

Project description sheet issued by a federal administration

This description sheet is issued by a federal administration. It describes the nature of the project it wants to implement, the tasks that should be attributed to a scientific team yet to be selected, the budget and timing devoted to the scientific team. It also describes the way the public institution will implement the end result of the scientific team both in terms of integration in its own functioning as in terms of dissemination of valuable information for researchers and the public at large.

Practical information

Name of the public institution who has issued the project: Federal Police

Name of the project: How to overcome non-responses (private line and refusal) of a telephone survey such as the Security Monitor?

Timing of the scientific tasks to be accomplished: 12 months

Deliverables and valorisation activities by the scientific team (not foreseen in the project description below):

- *International seminar (beginning of the project, state of the art concerning the data/work to perform) ;*
- *brief report* exposing the way the data concerned by the project could make international/European comparisons or harmonisation possible by the public authority;
- *Valorisation activity by the end of the project:* the team will make a proposal in this respect in its submission form.
- Deliverables from the research contract with federal Science Policy Office: *project description* (max. 25 lines in French, Dutch, English and German for the Web site of the Science Policy Office), *summary of the project* in max. 10 pages in F/D/EN/G for the web site of the Federal Science Policy Office, *a document in max. 40 lines destined to the AGORA Newsletter at the end of the project in F/D/EN*, *interims reports* (max. 2 pages, issued every 6 months destined to the financing of the project), *reports for the users' committee* (see below) ;

All these activities are to be financed within the allocated budget.

Working of the project:

The public authority steers and manages the project and collaborates closely with the team and the federal Science Policy Office (which form the technical committee of the project). The project is followed up by a users' committee who comes together at least three times in the course of the project (at the beginning, in the middle and at the end). Its role is to give a positive input to the team and the public authority in the management of the project. The scientific team is in charge of preparing the documents for this committee, the public institution is responsible of the agenda and the minutes of the meetings.

Date of the information session with a delegate of the public institution (inscription at least a week in advance by e-mail – naji@belspo.be . without mark of interest, the meeting will be cancelled):

12 January, room 7 of the Federal Science Policy Office, 2.30 p.m.

The project

1. Name of the Public institution

Federal Police
General Department of Operational Support
Department of the National Database

2. Name of the project

How to overcome non-responses (private line and refusal) of a telephone survey such as the Security Monitor?

3. Acronym

NOTESUMO (Non responses to a telephone survey such as the Security Monitor)

4. Description of the project and context in which it fits within the public institution

How to overcome non-responses (private line and refusal) of a telephone survey such as the Security Monitor?

The aim of the research is to allow, in the most optimal way, the use of the Security Monitor database that can take into account the bias induced by the importance and features of the non-responses. The non-responses problem is an obstacle that is peculiar to all large-scale quantitative researches. Most of survey based researches have to find a good balance between the interview method (face to face, telephone, per mail,...), the budget, the time and the participation rate (= the representativeness of the population). In the continuation of an AGORA project in 2005, focused on the optimisation of the Security Monitor questionnaire and the implementation of a mini-monitor and a monitor-plus, this research is of a considerable importance for all large-scale quantitative scientific surveys such as that of the Security Monitor.

The Security Monitor is a large-scale standardised telephone survey amongst the population. This survey is organised on request of the Minister of Home Affairs and is followed up by the Department of the National Database which is a part of the General Department of Operational Support of the Federal Police. This survey contains questions about the feeling of insecurity, victimisation, notification and report of criminal offences and the satisfaction about the functioning of the police services. In 2004, the Security Monitor has been made up for the fifth time at federal and local level (1997, 1998, 2000, 2002, and 2004). In 2004, more than 41.000 persons have been interviewed. The next Security Monitor will be organised during the first six months of 2006.

The Security Monitor survey, of which the sixth edition will be organised in 2006, has to be as representative as possible for all the population categories. The Security Monitor is an important tool in order to follow up the trends of the population's opinion about security and police matters. We thus have to see to it that nothing can influence the temporal comparability of the exploitation and analyses of the Security Monitor database.

1) An approach of the under-represented populations

The spreading of the Security Monitor database sample has been compared with the real population distribution in the country according to age and gender categories. As it is a telephone survey, the less represented categories are generally the youngest classes i.e. 15-24 years old and 25-34 years old that only have a cellular phone. On the other hand, the older categories are over-represented in the sample. The proportion of men to women in the sample is close to reality. This analysis has been made up since 1997.

	1997	1998	2000	2002	2004
15-24 years	0,67	0,65	0,67	0,60	0,60
25-34 years	1,00	0,99	0,86	0,74	0,73
35-49 years	1,07	1,09	1,12	1,03	1,04
50-64 years	1,13	1,13	1,22	1,25	1,28
Over 65 years	1,03	1,02	0,99	1,21	1,16

The under- and over-representation in the Security Monitor sample (per age category) in relation to the population distribution of 15 years old and over in Belgium.

Since 1997, it has appeared that the youngest age categories (15-24 years old and 25-34 years old) are less and less represented. A divergence is thus likely to appear in the results. It seems to be essential to think about the impact of that divergence and to implement alternative methods in order to reduce that growing gap.

2) Participation rate

On the other hand, we are able to calculate the participation rate in the survey because the number of refusals at the start or during an interview is known. In 2004, the net participation rate was 66,4%. If we take into account the unsuccessful attempts (recorded messages, busy calls,...), the gross participation rate was 57,1%. It could be interesting to verify if the persons who did not want to participate in the survey had a specific profile. Indeed, it is possible that some categories of respondents are therefore not present in the analysis. If the profile of the non-respondents deviates significantly from the profile of the respondents, it would be judicious to recalculate the confidence intervals while taking these deviations into account.

Moreover, there is a geographical difference in the rate of answers. The provinces of Namur, Luxemburg and Brabant Wallon have the highest answer rates (75%). On the contrary, the provinces East en West Flanders have the lowest rates (63%). It is important to emphasise the socio-economic or demographic factors at the root of those differences in order to define the techniques that can allow us to «erase» those spatial differences.

Lastly, a reflection on the main refusal reasons from the respondents could unveil the profile of the non-respondents (in descending order: no interest in the subject (40%), hang up without explanation (25%), too old/ill (20%) or has not the time (10%)).

5. Tasks to be accomplished

a) By the scientific team

1) An approach of the under-represented populations

The representativeness of the Security Monitor sample will have to be calculated according to various criteria. The bias that exist depending on the categories of age, gender, education level, occupation,... will have to be highlighted according to the population distribution.

If it appears that the deviations between the sample and the population distribution are too important, we will have to examine if the impact of the post-stratification does not influence too much the results (as well at federal as at local level). Ex.: weight distinctly higher than 1.

The Security Monitor uses weights to «rectify» the sample according to the population distribution, depending on age and gender. According to the results, will other post-stratification criteria have to be taken into consideration?

2) Profile of categories without a private line

According to the survey of the NIS (National Institute for Statistics) on household budgets, the evolution of the number of connections to a private line is clearly decreasing since 1997. In the same way, the number of persons with a cellular phone is clearly increasing. The impact of a large-scale telephone survey only on individuals with a private line inevitably induces a bias.

	Telephone subscription	Cellular phone
Survey 1995-96	95,6%	
Survey 1996-97	97,1%	
Survey 1997-98	93,5%	10,0%
Survey 1999	87,9%	30,7%
Survey 2000	84,0%	47,5%
Survey 2001	85,7%	63,0%

*Connection to private line – Survey on household budgets
Household Comfort - INS*

The NIS survey on household budgets also shows that in 2001, the percentage of households with at least one of the following means is:

- private line only: 34,1%
- cellular phone only: 11,4%
- private line and cellular phone: 51,6%
- private line or cellular phone: 97,1%

We can thus conclude that 11,4% of the Belgian households only had a cellular phone in 2001 and could not get reached by means of a conventional telephone survey.

Considering these observations, it seems to be useful to:

- gather information on the features of households with a private line (socio-demographic profile)
- gather information on the features of households without a private line (socio-demographic profile)

The profile differences between the households with and without a private line will have to be highlighted.

By knowing the profile of the respondents to the Security Monitor survey, the profile of the households with a private line and the profile of the households without a private line, it is possible to measure the deviations in relation to the sample. A recalculation of the confidence intervals by taking into account the under-representativeness will have to be done.

3) Alternatives to the phone survey

Parallel to the influence of non-responses on the analysis of the results of the Security Monitor database, reflections should be made about alternative survey methods in view of the decreasing number of households with a private line.

For the moment, the method applied for the Security Monitor surveys only uses the telephone. Through other studies, we already have a good idea of existing alternatives. Nevertheless, the concrete implementation has not been discussed yet. It is thus judicious to wonder about the possibility to combine alternative methods such as consulting the national register, gathering the names and addresses of the target population and then to wonder about the survey method such as the face to face method or per mail, Internet, GSM ...

Moreover, testing those alternatives should be considered in order to highlight the differences in the answers that could be generated by different survey methods and to determine the impact that it can have on the data analyses.

Finally, knowing the average time of a Security Monitor telephone survey, i.e. approximately 26 min., which is the feasibility of a survey by means of a cellular phone? What are the existing cellular phone databases, do they cover the whole population?

4) Participation rate

The respondents who did not want to participate in the Security Monitor in the beginning of the interview are nevertheless invited to answer to a small questionnaire that takes 5 minutes. In 2004, 509 respondents answered to that questionnaire. Of course, these are not the respondents that refused categorically to participate in the survey.

The characteristics of these respondents must be compared with the features of the respondents who answered entirely to the Security Monitor questionnaire. Due to this fact, it is possible that some categories of respondents are present in the analysis. If the profile of the non-respondents deviates significantly from the profile of the respondents, it would be judicious to recalculate the confidence intervals while taking these deviations into account.

An analysis of the geographical differences regarding the answer rate should also be considered and paralleled with a reflection on the main refusal reasons put forward by the respondents.

b) By the public institution

1) prior to the work of the scientific team

- availability of the raw data that are indispensable for the analyses (variables), notably regarding the personal features (age, gender, occupation, degree, head of household,...) of the Security Monitor database;
- availability of the file concerning the refusal questionnaire.

2) in the course of the project

- availability of other data that could be indispensable during the project ;
- continuous follow up of the project and evaluation during research;
- organise several guidance committees: at the beginning, during and at the end of the research.

6. Expected final product

a) From the scientific team :

- quantitative analysis of the profiles of respondents, non-respondents and persons without a private line;
- drawing up a report mentioning the results of point 3;
- (re-)calculation of the confidence intervals when necessary;
- quantitative analyses of the test results per survey method.

b) For the public institution :

- Report mentioning and analysing the various steps of the research (cf. point 3);
- Specifically for the under-represented populations: post-stratification criteria and confidence intervals on the Security Monitor sample to be recalculated.
- Concerning the profile of individuals without a private line: quantitative comparison between the results of the Security Monitor in its current state and the results of the test according to another method and recalculation of the confidence intervals.
- Concerning the alternative methods: analysis of the test results and searching for existing GSM databases.
- Concerning the participation rate: quantitative analysis of the subsidiary questionnaire of the current Security Monitor (refusal questionnaire).
- questionnaires drawn up or adapted according to the method.
- Results and analysis of the questionnaire test and results according to another method.

7. Valorisation of the final product:

a) For the public institution: integration of the final product in its own functioning.

The consideration of the research results will be done through various steps:

- o take into account the broader confidence interval if the difference between the sample and the spreading of the sample (age, refusal,...) is too significant.
- o integration of the test results from the questionnaires drawn up according to the most suitable method in order to improve the representativeness of the sample.

b) For the 'public': access methods and conditions for scientists and the public at large.

- o an in-depth reflection on the bias generated by the telephone surveys and their «solutions» could be transmitted to the government agencies which are confronted with the same problems.

8. Timing, planning of the activities

a) Timing of the activities

1 September 2006-31 August 2007

b) Planning of the activities

b.1.) for the scientific team

1) Approach of the under-represented populations (1,5 months)

- Representativeness of the Security Monitor sample according to various criteria (age, gender, degree level, occupation,... categories): ½ month.
- If considerable deviations between the sample and the population: post-stratification: ½ month.
- Other post-stratification criteria: ½ month.

2) Profile of the categories without a private line (3 months)

- Preliminary study on the evolution of the number of phone rentals: ½ month.
- To gather information on the features of households with a private line (socio-demographic profile) : ½ month.
- To gather information on the features of households without a private line (socio-demographic profile) : ½ month.
- To highlight differences between the households with and without a private line: ½ month.
- Comparison with the profile of the respondents to the Security Monitor survey + recalculation of the confidence interval according to the under-representativeness : 1 month.

3) Alternatives to the telephone survey (4,5 months)

- Identification and feasibility of the alternative methods: 1 month.
- Adaptation to the questionnaire according to the chosen method: 1 month.
- Tests of the method(s): 1 month.
- Analysis of the test results (based on the variables stemming from the raw data: statistics, correlations, ...): impact on the answers and differences according to the used method : 1,5 month.

4) Participation rate (2 months)

- Identification of the characteristics of the respondents refusing to participate: ½ month
- Comparison between the profile of the Security Monitor respondents and the respondents refusing to participate + recalculation of the confidence intervals: 1 month.

- Analysis of the geographical differences of the response rate (mean refusal reasons): ½ month.

5) Drawing up of the final report (1 month)

- Drawing up the final report with the aforementioned points : 1 month

	01	02	03	04	05	06	07	08	09	10	11	12
approach of the under-represented populations in the sample												
profile of the categories without a private line												
alternatives to the telephone survey												
participation rate												
drawing up of the report												

b.2.) For the public institution

	01	02	03	04	05	06	07	08	09	10	11	12
provide the necessary data												
provide the necessary data during the research												
guidance committees												

9. Special conditions

a) Suggestions for the composition of the users committee

Users committee for the follow-up of the project: besides the Department of the National Database, two representatives of the local police (1 Dutch-speaking and 1 French-speaking), appointed by the Standing Committee for Local Police; a member of the Department Functioning and co-ordination of the Federal Police (CGC), a member of the Criminal Offence Policy Service of the Department of Justice, a representative of the Department of Science Policy; a representative of the governors, to be assigned by the governors; a representative of the Ministry of Home Affairs (General Directorate of the Prevention and Security Policy); a director-coordinator; several representatives of the academic/scientific world; a representative of the 'Planning en Statistiek' Administration of the Flemish Community; a representative of the Walloon Region; a representative of the 'Vlaams stedenbeleid'; a representative of the 'Union wallonne des villes et communes'; a representative of the INS; PEO Departement 'Personnel et Organisation'.

b) Eventual confidentiality clause

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c) Possible presence of the team within the institution

Every week, there will be contacts between the research team and the public institution (per telephone or mail). This weekly contacts aim at exchanging information and follow up the evolution of the research as well as mentioning every kind of problem. A monthly meeting will also be organised in order to approve the several evolution phases.

d) Other

none