ANNEX D5 – 1 TERMS OF REFERENCE D5

Terms of Reference EU Twinning Project IL/12 CRIS 2015/370-467

23-26 May 2017

Component D: Methodological and – geo-spatial tools for improving the quality and efficiency of field surveys

Activity D.5: Study visit to Central Statistical Office of Poland

0. Mandatory results and benchmarks for the component

Mandatory results:

• Optimization of field workload allocation using geo-spatial tools for managing field surveys in designated area

Benchmarks:

- **ID1:** Definition of indicators to measure the efficiency of field work and reliability of estimates with a view to reduce costs and improve sample quality developed.
- **ID2:** Methodological paper on managing and monitoring field work using geo-spatial procedures during data collection process.
- **ID3:** Methodological paper on optimization of workload allocation of fieldwork using geospatial procedures and other tools.
- **ID4:** Feasibility test for managing and monitoring field work evaluated.
- **ID5:** Feasibility test for optimizing workload allocation of field work evaluated
- **ID6:** Design specification of a geo-spatial application, to identify and analyse regional non-response and enable rapid reaction and handling of problematic "hot spots"
- **ID7:** Design specification of a geo-spatial application, to optimize allocation of field workers' workload and enable multi-survey sampling

1. Purpose of the activity

The overall purpose of this activity is to gain detailed knowledge and hands-on experiences of the Polish system for workload allocation for multi fieldwork surveys taking into account the constraints dictated by each survey (reference time, allocation to filling in the questionnaire etc.). Furthermore, the purpose of the study visit is to gain knowledge and hands-on demonstrations on how CSO monitor and manage progress in surveys in real time and when and how actions are taken.

Subjects to be covered will be:

- The work flow within the Core Stat system
- The combination between field surveys, each with its specific constraints
 - ✓ Organizational side

- ✓ How CSO allocate workload to interviewer at a practical and operational level for multiple surveys taking into account constrains between surveys – e.g. time frame of each survey has to be completed in, length of time needed for each surveys, travel time, etc
- ✓ How do you combine household surveys and person surveys
- ✓ How do you build your frame. Do you start out with yearly workload allocation or weekly/monthly workload allocation
- ✓ How do you ensure that the burden on individuals/household is acceptable
- ✓ Training/knowledge needed for each survey both when it comes to managers and interviewers
- ✓ How do you prioritize between surveys and how do you update plans etc
- Presentation of field allocation and monitoring views.
- Monitoring dashboard for field supervisor.
- The "What" questions: what CSO monitoring and managing, what are the constraints, what is important during field allocation.
- Sampling procedures and multi survey sampling at CSO.
- Software requirements and architecture of Core Stat System.
- Integrating GIS components as an integral part of the whole system throughout all stages on all platforms (tablets, Headquarters managing and monitoring etc.)
- Planning outsourcing: what is critical to leave inside the organization in order to have maximum control and what to outsource.

2. Expected output of the activity

- Study visit report
- Recommendations

3. Participants

ICBS:

- Mr. Tzahi Makovky, Deputy Senior Director, Statistical Methodology Department, ICBS. Tzahi joined Statistical Methodology Department in 1988 and was part of a team responsible for sampling in household surveys. In his current position Mr. Tzahi Makovky is responsible for several sectors dealing with sampling and estimation methods for household persons & business surveys in ICBS. Email: Tzahim@cbs.gov.il
- Mrs. Anna Binstok Cohen, Director of GIS for Census Division, ICBS. Anna Binstok Cohen is in charge of GIS operations for census purposes since 2005. Anna Binstok Cohen works in the GIS Sector that is responsible for providing the geographical infrastructure, geocoding and GIS services for all projects in the ICBS. Anna Binstok Cohen took part and had acquired experience in a variety of GIS projects in the ICBS. Email: annabc@cbs.gov.il
- Ms. Galina Seinberg, Director of IT Sector for Census, IT Department, ICBS. Galina joined the IT Department in 2000 and was part of a team responsible for computerizing the 2008 Population Census. Since 2012, Ms. Galina Seinberg has been the manager of the IT sector in charge of the Census, Longitude Survey and other surveys. This position includes computerizing for WEB, mobile, tablet/laptop and management systems. Email: galinash@cbs.gov.il
- Ms Limor Charnotzki, Director of Households surveys, survey Department ICBS. Ms Limor Charnotzki is working at the Survey Department since 2002. The Department is responsible for planning and managing all the ICBS surveys and censuses. Ms Limor Charnotzki manages the planning and managing of two surveys the longitudinal survey and the Social survey. Email: limort@cbs.gov.il

- Mrs. Luba Faktarovich, Coordinator of Households Surveys, Survey Department ICBS. Ms. Luba Faktarovich is responsible for the longitudinal survey and the social survey since 2011. The Survey Department is responsible for planning and managing all the ICBS surveys and censuses. Email: luban@cbs.gov.il
- **Mr. Nitzan Hachohen**, Senior Director of Survey Department, ICBS. Prior to his current possition Nitzan Hachohen was head of domain of the population field work census that was implemented in 2008. In 2009 Nitzan Hachohen joined the Survey Department. The Department is responsible for planning and managing all the ICBS surveys and censuses. Email: Nitzanh@cbs.gov.il
- Mrs. Charlotte Nielsen, Resident Twinning Adviser since March 2016 where her main responsibilities include planning and co-ordination of Twinning activities with the ICBS, the European Union Delegation, stakeholders and experts from EU member states. From 2008 2016 Ms. Charlotte Nielsen, hold a position as Senior Advisor in the Research Services division of Statistics Denmark. Charlotte Nielsen has a Ph.D. in insect pathology and a master degree in agricultural studies. Email: cln@dst.dk

CSO:

- **Mr. Janusz Dygaszewicz,** Director of the Programming and Coordination of Statistical Surveys Department CSO
- Mrs. Magdalena Janczur-Knapek, Head of Modern Techniques of Data Collection Section in the Programming and Coordination of Statistical Surveys Department CSO
- Mrs. Katarzyna Ciesielska, Senior Specialist in the TERYT Registers Section in the Methodology, Standards and Registers Department CSO
- Mrs. Julita Świętochowska, Head of the Statistical Sampling Frames Section in the Methodology, Standards and Registers Department CSO
- Mrs. Karolina Warno, Specialist in the Statistical Sampling Frames Section in the Methodology, Standards and Registers Department CSO
- **Mr. Robert Wieczorkowski,** Consultant in the Statistical Sampling Frames Section in the Methodology, Standards and Registers Department CSO
- Mr. Waldemar Popiński, Head Specialist in the Statistical Sampling Frames Section in the Methodology, Standards and Registers Department CSO
- Mr. Piotr Gradzik, Head of Unit in the Statistical Computing Centre in Radom
- Mr. Miroslaw Migacz, Head Specialist in the Geospatial Information Section in the Programming and Coordination of Statistical Surveys Department CSO
- Mr. Artur Łączyński, Director of the Agricultural Department CSO
- Mrs. Renata Kaczkowska, Consultant in the Agricultural Department CSO
- Mrs. Elżbieta Lipińska, Head of the Surveys Section in Regional Statistical Office in Warsaw

4. Current Status of Methodological and Geo-spatial Tools for Improving the Quality and the Efficiency of Field Surveys (quotes from the Twinning contract)

The ICBS is regularly improving the quality and efficiency of field data collection in surveys. Nonetheless, until now no attempt was ever made to achieve this goal through optimal use of geospatial tools. Geo-spatial tools can support field surveys from the early stage of sample design up to the dissemination phase. In this Twinning project, ICBS seeks to focus on fieldwork management and monitoring, following the recommendations of the experts in the previous twinning project. More specifically: The daily management of field interviews should be improved: Data collection in several surveys should be combined and be performed by the same interviewers; local response rates should be identified by areas, in order to be able to address region-specific problems. Geo-spatial technologies can support the identification and analysis of regional under-coverage, and enable rapid reaction and handling of problematic "hot spots".

There are two main sampling frames: The Population Register – for sampling individuals and households, and the Dwelling Register for sampling dwelling units. Currently, all field surveys conducted by ICBS are sampled after geocoding of each unit in the sampling frames. ICBS conducts four main field surveys - Labour Force Survey, Household Expenditure Survey, Social Survey and Longitudinal Survey. However, the samples of these surveys are drawn separately for each survey. Moreover, the distribution of the workload units between the field interviewers is also performed independently for each survey, which has its own constraints dictated by its methodology: data collection period, time span feasible for collection, reference period, and so on.

Effective and economic work processes would maximize the time allocated by interviewers to data collection and minimize travelling time. ICBS is looking for a methodology that would yield optimized planning and allocation of workload units to interviewers, to reduce travelling time and increase data collection time, by combining data collection for various surveys while taking into account their respective constraints.

The second possible contribution of geospatial methodology deals with the optimal management of the fieldwork in real time. The goal is not only to achieve high response rates (ICBS enjoys a field response rate of 80% and more), but also to identify under-coverage areas and pockets of nonresponse in the midst of data collection and reallocate resources for their optimal treatment. In the current situation, problematic areas of coverage are acknowledged only at the end of the fieldwork.

Timetable of study visit for the representatives of the statistical office of Israel

20th March 2017

Morning session - Key-	words: Interviewers	burden, workflow
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09.00 - 9.15Welcome and presentation of participants - CSO

and ICBS

09.15 - 9.45The system of official statistics in Poland – CSO

(Mr. Janusz Dygaszewicz)

09.45 - 10.15The system of official statistics in Israel – ICBS

10.15 - 11.30The organization of work on the survey - CSO

> and discussion - all of participants (Mrs. Magdalena Janczur-Knapek)

Coffee break 11.30 - 12.00

Afternoon session 1 - Key-words: TERYT and GIS

12.00 - 13.00National Official Register of the Territorial

Division of the Country (system TERYT) as a basic

register in a public statistics and a base for activities in the field of GIS - CSO and discussion

all of participants

(Mrs. Katarzyna Ciesielska)

13.00 - 14.00Dinner

Afternoon session 2 - Key-words: Strategy for drawing

14.00 - 15.30Sampling frame for social surveys; strategy for

drawing of the sample for surveys - CSO and

discussion all of participants

(Mrs. Julita Świętochowska, Mrs. Karolina Warno, Mr. Robert Wieczorkowski, Mr.

Waldemar Popiński)

21th March 2017

Whole day - Visit in Statistical Computing Centre in Radom. The second day of the visit – in Radom – will be entirely organized by the IT people and discussion IT architecture at a more technical level for IT people will be possibly

Key-words: Simulations, coordination in real time, IT environment for construction of questionnaires.

08.00 – 09.30 Drive from the CSO to Radom

09.30 – 14.00 CORstat as a system for managing surveys and

interviewers with special regard to GIS - SCC and discussion - all of participants

(Mr. Piotr Gradzik, Sylvia Wowok, Rafael Dabrowski, Katarzynt Zabkiewicz, Kenrad

Kvarayth)

As part of the presentation will be discussed and shown in the operating system, the following issues:

- organization of work in the system
- allocation of tasks and monitoring their execution
- functions available to dispatcher (including monitoring)
- presentation capabilities of the system in terms of allocation, management, monitoring; indication of the potential constraints,
- architecture of CORstat system
- GIS place within the whole system from the viewpoint of IT
- planning outsourcing,
- Construction of questionnaires.

Coffee break determined to keep

14.00 – 15.00 Dinner

15.00 End of the visit and return to Warsaw.

22th March 2017.

Morning session - Key-words: Geostatistics Portal, management of multi-surveys

09.00 – 10.00 Geostatistics Portal - a platform for statistica
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data - CSO and discussion all of participants

(Mr. Mirosław Migacz)

10.00 – 11.30 Combination between field surveys,

management of them in the context of the allocation of tasks for the interviewers - in example of the agricultural surveys - CSO and

discussion all of participants

(Mr. Artur Łączyński, Mrs. Renata Kaczkowska)

11.30 – 12.00 Coffee break

Afternoon session - Key-words: workflow

12.00 – 14.00 Practical presentation of the allocation of tasks

for the interviewers – in context of multi-surveys

- CSO and discussion all of participants

(Mrs. Elżbieta Lipińska)

14.00 – 15.00 Dinner

15.00 – 16.00 Summary of the visit

16.00 End of the visit.