

## **Call for tenders**

National Surveys of Parents of elementary school children  
in South East European Countries

**TOR for survey agencies; and sampling plan**

# TOR

## ***Introduction***

Center for Educational Policy Studies (CEPS), Faculty of Education, University of Ljubljana in cooperation with Open Society Institute Education Support Program (OSI ESP) invites tenders to carry out face-to-face surveys of representative samples of parents of elementary school children in the South East European region (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Moldova, Montenegro, Romania, and Serbia). In each country there will be 4 samples

- Sample A: 30 parents in each of 30 schools
- Sample B: parent members of school boards and/or parents' councils in the same schools
- Sample P: School principals in each of these same 30 schools
- Sample E: 2 samples per country of 30 socially excluded parents

For each sample, the instrument will be a structured questionnaire of up to 20 minutes with a maximum of 10 open questions. Agencies must be prepared to apply the questionnaires in at least one minority language.

The instruments of samples A, B and E will be similar; for sample P there will be a different instrument.

Agencies intending to submit a tender may contact Mr. Steve Powell <[steve@promente.org](mailto:steve@promente.org)> for clarification or further information.

## ***Contents of tender***

Tenders should be submitted in English to [ceps@pef.uni-lj.si](mailto:ceps@pef.uni-lj.si) (and cc to [steve@promente.org](mailto:steve@promente.org)) by e.g. 30.04.09 and should include the following:

1. Which countries can be covered. Preference will be given to tenders which cover most or all of the countries listed above, 1 point per country
2. Details of suggested sampling strategies (see below), 10 points
3. Short list of most relevant recent references, 5 points
4. Brief references / CV of the person to be responsible for quality control for this survey at the agency, 5 points
5. Description of quality control procedures. What opportunities does the agency suggest for CEPS to independently check these procedures?, 5 points
6. Estimate of timeframe, 5 points
7. Any comments on this TOR and the sampling and survey design considerations, including the agency's assessment of possible risks and problems, 5 points
8. Other advantages or facilities offered by the agency, up to 10 points
9. SEPARATE price estimate with cost breakdown by country and by any other relevant parameters which affect cost (for example number of closed and open questions; whether open questions are to be coded by the agency; whether open questions are to be translated into English by the agency).

### ***Selection criteria***

Points will be awarded as above to the tenders on each of the above 8 criteria. Only for those tenders reaching a specified minimum score will the price estimate (point 9) be taken into consideration.

### ***Deliverables***

Translation into relevant languages in each country of the survey instrument<sup>1</sup>.  
Clean SPSS data files with variable and value labels in English and correctly coded missing values. A template may be provided by CEPS if preferred.  
List of addresses contacted in each country with success/failure, date of contact, name of interviewer, etc.

### ***Responsibilities of the client:***

- Ministries and schools will be informed by the project Country Teams in each country, but not asked for any help.
- Providing the final structured survey instruments in English

### ***Timing***

The survey is to be carried out in September and October, 2009

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<sup>1</sup> Project country teams will provide a back-translation, and the agency will complete a final translation on the basis of their comments.

Table of schools at which principals were interviewed in previous survey

Country/ region s		Schools	%	Sample	Urban	Rural
Albania	North	445	30.00%	89	77	12
	Center	324	22.00%	66	54	12
	South	569	38.00%	116	94	22
	Tirane	146	10.00%	29	9	20
	Total Albania	1484	100.00%	300	234	66
	NPP – Serbian entity	205	34.00%	60	21	39
Bosnia and Herzegovina						
	NPP – Bosnian entity	338	55.00%	100	35	65
	NPP – Croatian entity	69	11.00%	40	14	26
	Total Bosnia and Herzegovina	612	100.00%	200	70	130
Kosovo	Center	128	24.00%	53	10	43
	South □ East	105	19.00%	44	7	37
	West	306	57.00%	128	22	106
	Total Kosovo	539	100.00%	225	39	186
Macedonia	Skopje	150	29.00%	58	45	13
	North □ East	114	22.00%	44	26	18
	South □ East	65	13.00%	25	15	10
	South □ West	67	13.00%	26	15	11
	North □ West	122	24.00%	47	19	28
	Total Macedonia	518	100.00%	200	120	80
Moldova		661	100.00%	296	31	265
Romania		6123	100.00%	670	169	501
Serbia	Grad Beograd	190	16.00%	35	28	7
	Vojvodina	376	31.00%	60	28	32
	Istočna Srbija	337	28.00%	55	26	29
	Zapadna Srbija	306	25.00%	50	23	27
	Total Serbia	1209	100.00%	200	105	95

Notes: 1. In Bosnia and Herzegovina the sample is unbalanced. 2. In Kosovo the sample was limited to Albanian schools. 3. In the case of Moldova school districts were used instead of regions. 4. In Montenegro a census was carried out. 5. Regional details for Romania will be provided later.

## ***Sampling procedures in each country***

Samples A, B, P

- Take the existing lists of schools whose principals participated in the previous survey<sup>2</sup> (see table). These schools were (in nearly all countries) a stratified random sample of all public schools which include the final year of compulsory education, stratified by urban/rural and 3-10 relevant geographical regions. i.e. a two-dimensional stratified sample with  $2*y$  cells, where  $y$  is the number of geographical regions.
- The percentage of schools to be taken from each cell will differ from country to country, see sample size / power calculation later in this paper.
- Take a random subsample of **30** schools from this list, so that  $30/(2*y)$  schools are drawn at random from each cell.
- Identify the catchment areas around each selected school. If these catchment areas are not defined in the relevant educational regulations, catchment areas will be defined by CEPS, e.g. as 3km around the school in urban areas and 10 km in rural areas). The agency is asked to specify in the tender whether it will be able to follow these instructions in all cases, i.e. how to approach the problem of when a small school has been selected which only a small percentage of children in the area attend, which would mean knocking on more doors.
- Then conduct **face-to-face household survey in 30 households** in this catchment area. The agency will suggest details of a household sampling method which will ensure that each household within the area has an equal chance of being sampled
- If the household includes a child between the ages of 8 and 13, continue with the interview. If there is more than one such child, identify the one whose first name comes first in the alphabet.
- Ask to speak to mother of this child, if not there \*at that moment\*, ask to talk to father, if not there and mother/and or father do care for the children, reschedule a time to speak to the mother if possible, if not possible with the father; if not neither mother or father currently care for the children then ask to speak to whoever is caring for the child (e.g. grandparent); if not there, reschedule.
- Survey to be conducted as a structured interview on the basis of the survey instrument provided.
- This procedure to be followed in the neighbourhood until 30 interviews have been carried out for the selected school.
- Sample P. Contact the principal of the chosen schools and conduct a short questionnaire-based semi-structured or structured interview. Agencies should provide prices for whichever method they recommend: face-to-face AND/OR telephone AND/OR postal administration.

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<sup>2</sup> Croatia and Bulgaria did not take part in the previous survey, so a prior selection of schools will have to be made for those two countries according to procedures followed in the previous survey.

- Sample B. Contact the school board and parents' council of each selected school and conduct a face-to face questionnaire-based structured interview with them (at least 5 persons per school). Agencies should provide prices for whichever method they recommend: face-to-face AND/OR telephone AND/OR postal administration.
- Procedure for samples A, B, P: repeat for all schools selected.

Sample E:

- an **additional** two samples of socially excluded parents from exactly two catchment areas, 30 in each sample, i.e. an extra 60 per country. So two additional samples are to be drawn from neighbourhoods where socially excluded households are more common. The agency will suggest a method of selecting these households which will be as far as possible consistent across countries; exact method to be decided later in consultation between agency and client. Otherwise instrument and method are similar to sample A.

## **Annex: Sample size / power calculation for sample A**

### ***Background***

The purpose of this document is to set the framework for and guide the sampling process of schools to be surveyed in the South East European region (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Moldova, Montenegro, Romania, and Serbia). The survey is carried out as the second part of the first phase of the initiative entitled Advancing Educational Inclusion and Quality in South East Europe with the main aim of providing empirical evidence for the next phase, namely policy advocacy and community level interventions seeking to further parental involvement in school level decision-making.

### **Sampling considerations**

- a) Avoiding different forms of bias
- b) Allowing comparability across countries
- c) Replicability of sampling procedures – by recording the sampling process in each country.
- d) Plausible connection to the survey of school principals carried out in the previous phase (2007-8), i.e. visible continuity with previous activities

Considering that we have a fixed budget to carry out the survey our priority is to select the sampling theory that allows maximising precision.

## ***Possible sources of bias***

### **Selection bias.**

The most common forms of selection bias occur in the situations when a given sub-group of the target populations is underrepresented in the survey sample. Alternatively, despite a representative survey sample, we might encounter the situation in which those not responding to the survey are in a systematic way different from those responding, which is also known as nonresponse bias.

### **measurement error**

that among other have emerge from poor operationalization of key concepts to be measured in the survey. Another important sub-class of measurement error is known as respondent bias given either the poor quality of survey questions, or social desirability.

The third source of bias emerges from the level of accuracy of the estimated sample statistic to describe the population parameter.

As the schools in each region\*urban/rural cell in each country are to be drawn randomly from the sample of schools in the previous survey, and that sample was also drawn randomly from the region\*urban/rural cells of the population in each country, the new sample for each cell can also be considered to be a simple random sample of each cell in the population.

## ***Sample size calculation***

Calculating sample size is particularly difficult in this case. Sample size calculations depend first on the following factors:

- required power***
- the specific statistical tests to be carried out***
- a-priori estimates of the effect in the population***

However as this survey employs a multilevel design (households nested within schools), the issue becomes more complex, as follows.

### ***Number of schools per country:***

this could be fixed, to keep things simple. But if we are aiming for equivalent power and confidence intervals across countries, it will more generally be allowed to vary. In the previous survey, the sample sizes differed for each country because of finite sample corrections. As the N's for each country in the present survey will be larger than last time (more parents per country this time than principals per country last time), then assuming a fixed number of parents per school, the sample sizes will be more similar this time than last time, which means that proportionately more schools will be drawn from smaller countries than larger countries.

•**Number of parents per school:**

Fixed, to keep things simple, or proportional to school size? Whatever solution is chosen it should be the same across countries.

**Rule-of-thumb solution**

This calculation is not only complex but contains too many unknowns. For this reason, sample size calculation in multilevel designs usually resorts to using rules of thumb.

*“The most commonly offered rule of thumb with regard to sample size for multilevel models is at least 20 groups and at least 30 observations per group ... It soon becomes clear that sample size and sample structure are complex and underresearched issues in multilevel analysis....”<sup>3</sup>*

As this rule-of-thumb is likely to cost nearly the maximum budget assigned to the program, it can be adopted almost without change: in each country, 30 schools are to be drawn from the cells of the previous school sample, and 30 +10 parents are to be interviewed in each school.

Power analyses for estimates of proportions and correlation coefficients will be calculated subsequently.

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<sup>3</sup> Bickel, 2007. Multilevel analysis for applied research. Guilford Press. p. 259.