

Terms of Reference

EU Twinning Project IL/12 CRIS 2015/370-467

23-26 May 2016

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

Activity D.1: Position analysis of methodology to allocate interviewers' workload in multi-field surveys

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 geo-spatial 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"*
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- **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 present and discuss methodologies for improving the design of field surveys, taking into account the constraints dictated by each survey (reference time, allocation to filling in in the questionnaire etc.).

- ICBS will present the current situation regarding the planning of field surveys, sampling, and the allocation of workload to interviewers.
- MS-experts will present EU / MS experience on the same issues
- MS and ICBS staff will discuss and define various indicators / metrics that develop tools that measure efficiency and enable cost reduction in field allocation interviewers in field surveys.

2. Expected output of the activity

- Activity report
- Recommendations on how to improve the planning of field work using various methodologies (including geo-spatial tools)
- Input to position analysis / methodological paper
- Prioritized plan for actions / work in component D

3. Participants

Survey Department ICBS

- **Mr. Nitzan HaCohen**, BC Component Leader , Deputy Senior Director, ICBS Survey Department; nitzanh@cbs.gov.il
- **Ms. Rachel Gur** Senior Director, ICBS Survey Department, Rachelg@cbs.gov.il
- **Ms. Limor Charnotchi**, Director of House Holds Sector, limort@cbs.gov.il
- **Mr. Eyal Avital**, Director of Census Field work Sector, Eyala@cbs.gov.il
- **Ms. Tzipora Radian** Director of Family's Sector, Zipora@cbs.gov.il
- **Ms. Michal Nir**, Survey Methodologist, Michaln@cbs.gov.il
- **Mr. Yoel Domb**, Director of field operation Department, , Yoeld@cbs.gov.il
- **Mr. Zohar Chessakov**, Director of Call Centre Department, zoharc@cbs.gov.il
- **Ms. Mira Reches Cohen**, Coordinator Family's Surveys, mirar@cbs.gov.il
- **Ms. Luba Faktarovich**, Coordinator Households Surveys, luban@cbs.gov.il
- **Ms. Ronit Biller**, Coordinator Family's Surveys, Ronitb@cbs.gov.il
- **Ms. Maram Najjar**, Coordinator Census Surveys, najjarm@cbs.gov.il

IT Department, ICBS

- **Ms. Anna Binstok Cohen**, Director of GIS for Census division, annabc@cbs.gov.il
- **Mr. Eyal Maharian**, Director of GIS and Geography Sector, eyalm@cbs.gov.il
- **Ms. Rinat Calvo**, Director of Sector of GIS-IT, Rinatc@cbs.gov.il

Methodology Department, ICBS

- **Ms. Efrat Friedrich**, efratf@cbs.gov.il

MS experts

- **Mr. Peter Linde**, Head of Division, DST Survey, Statistics Denmark; PLI@dst.dk
 - *Specialist knowledge: Sampling, estimation, questionnaire design and data collection*
- **Mr. Finn Lund**, Survey Coordinator, Statistics Denmark; FIL@dst.dk
 - *Specialist knowledge: Interview administration, staff management, including hiring and training of the interviewers*
- **Mr. Poul Juhl Vestergaard**, Chief Advisor – Head of IT Development Team, Statistics Denmark; PVJ@dst.dk
 - *Specialist knowledge: IT systems / solutions for data collection*
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Twining Staff

- **Mr. Yoel Finkel**, BC Project Leader, Associate Government Statistician, yoel@cbs.gov.il, assisted by **Ms. Sigalit Mazeh**, Director, International Relations and Statistical Coordination Department, sigalit@cbs.gov.il
- **Ms. Batia Attali**, RTA Counterpart, BC Component Leader for component A, International Relations and Statistical Coordination Department, batia@cbs.gov.il
- **Ms. Charlotte Nielsen**, Resident Twining Adviser cln@dst.dk , CharlotteN@cbs.gov.il
- **Ms. Tamar Rand**, Resident Twining Adviser Assistant, TamarRa@cbs.gov.il

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, no attempt was ever made to achieve this goal through optimal use of geo-spatial 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.

Programme for Activity D1: 23-36 May 2016

Methodological and – geo-spatial tools for improving the quality and efficiency of field

Date	Place	Time	Event
Mon 23/05	Golan	09:00	Welcoming, acquaintance, programme of the week (Charlotte Nielsen and Nitzan Hacoheh)
		09:30	BC: Introduction to Survey Department (Mrs Rachel Gur)
		10:30	Coffee break
		11:00	BC: Introduction to component D and activity D1 (Nitzan Hacoheh)
		11:30	BC: Geocoding administrative files at ICBS (Anna Binstock cohen) (<i>infrastructure</i>)
		12:30	Lunch break
		13:45	BC: Current situation using GIS' tools for allocation of workload – longitudinal survey as a case study (Luba Fackterovich) (<i>workload, allocation, efficiency</i>)
		15:00	Final Remarks
Tue 24/05	Golan	09:00	BC: First day Review
		09:30	BC: GIS' tools usage in surveys (efficiency)
		10:00	BC: The dilemma of multi survey workload (work load integration) surveys constraints Coffee break (indicators to measure efficiency, reduce costs)
		10:30	Coffee break
		11:00	MS: Introduction to field survey at Statistics Denmark (Peter Linde)
		12:15	Lunch break
		13:30	MS: Organisation and management of field surveys at Statistics Denmark, (Finn Lund)
		14:30	Coffee break
Wed 25/05	CBS – floor 3	14:45	Questions, remarks and finalising
		09:00	MS: IT portal and digital communication with field workers (Poul Juhl Vestergaard)
		10:30	Coffee break
		12:00	MS: IT support for monitoring field workers (Finn Lund and Poul Juhl Vestergaard)
		13:15	Lunch break
		14:15	Discussion and remarks
		14:45	Coffee break
		15:00	Final remarks
Thu 26/05	CBS- floor 3	08:30	Report writing, including drafting a preliminary work plan
		10:15	Meeting and Discussion about preliminary recommendation
		11:15	Ad-hoc meetings and report writing – Coffee provided
		12:15	Final remarks and thanks'
		13:15	Lunch break. Experts leave with packed lunch

Abbreviations:

BC = Beneficiary Country (Israel)

MS = Member State (Denmark)

ICBS = Israeli Central Bureau of Statistics

IT = Information Technologies

GIS = Geographic information system

Material to be prepared and sent before the Activity:

Presentations.