EU Twinning Project
IS12/ENP-APFI/08

Support to the Israeli Central Bureau of Statistics in the development of National Accounts, Education Statistics, Survey Methodology, ICBS Website and Coordination of Israel National Statistical System

Component D
Survey Methodology

Activity D.2
Management and monitoring of CATI interviewers

Implemented by:

Peter Christian Linde
Head of Interview Services
Statistics Denmark

Ida Charlotte Salomonsson
Senior Head Clerk
Statistics Denmark

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Authors' names, addresses, e-mails

Peter Christian Linde
Head of Interview Services
Statistics Denmark
Tel. +45 3917.3271
pli@dst.dk

Ida Charlotte Salomonsson
Senior Head Clerk, Interview Services
Statistics Denmark
Tel. +45 3917.3653
isa@dst.dk

Table of contents

External annexes

List of Abbreviations

BC	Beneficiary Country (Israel)
FAQ	Frequently Asked Questions
ICBS	The Israeli Central Bureau of Statistics
MS	EU Member State
NIS	New Israeli Shekel

1. General comments

The MS Expert mission D.2 was the second activity within the Survey Methodology component of the EU/Israel Twinning project on statistics.

The mission was implemented according to the agreed set of Terms of Reference and Agenda which are included in this report as Annex D2.1 and D2.2, respectively.

The MS Experts would like to thank the staff of the Central Bureau of Statistics for their hospitality, fruitful discussions and the information provided during the mission.

The views and observations stated in this report are those of the MS Experts and do not necessarily correspond to the views of EU or Statistics Denmark.

2. Assessment and results

The ICBS collects a substantial share of their statistical data on both households and enterprises through telephone interviewing. Almost all telephone surveys are mandatory for the involved enterprises and households, and response rates are accordingly high (in average above 85 %).

All telephone interviewing is organized and conducted from the Headquarters in Jerusalem. Approximately 160 telephone interviewers are employed. The interviewers work in three shifts, a morning shift, an afternoon shift, and an evening shift where the household interviewing mainly is conducted.

Interviewers typically have the interviewing as their permanent job. The average age of the interviewers is around 62 years. After two years of employment, the interviewers are considered part of the ordinary staff of ICBS, and thus protected by the general rules for state workers.

Interviewer supervisors take part in the shifts, having up to 38 interviewers per supervisor. The supervisor has her/his own "booth", as have the interviewers.

Interviews are conducted with four different computer software of which variations exist. Blaise is one of these software types. Headsets are available, but voluntary to use.

Samples for the surveys are drawn by the Methodological Department of ICBS on basis of the business register or the population register.

With only very few exceptions, the interviewing is conducted for the statistics of the statistical programme of ICBS – i.e. no external customers buy and pay for ICBS interviewing services.

3. Conclusions and recommendations

Data collection on the web
Data collection through the internet in only used to a very limited extent by the ICBS, but this way of collecting data will inevitably be part of the future – also for ICBS. The advantages are numerous, among which should be mentioned:

- Can increase the response rate (mix-mode)
- Will eliminate the interviewer effect
- Will facilitate "soft error-checking"
- Will make pre-fill with earlier reportings possible
- Possible way to reduce, in a soft way, non-response (example: "Don't know" option not visible when first answering the question, but only allowed in a follow-up question)
- Will reduce the response burden.

Data collection by the internet is recommended both for business and household surveys. As for the households, a letter should be used to inform about the web-solution. Experience shows that as much as 50 per cent of the answers will be provided through the internet. The remaining part of the population will be interviewed by telephone. A joint entry for all household surveys is recommended – in Denmark it is known as "Your Answer" ("Dit svar"). It is easy to find, and features directions for help support and a FAQ.

It takes time and resources to change the data collection toward an electronic solution. First of all web-reporting is a design challenge, and it has to be supported by IT. It is recommended to do the introduction in several steps, building up soft editing with the paper questionnaire as the starting point. New types of competences will be needed in the organisation - designers with focus on the respondents' tasks as well as IT persons with focus on the user-friendliness of the system. First of all an implementation plan should be developed.

Generally about quality
As a starting point, it is the MS Experts' opinion one of the most important reasons to quality problems in any kind of enterprise or household reporting to statistical authorities has to do with high response burden problems.

It is therefore of the utmost importance to have a permanent focus on and a plan for on-going evaluation (and possible redesign) of permanent surveys. This should be based on experiences from quality surveillance as well as available indices of the quality.

When implementing new solutions, focus should be on user-friendliness, and different solutions should be tested. A pilot team for testing of questionnaires, possibly both involving new internal competences as well as experienced interviewers could be established for this. When evaluating the results, reporting should be done to both subject matter units and the management level.

Introductory letters to the interview person or the enterprise should also be tested – preferably with comparisons of different versions. The letters should be worded in a direct and positive way, emphasizing the importance of the participation. An example is the change of "*even though you have not been a victim of violence, we would kindly ask you to answer the attached questionnaire*" to "*It is important for us to know what makes you feel safe*".

Paper questionnaires
During the mission, the MS Experts showed a "before and after" example of a questionnaire used for the Danish account statistics. The example demonstrated the effect of user-friendly design and how the use of simple colours and symbols to help the interview person focus on her/his tasks. A

special software working with "eye-tracking" was recommended – i.e. an analysis of the human eye's natural focus. Equally important was the use of an easy understandably language and an inclusion of the necessary explanations (instructions) in the questionnaire – thus making a separate set of instructions superfluous. All this increases the response rate for all questions.

Quality of telephone interviews
Development of indicators on the quality of the individual interviewer's work results could focus on different aspects of quality. Among the recommended indicators which are also applied by Statistics Denmark are:

- Unit non-response: total refusals by interview person
- Item non-response share (partial non-response)
- The "don't know" share: how often is this option used
- Deviation from register information (variables)

For repeated surveys, the specific indicators can be recommended:

- Share of out-liers for burden questions and difficult questions – for example courses and working hours in the LFS, or family travels in the Travel survey
- Share of deviations from previous answers.

Extraction of reports should be taken from the system. It is recommended both to use constantly updated reports during the individual work sessions as well as after finishing the whole survey. The reports could either be weighted index or individual lists for each indicator - or both.

Efficiency
Regarding efficiency the following indicators are recommended by the MS Experts to be developed by CBS:

- Duration of the interviews
- Duration of breaks
- Call time
- Extent of calling "empty numbers"

To increase efficiency, fewer (than the present four) and more standardized systems to telephone interviewing could be considered by CBS. The advantages would be:

- Better possibility to have more goal-oriented training of interviewers
- Easier extraction of reports and more standardized reports (on indicators)
- Same solutions to the same types of issues and thereby also more flexibility for having the interviewers switch from one on-going survey to another.

Interviewer manuals
The challenge with interviewer manuals is to make them useful. The MS Experts recommend to use such manual (or instructions), and to consider the balance between, on the one side, the quantity and the accuracy, and, on the other side, the realistic usefulness.

The Danish experience is to have a rather short, general introduction to telephone interviewing to which the newly hired interviewers are introduced during the introductory training on a 2-days session. The general introduction manual is in Statistics Denmark combined with short, goal-oriented, and to-the-point manuals concerning the specific surveys. In relation to difficult questions, screen-dumps from the interviewer system are used to illustrate the potential problems and to indicate solutions.

HR issues

Regarding recruitment of interviewers, Statistics Denmark has positive experience with a two-step approach. First step, a large meeting for all applicants, is used to align expectations between Statistics Denmark and the applicants with use of inter-active dialogue based on simple case studies and role play). In the second step, the best interviewers are hired.

In Statistics Denmark the general training is done during a two days session where competences in persuading the interview persons are trained together. What is also stressed during these two days is the focus on the necessary, positive attitude to interviewing – called the "psychology of interviewing" and essentially having to do with the interviewer's body language ("smile in the telephone"). The training sessions also include specific tasks and role plays.

Shortly thereafter, the new interviewers are introduced to their first survey during a 1-2 hours session after which the interviewers begin their actual work. Approximately after one month, there is a follow-up on the individual interviewer's performance, partly based on the indicators.

The MS Experts recommend such fast introduction to the work as it is believed that on-the-job training, when accompanied by the supervisor's attention, is more efficient than longer training sessions based on comprehensive manuals etc.

The MS Experts stress the feedback function of the supervisor – both good and bad results during interviewing should be communicated to the interviewer. The supervisor's role is also to find ways to motivate the interviewers, and to show a clear physical and mental presence during the interviewing sessions.

As supplement to the regular communication between the supervisor and the interviewers, sharing of knowledge and experience could be organized through an official (or unofficial) forum, using the internet options. It is the MS Experts' opinion that it is fruitful and motivating for the interviewers to be involved in the processes of change.

As another motivating tool, the possibilities to reward the good interviewers should be explored, for example through the number of totally allocated shifts, or attractive shifts, to the individual interviewer.

Regarding the work environment, the MS Experts recommend to have precise rules regarding the use of mobile phones and internet during the working hours. In Statistics Denmark this is strictly prohibited, while, on the contrary, the use of headsets is mandatory as this is believed to increase efficiency.

4. Road map and time plan

Within the Twinning project period, i.e. until October 2014, ICBS could develop an overall index as a general measure to summarize the most important of the individual indicators at interviewer level.

A relatively short interviewer guide with a more direct approach than the present manuals could be developed and tested.

As part of the on-going work with overall ICBS strategy (in which the Twinning project is also involved) it could be considered how to integrate web-reporting from enterprises in the general data collection system.

Annex D2.1 Terms of Reference

Mandatory results of the component
- Establishment of quality control methods and tools for monitoring field interviewers
- Establishment of quality control methods and tools for monitoring telephone interviewers
- Establishment of a manual of guidelines for interviewers
- Detailed design of at least one web questionnaire
- Guidelines in cognitive aspects of questionnaire and interview design
- Guidelines on how to measure and reduce response burden on enterprises

Cf. below, the activity should contribute to the second and the third of these mandatory results.

Activity D.2:   Management and monitoring of CATI interviewers

Terms of Reference

Subject / purpose of the D.2 activity
Review of current methods used in management and monitoring of telephone interviewers; presentation and discussions on quality control methods for monitoring telephone interviewers; input to a manual for interviewers.

Expected output of the D.2 activity
Mission report on methods for managing and monitoring telephone interviewers and input to a manual for interviewers.

Annex D2.2 Programme, 11-14 November 2013

Date	Place	Time	Event
Mon 11/11	ICBS	09:00	Welcoming remarks and acquaintance
		09:15	BC: Introduction to Survey Department
		09:30	RTA+BC: The D1 recommendations and the linkage between D1 and D2
		10:00	BC: Introduction to D2 component and ICBS telephone surveys
		10:30	Coffee break
		11:00	BC: Quality control method and practice for business and individual surveys
		12:00	Lunch break
		13:00	MS: Introduction to the CATI Centre structure and Surveys
		13:30	MS: Discussion on Quality methods
		14:30	Coffee break
		15:00	MS: Preliminary recommendations for quality control
Tue 12/11	ICBS	09:00	Visit to the ICBS call centre
		09:30	BC: introduction to managing telephone interviewers
		09:45	BC: Span of control and measurement of outcome, efficiency measurement
		10:00	MS: Remarks and discussion
		10:30	Coffee break
		11:00	MS: Tools for control and manage telephone interviewers and measurement tools
		12:00	Lunch break
		13:15	Workshop on efficiency
		14:30	Coffee break
		15:00	Preparation for study visit
Wed 13/11	ICBS	09:00	BC: Training and recruitment of telephone interviewers, manual for interviewers and training course and on-going training
		09:30	Seminar: Writing a guidebook and training veteran interviewers
		10:30	Coffee break
		11:00	Seminar, *continued*
		12:00	Lunch break
		13:15	MS: An overview on interviewers manuals: structure, contents
		14:45	Coffee break
		15:00	Preliminary recommendations for writing manual guideline
		15:45	conclusion
Thu 14/11	ICBS	09:00	Workshop: Follow-up on Monday and Wednesday seminars – overview of the obtained results, and drafting a preliminary work plan based on the recommendations
		10:30	Coffee break
		11:00	Workshop, *continued*
		12:00	Lunch break
		13:15	Ad-hoc meetings and report writing
		14:45	Coffee break
		15:00	Preliminary recommendations for development of Quality Framework and monitoring telephone interviewers in ICBS

Annex D2.3 Persons met

Mon 11/11	Ms Rachel Gur – Senior Director of Department
	Mr Nitzan Hacohen – Deputy Senior Director of Department
	Mr Eyal Avital - Director of Census field work Sector
	Ms Tzipora Radian - Director of Families Sector
	Ms Eti Yacob - Director of business survey
	Ms Chana Cohen – Director of department manager of Call Centre
	Mr Ido Halevy – Deputy Director of Call Centre Department
	Ms Tzofit Bar-Tov – Labour force survey Supervisor
	Ms Tali Koppstien – HQ Supervisor
	Ms Efrat Ben-Atar – HQ Supervisor
	Ms Tali Nechemia – HQ LFS Cati Supervisor
	Ms Limor Chernotzky - Director of households survey
	Mr Ofer Zelkind - business survey Supervisor
	Mr Zohar Tzeskov – director Cati Centre
Tue 12/11	Mr Nitzan Hacohen – Deputy Senior Director of Department
	Mr Eyal Avital - Director of Census field work Sector
	Ms Tzipora Radian - Director of Families Sector
	Ms Eti Yacob - Director of business survey
	Ms Chana Cohen – Director of department manager of Call Centre
	Mr Ido Halevy – Deputy Director of Call Centre Department
	Ms Tzofit Bar-Tov – Labour force survey Supervisor
	Ms Limor Chernotzky - Director of households survey
	Ms Tali Koppstien – HQ Supervisor
	Ms Efrat Ben-Atar – HQ Supervisor
	Ms Tali Nechemia – HQ LFS Cati Supervisor
	Mr Zohar Tzeskov – director Cati Centre
Wen 13/11	Mr Nitzan Hacohen – Deputy Senior Director of Department
	Mr Eyal Avital - Director of Census field work Sector
	Ms Tzipora Radian - Director of Families Sector
	Ms Eti Yacob - Director of business survey
	Ms Chana Cohen – Director of department manager of Call Centre
	Mr Ido Halevy – Deputy Director of Call Centre Department
	Ms Tzofit Bar-Tov – Labour force survey Supervisor
	Ms Limor Chernotzky - Director of households survey
	Mr Zohar Tzeskov – Director Cati Centre
	Ms Riki Maler – HQ Supervisior, Training Team
Thu 14/11	Ms Rachel Gur – Senior Director of Department
	Mr Nitzan Hacohen – Deputy Senior Director of Department
	Mr Eyal Avital - Director of Census field work Sector
	Ms Tzipora Radian - Director of Families Sector
	Ms Eti Yacob - Director of business survey
	Ms Chana Cohen – Director of department manager of Call Centre
	Mr Ido Halevy – Deputy Director of Call Centre Department
	Ms Tzofit Bar-Tov – Labour force survey Supervisor
	Ms Limor Chernotzky - Director of households survey

Mr Zohar Tzeskov – Director Cati Centre