index is proposed for next year (2013). *Index for construction was discussed with Swedish colleagues during the study visit in January 2012.*
7. When new structure of sampling and weights is introduced also questionnaires are affected. *Corresponding changes were made in the questionnaires.*

8. Other changes in the questionnaire are also necessary. Each item should have specific number and the item specification should be pre-printed in the questionnaire to ensure that the price for the exact same item is reported each month. *Corresponding changes were made in the questionnaires.*
9. There are at least 30 large companies in NACE 4200 group in the present PPI sample that should be re-classified before creating a new sample. *Corresponding actions have been conducted. Main part of unclassified enterprises were classified and included in the sample.*
10. An important task for the Price statistics division is to develop and to implement an Export price index. The most appropriate way to do it would probably be to create a domestic PPI and an export PPI. These two parts would then have to be merged to an overall PPI. Weights would have to be divided between domestic and exports, to conform to an overall PPI. The new software should be ready to handle this, and perhaps also the inclusion of an import price index. The import price index and the domestic PPI could be merged to form a price index for domestic supply that is of interest for the National Accounts. To be able to implement all this, the Price Statistics Division would need more resources or new tools to make work more efficient. Otherwise the present surveys could risk to be reduced in quality. *During 2012 an intensively work is planned in order to implement export price index. (If possible also work on import price index could be started).*
11. Construction index is not named correctly in English on the Geostat website, but it seems to be correct in Georgian. The Construction index should not be named as a producer price index. It is an input price index for the construction industry that reflects on the cost of materials. *Change in English title has been done.*

The upcoming work before the next mission in September 2012 should focus on developing a more elaborate press release and publish metadata for PPI on the Geostat website, as well as developing a new database and software for PPI. *English version of metadata is already placed on the website of Geostat. Press release will be published in the nearest future. New database and software is under development.*

### **3.1.2 Consumer Price Index**

The second short term mission on the Consumer Price Index (CPI) was conducted during the period by Ms. Oxana Tarassiouk in April 2012. A combined study visit for PPI, CPI and construction price index took place in January 2012. The length of this study visit was 3 days, 3 persons from Geostat's Price division and an interpreter participated. Next mission within this area takes place in September or October 2012.

In the following, recommendations made by the consultant as well as the implementation of them so far, are commented:

1. Main source of weights should be National accounts instead of Household budget survey. Weights from National Accounts are accessible with or without own-account production. It is recommended to use weights excluding own-account production, because the current CPI covers only urban settlements. *Introduction of a new set of weights that from January 2012 uses the National Accounts data as the main source along with the Household Budget Survey (HBS) as an additional source. Own-account production is excluded.*
2. Influence of new weights on CPI should be explained to users before the implementation. It is important to describe and explain all main changes caused by weight and methodology alteration in consumer basket. *Methodological changes were explained to users. Updated Consumer basket's main groups' weights, methodological changes and detailed list of items and services were published. Public presentation about updated basket and methodology was held for main users.*
3. For weight calculation on detailed level of COICOP some additional sources might be used e.g. household budget survey and information from enterprises. For further improvement, the recommendation is to increase amount of regions, starting with increase of cities. Finally the whole regions can be covered either by collecting prices in some rural areas or by assuming that the price dynamics in the rural areas is similar to the urban areas. A pilot study should be conducted before such an assumption can be done. *For city weights shares of regional monetary expenses are used. The assumption that price dynamics in region villages is proportional to the price dynamics in the selected observed city is made relying on the fact that selected cities are important economic centers in the regions.*
4. A review of goods and services that should be included (or excluded) in the CPI basket is recommended to be done before 2012. *A review of goods and services to be included in the basket has been completed in December 2011.*
5. Distribution of weights between the five cities included in the CPI can be done either with the help of population count or consumption values in Household budget survey. *Regional monetary expenses' shares have been used.*
6. The COICOP five digit level should be the same for all five cities but for more detailed level some area-specific types of items might be chosen. Results from Household budget survey should be used for weight distribution of CPI basket in every city. *We accept the recommendation.*
7. On elementary aggregation level, ratio of geometric mean should be used. When this level is split to form a categorization on the sixth level and the price observations on the seventh level, the aggregation on the lowest level should be based on the ratio of geometric means. Then the second level aggregation could be conducted by the ratio of weighted

arithmetic means. If there is no weight here, the ratio of geometric means should be used. *The lowest group index is calculated using simple geometric mean.*

8. Current price imputation method and its influence should be reviewed, in order to identify the products for which imputation method need to be improved. *We accept the recommendation. But it is a bit unclear what criteria to use in order to identify such products and how to improve the methodology.*
9. Sample size of products should be adjusted by increasing the sample in problematic areas e.g. by looking at the variation and taking into account product weights. Decrease of sample size is recommended for items which are identical within different regions. Before 2012 there is not much time for this work so we recommend some emphasis on a few especially sensitive products. *We accept the recommendation. The same approach is applied for sample size.*
10. Regarding “Actual rental for housing“ (COICOP 04.1), the recommendation is to include more types of apartments in the sample, and preparation of detailed characteristics on them. It is also acceptable to add own houses in the sample. *We plan to increase the sample size.*
11. Acquisition approach is recommended for EU countries, it is explained in Technical manual on owner-occupied housing for Harmonized Index of Consumer Prices”. This approach is recommended compared to “Consumer Cost” and “Imputed rent” methods. The recommendation is small increase of coverage for the new basket in this area, and to investigate additionally market during 2012. *We accept the recommendation partially. EU gives this recommendation for harmonized consumer price indices. It is subject of additional discussion how acceptable this method is for our consumer basket.*
12. Further study of reliability and efficiency of CPI is planned during 2012-2013. The recommendation is to place more detailed descriptions of diagrams in the press releases, followed by explanatory text of CPI changes. *We accept the recommendation. It is planned to conduct changes in this direction.*

The short term mission in April 2012 presented following recommendations which will be dealt with during coming months:

- Metadata – only the English version is available and the main recommendation is to translate the existing version into Georgian.
- The press release needs some minor adjustments, e.g. description of the graphs where the content is not obvious for general users.
- Quality adjustment method for personal computers and mobile phones – an increase of the sample size is one of the first steps suggested for an improvement of the index quality.
- Price and data validation procedures are suggested to provide more comparisons to the historical data.

- Written instructions for regional price collection should be created explaining the rules of price collection and a manual should be written for the handheld computers along with the software used for uploading and sending the data.
- The new software that is under development should be flexible in terms of introducing new calculation and quality adjustment methods. Approximately one year (or at least until the annual update) after the release of the new software it's strongly recommended to make parallel calculations in MS Excel in order to ensure that the software works as intended.

### **3.2 National Accounts**

Two short term missions on National Accounts were conducted during the period by Ms. Birgitta Magnusson Wärmark - one in November 2011 and the other in March 2012.

In the following, recommendations made by the consultant as well as the implementation of them so far, are commented:

1. Investment estimates on a quarterly basis.

As the present quarterly investment survey does not reveal any reliable results in relation to the annual investment survey, another method has been proposed by the consultant. It is based on the classification "BEC, Broad Economic classification" with bridge connection to HS (CN) and ISIC. By the help of products imported to Georgia it may be possible to compile some estimates of investments. The presently used method which is built on the relation between investment values and production values by activity from a 4 year old survey is of no relevance. Until the quarterly investment survey has been so much improved that it can be used and relied upon the BEC-approach could hopefully be used for a preliminary result and to distribute shares of investments between NACE-groups. The national accounts have by March 2012 received imports information which will be used for further development of the proposed method. *Suggested method has already been implemented in calculation of Gross fixed capital formation. The results which we received in Q4 2011 seem to be quite reasonable. Therefore, we will continue to use this approach in the next quarters, till quarterly investment survey will be improved substantially.*

2. Consumption of fixed capital. During the March 2012 mission work was started on building up capital stocks by asset type in the capital account. The 2010 investment survey has meant that new information can be introduced in the Georgian NAs. The survey contains information of new investments but also on capital stocks, however by book-keeping values and not replacement costs as should be the case in NA. But this is a good starting point compared to having no information on stocks at all. Depreciation rates can be found in research papers from e.g. USA. These are widely used in other countries when no other data is available. (A research paper by Yisheng Bu, Boston, also states that the relation between depreciation expenses and capital

stocks as recorded in company accounts may be quite appropriate as depreciation rates.)

*Preliminary version of capital accounts for 2010 was compiled in April 2012. We took into account these recommendations. Depreciation rates by Hulten-Wyckoff methodology from US BEA web-site were used for calculation of Depreciation for several types of fixed assets in public infrastructure, for which no data from survey were available.*

3. During the March mission, the results of the 2012 annual investment survey have been dealt with. Assessments of reliability by assets type have been made. Some problem areas have been identified. New research has to be undertaken for these areas, e.g. register checks. It concerns foremost own produced software, patents and mineral exploration where new information will be sought. Recommendations for own produced software are based on that vocational codes by NACE industry should be used in combination with wages in the IT-activities with an added profit element from NACE 72. NA would need a detailed investment survey running every year, not as now every 5<sup>th</sup> year but also a more reliable quarterly investment survey. *Business Statistics Division has changed annual questionnaire for non-financial corporations. The new questionnaire includes more detailed questions on investment in fixed capital according to the needs of National Accounts. A list of registered patents 2010 were obtained from the National Intellectual Property Center. However, it is still a question how to value them with appropriate market prices. In the area of own produced software we are still looking for relevant data sources for the number of employed programmers.*
4. The most important area for consumption of fixed capital is Government as it has influence on GDP. Within this area roads and railroads are very important. Annual expenditures on roads are included in Government COFOG-materials. But there are no balance sheets on road assets. Information on lengths of roads by different standards is available from the Department of Roads and Infrastructure and railways from Georgian railways enterprise. A compilation of road and railway capital will be made with appropriate prices per meter. *The calculations were made and reliable results are received.*
5. Buildings within government like schools and hospitals are covered as assets in balance sheets in the investment survey. Administrative offices are covered in a survey made by social statistics. The results are handed over to NA. The consultant will supply information on breakdown by machinery and structures for the Swedish Government NA. *Currently we use exactly this method. However, the questionnaire of social statistics survey will be changed in a few months and will include more detailed questions about the structure of fixed capital.*
6. Inclusion of churches in NPISH. How they could be captured was discussed. In order to get a preliminary measure of capital stock, the consultant proposes to apply replacement costs (sales values) multiplied by the number of churches in the country. *There are no data available*

*at this stage. We should try to obtain the number of churches at least to make some estimates.*

7. Other areas of assets. Compilation of permanent dwellings by the cost method (Polish method) is in progress. Today an estimate on secondary homes is included as non-observed economy. Other possibilities of compilation were discussed. These houses could also be registered by help of the cost method or with a measure of rents per week, weeks used and number of secondary houses. It is advisable to check what information is possible to find. Check with Ministry of Justice and department of Tourism and Ministry of External Affairs what register information they can supply. *Imputed rent of own occupied dwellings were calculated by “user cost” approach. The same method is used Polish National Accounts and their experience was very helpful. A new time-series of Imputed rent will be published by the end of 2012 during the general revision. There are no data available on secondary houses at this stage.*
8. NA will need domestic supply indices. They consist of domestic production + imports – exports + government and NPISH sales (if any). As only PPI and CPI are available presently, more price indices are necessary to develop. The consultant proposed to start with export price indices. The initial work could be concentrated to a few products, for which Georgia has considerable amounts of exports, e.g. NACE 24 and 28. As regards import price indices export price indices from other countries could be used as a solution to this problem. E. g export price indices of the USA are available on BLS webpage covering many products. As information is at hand for imports by country, export price indices could be sought by country of origin. *These recommendations are extremely important and useful and this will be one of the main issues for the third mission, which expected to be held in June 2012. At this time we will prepare export price indices for some countries, which are interested from our point of view.*
9. The use of unit price indices was not recommended by the consultant. It is not possible to catch quality improvements in units price indices so therefore they could only be used for very simple products, like for instance gravel. Only if Geostat has extra resources for compiling unit price indices they could be used for comparison purposes on some products. *This recommendation is completely acceptable. No unit price indices are compiled at this time.*
10. Changes in stocks. Discussions on how to compile constant estimates of changes in stocks have been held. Geostat will try to do compilations when resources are available. A quarterly survey is most useful for these estimates as annual surveys give problems with price adjustments. *This is an issue for the next missions.*
11. Volume estimates of Government production is based on number of jobs. Possibilities of measuring hours worked instead, not only number of jobs should be investigated. Today the survey poses questions on hours worked in large intervals (less than 20, 21-40, 41-60) so this

questionnaire ought to be changed. There seems to be other questions that probably could be deleted (commuting time for instance). *These issues will be discussed with the representatives of Social Statistics Division, where LFS are conducted. It is possible to change these items in questionnaire. Final decision will be done before the third mission.*

12. Any more information on public activities, e.g. education and health care to help introduce volume indicators for non-market individual production. Check what information is available on e.g. universities and hospitals. We should go through the detailed compilations for all parts/COFOG and also set up a road-map for development of volume indicators. *Detail sets of education and health care indicators will be prepared for the third mission. These data are available from administrative sources and processed in Social Statistics Division.*
13. Deflation of tourism purposes. A model was presented on this item during the November 2011 mission. Geostat will try to receive more information from the Department of Tourism, as they have a border survey of incoming tourists. Maybe some help on tourism satellite accounts too in the future. *There are no data available from the department of Tourism and Resorts at this stage. However, it is possible to receive some information from them in the future.*
14. Documentation. Metadata has been translated and a structure is set up. The material will be distributed to the staff members and further work will be carried out during coming years. *Swedish inventory for Quarterly National Accounts has already been analyzed. This material will be used as an example for preparation of Georgian metadata of National Accounts. Metadata should be published on Geostat website by the end of 2013.*
15. Non-observed economy. A new survey on private teaching is now being launched and will be available by the next mission. *Survey of Non-observed economy in education has already started. Field works are in progress at this time. Survey results will be available in July 2012.*
16. Business statistics is implementing new software in 2012. Kaisa Ben Daher will bring up the question on changing to NACE rev.2 with them. A plan has to be set up for the introduction of NACE rev.2. *Implementation of NACE rev.2 is included in current year's programme of Business Statistics Division. The issue was discussed during a mission on business register in April 2012.*
17. Set up a plan for adaption to the new ESA transmission programme. There are requests for new information on pensions and on R&D which may demand collection of new information and creation of models.

*This is very challenging item. Plan for the implementation of SNA 2008 has already compiled. We will start to analyze new requirements of ESA transmission programme as well.*

18. Geostat's NA division is very depending on the qualifications of a few employees. It is recommended that a circulation of items/tasks takes place among the personnel so that a broader knowledge is applied. It would also be a good idea to try to exchange personnel within units of Geostat for shorter periods. This gives a better understanding between primary statistics and NA about what kind of information/statistics the respective divisions have and need. *This is a very good idea. However, not any effort was made to realize it in practise at this moment.*

### **3.3 Statistical Methodology**

Statistical methods are one of the focus areas within the project. The goal is to strengthen the capacity of the staff in general concerning statistical methods within survey methodology and in specific to train a number of staff members from different subject matter areas in more advanced statistical methodology in theory and practice.

It was agreed by Geostat and Statistics Sweden to start with a training course on general survey methodology that consists of five parts with a length of one week (five days) each. The first two weeks of preparatory level were conducted during the inception period (September and October 2011).

The third part of the training course took place in December 2011 and the remaining two parts on advanced level were conducted during the first quarter of 2012. For each course week two teachers (experienced experts from Statistics Sweden) were responsible. Following persons have been responsible for preparations and lecturing during the course: Michael Carlson, Joakim Malmdin, Martin Axelsson, Claes Andersson, Ann-Marie Flygare and Tiina Orusild.

During the first week of the training course about 20 people representing different subject area divisions at Geostat participated, both heads of divisions and other staff members. The number of participants was then successively reduced when the level of the training course became more advanced.

After the third part of the course a test was prepared and totally 9 participants of the course attended and all of them passed the test. The test results helped us to assess the quality of the training and the skills of the staff to understand statistical terms and also to be able to adjust the future training into the competence level of the staff and to the requirements of the management.

The last two weeks of advanced training course was actively attended by approximately 10 staff members from different parts of the organisation. The course material including presentations, exercises and reading assignments are published on Geostat's website.

Next step in capacity building within statistical methods will be a creation of a methods working group consisting of 4-5 staff representing different divisions. This would have a task to go through Geostat surveys from the methods point of views (sampling, under- and over coverage, imputations etc), to make a documentation of methods used and to discuss them with experts from Statistics

Sweden. First short term mission will take place in June to discuss sampling methods for Business Statistics survey.

Additional step is to let 2 participants attend the Summer School organised by Örebro University and Statistics Sweden in June 2012. The course will deal with construction of measurement instruments e.g. questionnaires.

### **3.4 Business statistics**

First one week mission within business statistics devoted to promotion of business register was carried out in November 2011. The second mission of 8 days was conducted in the end of April 2012. Both missions were carried out by Mr Kent Olofsson.

After the November mission the short term consultant provided some recommendations and an activity list for Geostat to work with before the next mission would take place. The mission report from the second mission is not yet available.

In the following recommendations made by the consultant as well as the implementation of them so far are commented:

1. Creation of a working group for analysis of the recommendations to go through the mission report, to find out the most important issues and try to work them through. *The group has been created and it consists of 10 persons mainly from Business statistics division but also IT- and sampling experts. The group has started the task and has worked out a document on how to convert from the old system to the new one.*
2. Creation of the structure of the business register and a preparation of a new model of database. *The task is currently on going. The database model is made in Visio. A lot of work has been dedicated to the model. The model is also implemented in data bases.*
3. In cooperation with Revenue service, creation of the descriptions for database from Revenue service (preparation of metadata). *The action is currently on going (a letter was sent to the Revenue service and we are waiting for a reply with additional information).*
4. Processing of database from Revenue service (A-table, T-table, Change-table, Input-table) by using data from the Tax file. *The action hasn't started yet (We are waiting for some additional information from Revenue service).*
5. Creation of new software for Business Register. *The development of new software has started. The recommendation to replace the existing database, Paradox with one or a set of SQL-databases were followed. The fact that Ms SQL Server was chosen is an extra advantage.*

6. Creation of new Business register (migration of database in new software) using new structure aA-table, T-table, Change-table, Input-table). *Currently On going.*
7. Review of different administrative sources, in scope of enterprise status (active non-active) and activity type (NACE) or surveying using different ways and periods. *Currently Ongoing but we are waiting for additional information from Revenue service. After processing and analyzing this information we plan specific action.*
8. Preparation of Business Register metadata. *Preparation is conducted. The metadata currently includes descriptions of database tables and classifications and also the structure of the database and consists of 58 pages. The metadata documentation is not finished yet but will be further developed.*
9. Consultations with Swedish experts (On-line). *We haven't used this opportunity yet.*

### **3.5 IT Strategy**

A one week long mission regarding IT strategy and policy issues was conducted in November 2011. The main purpose of this mission was to discuss the draft IT Strategy compiled by Geostat and to propose continued work to finalise a first version of the strategy and IT policy. The recommendation of the consultant – Gösta Nilsson – was that the work on IT strategy should go on at Geostat with some proposed activities by the consultant e.g. regarding IT skills supply, continuity and sustainability. The need for additional consultancy should be decided by Geostat. The consultant also suggested a study tour to Statistics Sweden before development of a new tool for a web based data collections starts. During this study visit also the PC-Axis software package should be examined in more depth as a tool to increase the Geostat website flexibility. It was also suggested that the security and confidentiality rules should be worked out with the support of an expert in security matters. Introductory discussions could take place during the proposed visit to Statistics Sweden

A study visit on IT, as proposed by the consultant, was carried out in March 2012. The length of the visit was 4 days. Deputy Director of Geostat, 2 persons from IT division and an interpreter participated. Issues on electronic data collection tool SIV, IT security and data dissemination tool PC-Axis were dealt with. The progress made at Geostat regarding IT development issues after the short term mission in November 2011 was presented. Some questions were raised during the mission: The costs of license for PC-Axis tool and the possibility to arrange a training course for Geostat staff in PC-Axis if the tool will be implemented in Georgia (depends of the costs).

Next short term mission on IT related issues will tentatively take place in second half of 2012.

### **3.6 Management**

First mission within management component was carried out by two management consultants – Chris Denell and Per Cronholm - during one week in February 2012. The main objective of the mission was to make an assessment of Geostat's current management situation and outline a plan of improvement in areas where shortcomings were identified. In agreement with Geostat's top management the consultants selected the two areas, planning including steering and follow-up and HRD, as suitable for project support. The planning support targets Geostat's budget planning procedures and the HRD focuses on design and partial implementation of an HRD system.

The mission activities included meeting with Geostat's top management as well as several meetings with important stakeholders e.g. National Bank of Georgia, and Ministry of Finance. Some of the persons met were also members of Geostat Board. All managers at Geostat were invited to a half day seminar on management issues. The role of a national statistics institute and the general concept of management were outlined. The participants also had group discussions on the current situation at Geostat, its mandate, tasks, strengths and shortcomings.

The consultants also discussed and modified the descriptions of organisational development and capacity monitoring found in the Result Based Management (RBM) Matrix included in Appendix 1.

Next mission within management component will take place in the beginning of July and will focus on Human Resource Development issues.

## **4 Remaining short term missions first half year of 2012**

- National Accounts – third mission for promotion and for long term improvements in NA in June 2012
- Business statistics – first mission for the improvement of sampling procedures and documentation in business statistics survey in June 2012
- First mission on Human Resource Development in July 2012

## **5 Changes in contents**

A study visit on IT was conducted in March 2012. A planned short term mission on IT has been postponed until second half year 2012.

## **6 Risk assessment**

Activities listed in the Results Based Management matrix (RBM) in appendix 2 are planned to be carried out during the project period, but the outcome of the activities may come later. Some minor changes of the activities might be necessary to make due to changes in needs, external requests and priorities.

Prerequisites for achieving the results are:

- No or small turnover of key staff at Geostat
- Availability of short term consultants from Statistics Sweden
- Capacity at Geostat to receive short term consultants

To overcome these risks is an important task for the project and can be done using following actions. Human resource developments e.g. in –house training would make Geostat to an attractive workplace which should decrease the staff turnover. If and when shortage of short term consultants appears, Statistics Sweden handles this by hiring former employees or independent consultants. The capacity at Geostat to receive short term consultants is managed by forward planning and coordination made by the LTA in cooperation with Geostat.

An external risk related to achievements of results is a severe diminishing of the Geostat budget.

## 7 Conclusions

The project runs smoothly and mainly in accordance with original planning. All three parties (Geostat, Statistics Sweden and Sida) expressed their satisfaction with the project.

Regarding the RBM matrix (Appendix 1) the contents of the two components within management – Organisational development and Capacity monitoring – were approved by Sida. Minor adjustments in the RMB matrix were proposed by Sida (marked in the matrix).

A new component ‘Monitoring business survey response burden/Regularly Impact Assesment’ was proposed by Geostat and approved by Sida.

## 8 Cost summary

The project started in May 2011 and is scheduled to finish in April 2014. The cost summary below mirrors the utilisation of means from May 2011 to March 2012. The assignment costs include the purchase of a project vehicle.

### Cost Summary, SEK

Item	Budget	Invoiced up to 30 November 2011	Invoice and credit notes 2012 Q1	Accumulated costs	Balance	Utilisation as of 31 March 2012
Fees	10 157 000	1 327 405	1 354 855	2 682 260	7 474 740	26%
Reimbursable costs	3 052 000	332 528	239 464	571 992	2 480 008	19%
Assignment costs	2 132 000	284 301	147 121	431 422	1 700 578	20%
Contingencies	1 500 000	0	0	0	1 500 000	0%
<b>Total</b>	<b>16 841 000</b>	<b>1 944 234</b>	<b>1 741 440</b>	<b>3 685 674</b>	<b>13 155 326</b>	<b>22%</b>

## Appendix 1

### RBM (Result Based Management) matrix for the period 1 May 2011 – 30 April 2012

Input	Activity	Expected output	Expected outcome	Indicators and sources of information	Status 30 April 2012
LTA (Long Term Advisor)	Assist in the smooth running of the project. Coordinate project activities including short-term missions with Geostat needs and with other donor - financed activities. Follow-up of the short-term missions and study tours.	Geostat receives support according to the project plan. The objectives of the project are completed.	A more efficient Geostat. Successful implementation of the project.	Number of short term missions carried out. Reports of short term missions. Number of study visits. <a href="#">Number of visitors, press releases and reports on the website.</a> Progress reports Evaluation of the project <a href="#">in the end.</a>	16 short term missions carried out by 30 April 2012. Reports from 15 missions are received and approved. 3 study visits to Statistics Sweden have been conducted during the period.
STC	Training in statistical methods	-improved competence in --sampling theory and application --general survey methodology --time series analysis --register statistics --questionnaire design and testing	-statistics are produced according to established and recognised methods, i.e. reliable statistics are produced -increased competence of staff in statistical methods	-number of statistical products having implemented up-to-date methodology concerning the specified area	Training course in statistical methods is completed, totally five weeks of courses have been carried out. Geostat personnel are satisfied and see the courses beneficial and efficient. Business statistics survey has introduced new sampling methods and currently works with documentation.

STC	Course "Statistics in Action" (if agreed, will replace some other components in training)	<ul style="list-style-type: none"> <li>-staff understand the survey process</li> <li>-report from course survey</li> </ul>	<ul style="list-style-type: none"> <li>-staff better prepared for work on all phases of surveys</li> <li>-better quality in the survey process, leading to better quality of published data</li> </ul>	-course carried out	The first phase of training in statistical methods consisted of 5 * 1 week training in general survey methodology. 'Statistics in Action' will not be carried out.
LTA / STC	Support for development of methods strategy	-methods strategy	-common basis for statistical methods	-strategy exists	Work has not started yet.
STC	Improve national accounts	<ul style="list-style-type: none"> <li>- exchange of experience of NA in day to day work</li> <li>-household final consumption reviewed and calculated in constant prices</li> <li>-construct full institutional sector accounts for government</li> <li>-new questionnaire for business survey</li> <li>-better methods for calculation of output, intermediate consumption, value added and taxes and subsidies</li> <li>-seminars on supply and use tables and on input/output-tables</li> <li>-seminars and training on fixed capital formation and calculation of consumption of fixed capital</li> </ul>	<ul style="list-style-type: none"> <li>-improved methods where relevant</li> <li>-better possibilities to analyse household final consumption when changes in volume can be studied</li> <li>-government sector can be analysed in NA definitions</li> <li>-higher quality in collected data</li> <li>-more reliable data on the production side</li> <li>-increased competence in supply and use and in input/output</li> <li>-increased knowledge on capital formation and consumption of fixed capital</li> </ul>	<ul style="list-style-type: none"> <li>-household final consumption is calculated in constant prices</li> <li>- institutional sector accounts for government are completed</li> <li>-staff has enough knowledge to start calculation of fixed capital formation</li> </ul>	<p>2 short term missions have been conducted so far. A plan for activities has been drawn up.</p> <p>New method has been implemented in calculation of Gross fixed capital formation.</p> <p>Preliminary version of capital accounts for 2010 was compiled and published in April 2012.</p> <p>Survey of Non-observed economy in education has started</p>
STC	Improve the Consumer	-To introduce a new set of	- raising the quality of the	- customer	2 short term missions

	Price Index (CPI)	<p>weights based on NA for the 2012 index (first publication would be for the January 2012 index)</p> <p>-To introduce a new set of products in the basket with specifications based on the NA weighting system for the 2012 index (first publication would be for the January 2012 index).</p> <p>-To analyse and determine the best form of elementary aggregation for use in the CPI from 2012.</p> <p>-To analyse the adequacy of the present methodology for seasonal products. Finished during 2011 for implementation (if needed) in January 2012.</p> <p>-To reach a decision on the re-allocation of the sample of price observations for the 2012 index based on an analysis of price change variation within elementary aggregates. Finished during 2011.</p> <p>-To elaborate working rules for the field work and written instructions to price collectors. The work should start and a draft be produced in 2011. Final instructions to be produced during 2012.</p> <p>-To decide on the implementation of hand-held</p>	CPI towards internationally recognised standards without increasing the resources needed for current production to gain higher satisfaction from customers	satisfaction from National Bank	<p>conducted so far. First two activities (outputs) – new weights based on National Accounts and new set of basket based on the NA weighting system - were implemented as planned for the January 2012 index.</p> <p>On elementary aggregation level (the lowest group index) ratio of geometric mean is used from 2012.</p> <p>Hand-held computers for CPI field work were implemented in 2011.</p> <p>Instructions for the price enumerators will be produced during 2012 describing the price collection rules as well as how the handheld computers and software for uploading and sending the data is used.</p>
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		<p>computers for CPI field work and make the necessary modifications of existing software, as needed. To be done in 2012. (NB: It is possible that a further analysis of this issue will conclude that hand-held computers are not an efficient solution for the Georgian CPI.)</p> <p>-To develop improved methods for certain products with more complex pricing patterns. Work should proceed product by product and start in the second half of 2011. Improved methodology should be implemented for at least mobile telephony in January 2012 and for all products, where needed, in January 2013.</p> <p>-To produce a methodological handbook on the CPI. To be finished in 2013.</p> <p>- To investigate the need for measures of core inflation and their definition. To be finished in 2013.</p>			<p>The increase of the sample size up to the acceptable level is strongly recommended and will be implemented as a first step of improving the treatment of personal computers and mobile phones.</p> <p>New, more flexible for different kinds of adjustments, software is developed for CPI and will be implemented in the nearest future.</p>
STC	Improve the Producer Price Index (PPI)	<p>-To change the weighting system in the PPI to one based on total national production. To be implemented for January 2012.</p> <p>-To introduce a modernised PPI system. The consultant will</p>	- raising the quality of the PPI towards internationally recognised standards without increasing the resources needed for current production to gain higher satisfaction from	- customer satisfaction from NA Division at Geostat	3 short term mission conducted so far. Change of weighting system in the PPI one based on total National Accounts was implemented in March

		<p>assist in checking the correct working of the system. To be implemented in 2012.</p> <p>-To introduce written instructions to price collectors. To be finished in 2012. To reach a conclusion on this matter in 2011.</p> <p>-To produce a methodological handbook on the PPI. To be finished in 2013.</p>	external (e.g. National Bank) and internal customers (NA)		<p>2012 from January 2012.</p> <p>Development of new software for PPI in on - going.</p> <p>The work on written instructions to price collectors is also on-going.</p>
STC	Implementation of commissioned statistics	5% of Geostat turnover comes from commissioned work	The income from commissioned work makes it possible for Geostat to continue the improvement of its services	-Geostat financial turnover	The proposal from Geostat 's management on postponing or removing these activities from the project was discussed at the semi -annual meeting in November 2011 and approved by Sida.
STC and LTA	Support for elaborating and implementing IT policy and IT strategy, incl. IT security rules	<ul style="list-style-type: none"> <li>- IT policy document, incl. IT security policy</li> <li>- IT strategy document, incl. IT security strategy</li> <li>- continuously monitoring and support (LTA)</li> </ul>	<ul style="list-style-type: none"> <li>- only approved software is used for data processing</li> <li>-data security is guaranteed through backup routines and other policies</li> <li>-policy is followed by all computer users</li> <li>-long term IT planning is supported by the strategy</li> </ul>	<ul style="list-style-type: none"> <li>- brands of software used</li> <li>- policy and strategy documents produced</li> <li>- virus attacks on a minimized level</li> <li>- no data disasters</li> </ul>	A proposal for new IT policy and strategy was prepared by Geostat and discussed with an expert during a short term mission in the middle of November. A study visit on IT in March also dealt with this issue.
STC	Improve business statistics	- better methods for updating and maintaining of the business	- improved statistics for use as input in the National	<a href="#">Customer satisfaction from</a>	2 short term mission on business register

		<p>register</p> <ul style="list-style-type: none"> <li>- appropriate sampling and estimation methods for the business surveys</li> </ul>	<p>Accounts, leading to better quality.</p>	<p><a href="#">National Accounts division at Geostat</a></p>	<p>conducted so far.</p> <p>Several actions are on going to improve the quality and the updating routines of the BR. New software will be implemented in the nearest future. Metadata for BR and for sampling methods are produced.</p>
STC	<p>Management: HRD</p>	<ul style="list-style-type: none"> <li>- further developed HRD planning process</li> <li>- a management training program</li> <li>- a program for appropriate training of different staff categories</li> </ul>	<ul style="list-style-type: none"> <li>-more efficient management of Geostat</li> <li>-staff trained for their duties</li> <li>-establish efficient human resource's practice</li> <li>- better motivated staff</li> </ul>	<ul style="list-style-type: none"> <li>-documented routines for the HRD planning process</li> <li>-number of staff participating in training programs</li> </ul>	<p>First HRD mission will take place in July 2012.</p>
STC and LTA	<p>Management: -development and implementation of dissemination and communication policy and strategy documents</p>	<ul style="list-style-type: none"> <li>-policy and strategy documents for dissemination and communication</li> </ul>	<ul style="list-style-type: none"> <li>-systems for dissemination to users standardized and applied</li> <li>-communication procedures with users developed and applied</li> <li>-improved awareness of Geostat statistics and its contribution to the development of the country</li> </ul>	<ul style="list-style-type: none"> <li>-policy and strategy documents drafted and disseminated</li> <li>-<a href="#">annual communication plan on press conferences, lectures and seminars</a></li> </ul>	<p>Work has not started yet.</p>
ST and LTC	<p>Management -organizational development</p>	<ul style="list-style-type: none"> <li>-further developed budget planning and reporting procedures in place</li> <li>- internal and external</li> </ul>	<ul style="list-style-type: none"> <li>-Increased effectiveness in Geostat</li> <li>-planning and HRD duties devoted on middle</li> </ul>	<ul style="list-style-type: none"> <li>-documentation on budget planning procedures exists</li> </ul>	<p>Geostat management will improve the working process including planning,</p>

		<p>communication patterns improved</p> <ul style="list-style-type: none"> <li>-internal and external cooperation improved</li> <li>-more involved middle management</li> <li>- more effective decision making processes</li> </ul>	<p>management</p> <ul style="list-style-type: none"> <li>-NSS issues more to the forefront</li> <li>-increased internal coordination</li> </ul>	<ul style="list-style-type: none"> <li>-regular planning meetings with middle managements take place</li> </ul>	<p>communication and coordination, internally and externally</p>
ST and LTC	<p>Management</p> <ul style="list-style-type: none"> <li>-capacity monitoring</li> </ul>	<ul style="list-style-type: none"> <li>-procedures for planning, steering and assessment documented</li> <li>- improvements in various statistics documented and systemically used for further improvements</li> </ul> <p>Tools and methods for measurement of the effect of training courses in place</p>	<ul style="list-style-type: none"> <li>-better tools to monitor and assess the capacity development in Geostat in place</li> </ul>	<ul style="list-style-type: none"> <li>-documents on planning, steering and assessment procedures available</li> <li>-results from monitoring exercises available</li> </ul>	

## Appendix 2

### Tentative planning of short term missions and study visits

September - December 2012

Short term missions	When	Comments
Statistical methods	September	Nace rev 2
Statistical methods	November	Sampling
National Accounts	October	
Price statistics CPI	October	Confirmed
Price statistics PPI	September	Confirmed
Business register	November	
IT (PC Axis?)		
Monitoring Business survey response burden (RIA?)		
<b>Study visits</b>		
Business statistics	September	
<b>Semi-annual meeting</b>	28 November	

