

Country-specific Quality Control Checks for ESS Weighting Procedures

DACE project WP12, additional task 3A

Final report

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ABSTRACT: *The additional task 3A in WP12 of DACE project is checking the weights (calculated in WP12 for rounds R1-R5) with national coordinators (NC). The task has started in March, and in April NCs were sent the template to comment. At the end, all (34) countries responded with filled template or just simply over the email communication (i.e. Denmark). The issues were clarified and the weights were confirmed for 20 countries, while the other 14 countries encountered one or more problems. Four (4) required other control data in weighting procedure, ten (10) countries needed additional clarification related to education, or proposed the exclusion of educational variable from the weighting procedure: for this ESS education expert was involved. For five (6) countries the weighting procedure was repeated due to various reasons (region, design weights problems, mismatch in coding, other weighting procedure).*

Overall, this verification exercise was well received by NC, who took the task very seriously. We can also confirm the usefulness of this task, as for almost half of the countries some interventions were needed to improve the data. The results were thus ensuring ESS data quality and preventing later complaints from users. In this report we document the activities and we also enclose all country reports that we received.

April 2014

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1 Introduction

The end of April was a milestone for the Deliverable 12.8 (WP12 DACE, Task 3), where the weights for all countries and for all ESS rounds were produced. Meanwhile, an additional Task 3A has started in March to perform country-specific quality control checks for ESS weighting procedures (Formally approved structure of 3A task is in Appendix A.)

2 Tasks and timing

Task 3A has formally started in March 2013 with the elaboration of the methodology. On March 20th, at the Manheim NC meeting, the materials had been checked and confirmed. According to 3A description of work the methodology was completed in March (i.e. template, timing, communication protocol). In the first week of April the template for country-specific feedback on weighting was finalised (see Appendix D). On the 10th of April the country-specific materials were sent to the first seven countries (Belgium, Czech Republic, Germany, Estonia, Netherlands, Slovenia and Switzerland). By the end of April all 34 countries were contacted.¹

3 Country-specific feedback

The majority of countries responded relatively soon, but several others appeared harder to reach. In general at least two reminders were needed to get a filled template. By the beginning of June we received 25 filled templates (for country-specific answers see Appendix E). There were some serious delays for France, Denmark, Portugal, Hungary, Israel and Turkey. French and Hungarian National Coordinators typically had problems with contacting and consulting their national weighting experts, whereas the Israeli National Coordinator was facing fatal financial problems (lack of resources for ESS related work). Among all delayers, Denmark and Turkey seem to be the most problematic. In the case of Denmark, we have not received suitable response after longer period of time, besides that Denmark officially did not fulfil the template, but provided a few answers only through email communication. In the case of Turkey, despite many reminders that we have sent, we have only received one short confirmation that emails were received by the right person, and one short email regarding design weights problem. By the middle of July we received 32 (out of 34 countries) filled templates. By the end of February, all countries provided country-specific answers.

¹The exceptions were only Norway and Iceland. They were contacted in May, due to some additional recalculations in the weighting process.

Table 1: Response on template and documentation of correspondence - reminders (rem.) and responses (resp.)

Country	Template sent to NC	Resp. before 1. rem.	1. rem.	Resp. after 1. rem.	2. rem.	Resp. after 2. rem.	3. rem.	Resp. after 3. rem.	4. rem.	Resp. after 4. rem.	5. rem.	Resp. after 5. rem.	6. rem.	Resp. after 6. rem.	7. rem.	Resp. after 7. rem.	Filled template received
AT	23.4.2013	X	30.4.2013	X	8.5.2013	X	*17.5.2013	17.5.2013									24.5.2013
BE	10.4.2013	X	18.4.2013	18.4.2013													22.4.2013
BG	23.4.2013	X	30.4.2013	X	8.5.2013												13.5.2013
CH	10.4.2013	X	18.4.2013	X	23.4.2013	23.4.2013											26.4.2013
CY	23.4.2013	X	30.4.2013	30.4.2013													10.5.2013
CZ	10.4.2013	X	18.4.2013	18.4.2013													23.4.2013
DE	10.4.2013	X	18.4.2013	18.4.2013													6.5.2013
DK	23.4.2013	X	30.4.2013	30.4.2013	8.5.2013	X	24.5.2013	X	11.6.2013	X	19.6.2013	X	26.6.2013	X	5.7.2013	8.10.2013	X
EE	10.4.2013	X	18.4.2013	18.4.2013													24.4.2013
ES	23.4.2013	X	30.4.2013	30.4.2013													7.5.2013
FI	23.4.2013	23.4.2013	10.5.2013														15.5.2013
FR	23.4.2013	X	30.4.2013	7.5.2013	3.6.2013	4.6.2013	19.6.2013	19.6.2013	26.6.2013								1.7.2013
UK	26.4.2013	X	8.5.2013	9.5.2013	21.5.2013	X	3.6.2013	X	11.6.2013	11.6.2013							13.6.2013
GR	23.4.2013	X	30.4.2013	30.4.2013													17.5.2013
HR	23.4.2013	X	30.4.2013														30.4.2013
HU	23.4.2013	X	30.4.2013	X	8.5.2013	X	*17.5.2013	22.5.2013	3.6.2013	3.6.2013	11.6.2013	12.6.2013	19.6.2013				20.6.2013
IE	23.4.2013	X	30.4.2013	30.4.2013													14.5.2013
IS	16.5.2013	X	23.5.2013	23.5.2013													28.5.2013
IL	23.4.2013	X	30.4.2013	30.4.2013	21.5.2013	21.5.2013	3.6.2013	3.6.2013	11.6.2013	X	19.6.2013	X	26.6.2013				3.7.2013
IT	23.4.2013	X	30.4.2013	X	8.5.2013	9.5.2013	21.5.2013	X	3.6.2013								3.6.2013
LV	23.4.2013	X	30.4.2013	X	8.5.2013	8.5.2013	21.5.2013	22.5.2013	3.6.2013	X	11.6.2013						18.6.2013
LT	23.4.2013	23.4.2013	10.5.2013														16.5.2013
LU	23.4.2013	X	30.4.2013	30.4.2013	21.5.2013												23.5.2013
NL	10.4.2013	X	18.4.2013														22.4.2013
NO	3.5.2013	X	10.5.2013	14.5.2013													11.6.2013
PL	23.4.2013	X	30.4.2013	30.4.2013													14.5.2013
PT	23.4.2013	25.4.2013	10.5.2013	X	23.5.2013	23.5.2013	11.6.2013	11.6.2013	19.6.2013	25.6.2013	5.7.2013						17.7.2013
RO	23.4.2013	X	30.4.2013	30.4.2013	21.5.2013												23.5.2013
RU	23.4.2013	X	30.4.2013	X	8.5.2013	8.5.2013											22.5.2013
SE	23.4.2013	X	30.4.2013	30.4.2013	21.5.2013	23.5.2013											24.5.2013
SI	10.4.2013	X	18.4.2013	18.4.2013													22.4.2013
SK	23.4.2013	X	30.4.2013	30.4.2013													17.5.2013
TR	23.4.2013	X	30.4.2013	X	8.5.2013	12.5.2013	23.5.2013	X	3.6.2013	X	11.6.2013	X	10.7.2013	17.7.2013	17.7.2013	X	24.2.2013
UA	23.4.2013	X	30.4.2013	30.4.2013													9.5.2013

*Other person contacted.

3.1 Received comments and suggestions

With filled and returned country-specific templates we got various comments and suggestions about weighting procedure. Countries often added detailed explanation on their answers, or additional materials were attached, which was, of course, very appreciated. On the other hand there were also countries that just briefly and concisely confirmed the overall weighting procedure.

The five most exposed issues can be seen in Table 2. Two of them refer to the education variable, namely four countries have *questioned if education variable is correctly coded, equally in both data sources (the ESS and LFS) and through the years*, while six countries even suggested *excluding the education variable from the weighting procedure*. Thus, it seems that the use of education variable in our weighting procedure causes problems. Of course, this is not surprising, as we have already been faced with numerous problems related to the education variable (matching the variables of education in the LFS and ESS). Some ISCED classifications are difficult to be assigned to one of the three levels used for weighting (there are changes in the educational system and in the ESS/LFS variables across time, etc.); many countries also suggest at least four categories. Therefore, for future rounds of weighting the handling of education variable might be revised.

One of the frequently raised issues was also the suggestions *to use additional or other weighting variables*. Suggestions mostly referred to the level of urbanization, but sometimes also to household size/type, nationality, economic activity. Eleven countries also commented that *some other control data could be used* especially due to quality reason. In addition, several countries requested a *higher number of regions in the weighting procedure*. In fact, small countries usually have only one or few NUTS II regions, while NUTS III is not in the LFS. This is somehow unfair as sample sizes are approximately the same for big (with main NUTS regions) and for small countries and thus the latter have no regional controls. Of course, involving lower levels means additional work outside LFS.

Beside these five most commented issues, there were also some more specific comments and suggestions (Table 3). For example, Estonia suggested using the calibration method instead of post-stratification and smaller age groups (e.g. 5 or 10 year age group); Greece has mentioned adding a cross-tabulation of region by level of urbanization; the Belgian team has proposed using the regional variable as a starting point in the weighting procedure (i.e. weighting with

four-dimensional post-stratification table), whereas in Switzerland they in general do not prefer weighting procedure with a socio-demographic variables.

Table 2: Five most commented issues raised by countries

country	more cells in region variable (e.g. NUTS 3 instead of NUTS 2)	other control data	additional control variable in weighting procedure (e.g. level of urbanization)	to exclude education variable from weighting procedure	dilemma if education variable is correctly coded, equally in both data sources (ESS, LFS) and through the years
Austria					
Belgium					
Bulgaria	X	X		X	
Switzerland					X
Cyprus		X			
Czech Republic					
Germany					X
Denmark					
Estonia	X		X		
Spain	X				X
Finland		X			
France			X		
United Kingdom				X	
Greece			X		
Croatia		X			
Hungary		X	X		
Ireland	X		X		X
Iceland					
Israel		X			
Italy					
Latvia		X			
Lithuania	X	X			
Luxembourg		X	X	X	
Netherlands			X		
Norway		X			
Poland				X	
Portugal		X			
Romania					
Russia				X	
Sweden					
Slovenia			X		
Slovakia					
Turkey					
Ukraine			X	X	
Total	5	11	9	6	4

Table 3: Some other specific comments

Country	Comments
Belgium	We would like to suggest an improvement of the weighting procedure by using the regional level as starting point for the weighting instead of the entire country.
Estonia	We think that calibration should be favoured over raking; What about smaller age groups (e.g. 5 or 10-year age groups)?
Finland	Please, use our original calibrated weights; NUTS2 classification changed twice since 2002.
Greece	One suggestion could be adding a cross-tabulation of region by level of urbanization (with 20 cells, urbanization used as urban vs. rural in Greece).
Israel	We discovered the design weights for 2008 and 2010 were not calculated properly by our sampling expert; we do not think the region variable is good for post-weighting.
Norway	Instead of raking directly towards population demographic values, another alternative could be a two-stage raking: in the first stage raking up to the gross sample demographic values, and then in the second stage up to the population demographic values.
Poland	LFS provides much lower quality of education measurement.
Romania	I personally have a poor opinion of the work conducted by the National Institute of Statistics (NIS); There are not any other better sources available.
Russia	Doubts for reliability of the Census data for education. I will be extremely grateful if you use new data (2010 instead of 2002).
Switzerland	We prefer not to weight for socio-demographics, but to put more emphasis on sampling and good fieldwork.
United Kingdom	Merging of small cells and cells where extreme weights are created would be one approach to avoiding extreme weights and the issues with trimming. Another approach might be to interlock (say) age with gender and then age (or gender) with education separately, instead of all three together.

3.2 Problems discovered or confirmed

During our weighting process (Task WP12) we discovered that some other potential problems and mistakes could exist in several countries; therefore this additional Task 3A was a good opportunity to verify if problems really exist.

According to our previous suspicions design weights were damaging the original structure of ESS data in certain countries, namely Ukraine, Turkey, Slovakia, Hungary and maybe also Portugal. In fact, significant discrepancies between ESS data and control data for region variable (when design weights were applied) were implying that *design weights in certain countries could be incorrect*. During weighting validation with National Coordinators we therefore paid special attention to that problem. As a result we got a confirmation from Ukraine, Slovakia, Turkey and Portugal that something is wrong when design weights are applied. In addition also Israel warned us that design weights were not calculated properly and that they discover that after the data were published (see Appendix F for National Coordinator's comments regarding potential problem with design weights). When this

specific problem was discovered (and confirmed by some countries) we informed the NSD partners (see Appendix G) who took the coordination in order to get design weights corrections.

Furthermore, we found problem in the ESS data – *a mismatch in coding for region variable for Croatia*. The Croatian National Coordinator confirmed that problem. We then informed the ESS team which then proceeded to correct the error in coding.

As mentioned in the previous section, in several countries there were strong *doubts raised about the appropriateness of the education variable*, which was included in the weighting procedure. Countries like Ireland, Germany, Spain, United Kingdom, Switzerland and Luxembourg exposed either a problem with significant discrepancies between ESS and control data (i.e. LFS), or the dilemma on the correctness and uniformity of education coding in both data sources and through the years. Besides that, Poland, Ukraine and Russia expressed concern about the low quality of control data for the education variable. In those cases additional discussion with National Coordinators was carried out and with Silke Schneider – the expert for educational classification and coding - trying to find out what was the problem and which solution is the most appropriate, for example:

- was classification/coding incorrect;
- was classification/coding in the ESS different from the other data source (e.g. LFS);
- was classification/coding in the ESS different through the rounds;
- the quality of the ESS data was not good enough;
- the education variable should be omitted from the weighting procedure

After several extensive discussions with National Coordinators, partners and other experts we reached an agreement and solution was found for every country. This is described in details in the next chapter.

4 Recalculations and newly computed weights

With country-specific feedback on the weighting procedure we received various comments and suggestions from 34 countries. All important suggestions were accepted and have been taken into consideration. Along with that, some other problems in the ESS data have been identified. Therefore, additional calculations of weights needed to be done for some countries.

Table 4 below presents in which countries recalculations have been performed, what were the reasons and what changes have been applied in weighting. In Table 4 it is also noted which countries approved the weighting procedure. We can see that all (34) countries have approved the weighting procedure, or we came to a final agreement about what changes would be applied in the weighting procedure.

Weighting recalculations were performed for 14 countries (Belgium, Switzerland, Finland, Spain, Croatia, Poland, Ireland, Israel, Lithuania, Russia, Slovakia, Turkey, United Kingdom and Ukraine). All reasons for performing a recalculation were specific, e.g. for Belgium the all three regions were (and data also allowed that) raked separately for age, gender and education, for Spain changes in NUTS were performed (we used 16 regions instead of 7) due to strong differences among autonomous communities (regions) regarding competences, political party systems, languages and history. For Switzerland we received the LFS control data for year 2010 and we used them (instead of 2008 data) for weighting Round 5. In addition, an educational variable was excluded from the weighting procedure. Also for United Kingdom, Ireland (rounds R1-R4), Poland (R1-R5) and Ukraine (R2-R5) educational variable was excluded from the weighting procedure. For Russia, Finland and Israel new control data were used. For Croatia, weighting procedure was performed again because of the mismatch in coding the region variable. Additional weighing was also performed for Lithuania as the ESS data for Round 5 became available. Recalculations were also performed in countries, where problems with design weights appeared. For Turkey, Israel and Slovakia we received new design weights (for R4 in R5) and recalculations were performed based on corrected design weights. For Hungary, Portugal and Ukraine corrections for design weights are not available, therefore initial weights in weighting procedure for those countries remains as they are.

Table 4: Confirmation of weighting procedure and recalculations

Country	Country-specific feedback received	Weighting procedure approved	Recalculations were performed	Changes applied [in which round]
Austria	YES	√	NO	
Belgium	YES	√	YES	Raking with three 2-dimensional tables (Region/Gender, Region/Age and Region/Education) [R1-R5]
Bulgaria	YES	√	NO	
Switzerland	YES	√	YES	New LFS control data from 2010 used instead of 2008 [R5]; exclusion of education variable [R1-R5]
Cyprus	YES	√	NO	
Czech Republic	YES	√	NO	
Germany	YES	√	NO	
Denmark	YES	√	NO	
Estonia	YES	√	NO	
Spain	YES	√	YES	Region variable with 16 cells instead of 7 [R1-R5]
Finland	YES	√	YES	Region variable data from the ESS Appendix instead of the LFS [R1]
France	YES	√	NO	
United Kingdom	YES	√	YES	Education variable excluded from the weighting procedure [R1-R4]
Greece	YES	√	NO	
Croatia	YES	√	YES	Corrections in coding for region variable; weighting with Census data (gender/age) after initial weighting with LFS data [R4-R5]
Hungary	YES	√	NO	
Ireland	YES	√	YES	Education variable excluded from the weighting procedure [R1-R4]
Iceland	YES	√	NO	
Israel	YES	√	YES	Weighting with corrected design weights; control data from 2010 used instead of 2002 [R4, R5]
Italy	YES	√	NO	
Latvia	YES	√	NO	
Lithuania	YES	√	YES	Data for Round 5 additionally added in the ESS archive, therefore additional weighting performed [R5]
Luxembourg	YES	√	NO	
Netherlands	YES	√	NO	
Norway	YES	√	NO	
Poland	YES	√	YES	Education variable excluded from the weighting procedure [R1-R5]
Portugal	YES	√	NO	
Romania	YES	√	NO	
Russia	YES	√	YES	New control data from Census 2010 used instead of 2002 [R3-R5]
Sweden	YES	√	NO	
Slovenia	YES	√	NO	
Slovakia	YES	√	YES	Weighting with corrected design weights [R2-R5]
Turkey	YES	√	YES	Weighting with corrected design weights [R2, R4]
Ukraine	YES	√	YES	Education variable excluded from the weighting procedure [R2-R5]

5 Draft recommendation for future ESS weighting

According to various comments and suggestions, which we have received from different countries, along with our past experiences with weighting, we suggest that the following issues need to be discussed for the future of ESS population weightings:

- Use of the NUTS 3 region variable or national specific regional data from other sources in the weighting procedure instead of NUTS 2, needs to be considered, especially for smaller countries. Many smaller countries (e.g. Cyprus, Estonia, Iceland, Slovenia, Latvia, Lithuania and Luxembourg) have only one region on the NUTS 2 level. In these cases, we actually exclude region from the weighting procedure. Therefore, we could use the NUTS 3 level for these countries, which was also suggested by many of them. If LFS data does not contain information for the NUTS 3 level, the national official data could be used. Alternatively we could also more proactively promote and harmonised country specific weights.
- Future considerations should be made on dealing with the education variable in the weighting process. Some countries have expressed doubts whether education was correctly and uniformly coded in both data sources and through the years, especially where noticeable discrepancies between the ESS and control data appear (e.g. Ireland, Germany and Ukraine). One solution for better comparability between data sources would be to implement a four-category education control variable, because as we already know, some ISCED categories are difficult to assign to one of the three levels used for weighting. Anyway, the dilemmas with respect to education were already identified in the core methodological report, where the current solution has been selected due to practical and time/resources related reasons.
- The Core Scientific Team (CST) needs to decide whether the ESS should more actively encourage the participating countries to include their own population weights. Perhaps countries would feel it important to weight their data and produce their own weights (e.g. in Finland they have already produced their own weights and suggested to use them instead of our weights). In this case, it might be also decided on some minimal harmonisation, quality control and comparisons with ESS weights.
- The sequence of activities related to weighting needs to be elaborated in advance, in order to see how the weighting fits into the overall production of data files.

Appendix A: Proposal for DACE, WP12 additional Task 3a

Vasja Vehovar, January 2013

DACE, WP12, Task 3 extension PROPOSAL 3A

The proposed task provides evaluation of the ESS weights from country experts. Substantial efforts were already put into construction of ESS weights (particularly with respect to control variable of education). As the weights are in many aspects country specific feature, to increase the ESS data quality, the feedback from country experts is very beneficial: it improves the quality of the data, as it can anticipate and solve the potential national-specific comments.

NAME OF THE TASK "Country-specific Quality Control Checks for ESS Weighting Procedures"

DEADLINE: October 2013 (if it starts in February).

DESCRIPTION OF WORK: We ask ESS National Coordinators to provide us with a person responsible and knowledgeable about weighting for General Social Survey (or a similar survey) in their country. If no expert is identified, we will contact weighting experts for social surveys from the corresponding statistical office. We then ask the selected expert to fill the template.

DELIVERABLES:

- Finalized and approved (from WP leader and DACE coordinator) template and communication protocol (Month 1).
- Progress report (Month 5)
- Final report on results and communication with countries, including - whenever needed - a new set of weights and/or revised documentation (Month 8).

RESOURCES: 'Researcher'/Research Assistant (@ €2.5K pcm).

Costs: Direct costs 100%

Indirect costs 60%

Subtotal, of which 75 is reimbursed/EC contribution

Direct Researcher/personnel: 10,000

Indirects 6,000

Subtotal 16,000, of which **12K** is EC contribution

Appendix B: Communication protocol

Communication protocol to clarify weighting issues (DACE, WP12, Task 3a)

The team from University of Ljubljana (UL) is undertaking an additional task related to Task 3 of Work Package 12 of the DACE project: *Calculation of improved post-stratification weights to correct for unequal representation for all rounds for all countries*. The new task involves a consultation process with all countries for which weights are being computed, and it will act according to the following communication strategy:

1. In April of 2013 the National Coordinators (NC's) of all countries for which weights are being computed will receive the material (letter and national template to fill) by email.
 - If the NC has enough expertise on survey weighting, he/she can fully serve as a weighting expert and fill in the template.
 - NC's who feel they do not have enough expertise (which seems to be the predominant situation) will fill the template in cooperation with a national sampling expert. Where appropriate, this will be the pre-appointed national ESS sampling expert; otherwise, the NC will appoint a knowledgeable expert in their organization or in the contracting agency in charge of fieldwork in their country. Alternatively, the NC may also appoint or recommend a competent expert outside their own organization or the contractor.
 - It is recommended that the NC remains the primary contact and the NC is expected to fill the template with the help of national expert(s). However, in exceptional circumstances, and with the goal of effectively completing the task the expert may become the contact person and will work with the UL team directly to fill in the template.
2. If no response is received from the NC (or from the selected expert) within a week of the material being sent, a reminder will be sent to the NC. If no response has been received within two weeks, up to two additional contacts will follow, using alternative contact modes (e.g. phone call and/or letter). If after four contact attempts the NC still does not reply, the UL team will try to find and appoint an expert in that country. This will typically be someone from the Statistical office such as weighting staff in social survey sections. The same reminding strategy will be used to try to gain cooperation from the weighting expert (two emails, plus two alternative contacts).
3. The contact procedure is estimated to last three months.
4. The workload for experts in a typical country is estimated to be up to around few hours. The experts will be asked to comment on the procedures, and we expect this to be a straight-forward task. In addition, they will be asked to check the margins of the control variables. In few countries, where problems arise and clarification is needed, more efforts will be required.
5. We expect that some NC's and experts could have queries and requests for clarification. Queries related to education will be forwarded by an ESS expert in education. Queries related to other topics will be handled by the UL team, working to clarify the problem until a consensual solution with the NC (or national expert) is found. If any queries arise that are considered to be critical, other experts might need to be involved.
6. For remaining unresolved issues the corresponding problems will be discussed among researchers involved in DACE Work Package 12; if necessary, the ESS Methods Group and/or the ESS/DACE CST will also be consulted. In case of serious problems for which no optimal solution is found, either an acceptable compromising solution would be sought, or additional resources will need to be provided to address and solve the problem.

Appendix C: Communication letter

Dear [name, surname], ESS national coordinator for [country],

As we agreed at March 2013 Manheim NC meeting we are now sending you the template for country specific feedback on weighting.

Since the release of data from Round 1, the European Social Survey (ESS) has provided data users with design weights (DWEIGHT) that account for unequal probability of selection within country and population weights (PWEIGHT) that account for differences in country population size when combining data from more than one country. However, users have often requested within-country post-stratification weights that can correct for unequal representation of different socio-economic groups among the respondents. A number of obstacles made computation of such weights challenging, but a team of researchers from the University of Ljubljana (UL) in collaboration with other members of the Core Scientific Team (CST) of the ESS have been working to produce post-stratification weights that hopefully help increase the accuracy of survey estimates. The task involves producing weights for all countries included in the released datasets of each round.

As part of our commitment to data quality, we are undergoing a consultation process where NCs together with weighting experts from each country are invited to comment on the appropriateness of our weighting procedure. The attached document/template contains a set of questions related to the weighting computation procedures, as well as tables providing outcome to help you evaluate the resulting weights.

We are extremely thankful to you for your cooperation with us. Please answer the questions we present in the template. Please use as much space as you need to provide your answers.

We expect a response from you (i.e. filled template sent to us by email) in two weeks. We understand however that rarely NC will be also the sampling expert, so we suggest you fill this template with the help of corresponding expert. Typically this will be the person who already participated for sampling issues related to ESS round 5 survey (either from you organization or from contracting agency), but this can also be an independent external expert.

In case of any question do not hesitate to contact us.

Sincerely,

Dr. Vasja Vehovar, University of Ljubljana
Email: vasja@fdvinfo.net
Tel: [+386 1 5805 297](tel:+38615805297)

Here are URL links to (slightly improved) weighting materials from Manheim meeting:

- [\[Country-specific weighting documentation – template to fill\]](#) (same as in attachment)
- [Communication protocol to clarify weighting issues \(DACE, WP12, Task 3a\)](#)
- [Post-stratification weighting of the ESS \(Methodology development and data preparation\)](#)

Appendix D: Country-specific template to fill out

The European Social Survey - Data for a Changing Europe (ESS-DACE)

Country: [country]

Country-specific weighting documentation

Illustration: Effects of the weights in R5: Table 1 demonstrates (for 9 variables) the effects in ESS Round 5 (2010) for your country. Further on, Tables 2 and 3 outline the weighting procedure and control variables. More details are available in the documents linked at the end of this template.

Table 1: Estimates for the means for selected variables (scale 0-10) in Round 5

variable	variable label	Unweighted	Design weights	New weights	New weights (cut at 2)	New weights (cut at 4)	Relative difference (%)
ppltrst	Most people can be trusted (10) or you can't be too careful (0)	3,94	3,94	3,96	3,96	3,96	0,49
pplfair	Most people try to take advantage (0) of you, or try to be fair (10)	4,49	4,49	4,52	4,52	4,52	0,57
pplhlp	Most of the time people helpful (10) or mostly looking out for themselves (0)	4,41	4,41	4,42	4,42	4,42	0,26
trstep	Trust in the European Parliament (0 - No trust at all, 10 - complete trust)	3,74	3,74	3,76	3,76	3,76	0,34
lrscale	Placement on left (0) right (10) scale	4,85	4,85	4,87	4,87	4,87	0,42
stflife	How satisfied with life as a whole (0 - Extremely dissatisfied, 10 - Extremely satisfied)	6,97	6,97	6,97	6,97	6,97	-0,03
stfeco	How satisfied with present state of economy in country (as above)	2,87	2,87	2,91	2,91	2,91	1,41
stfgov	How satisfied with the national government (as above)	2,65	2,65	2,64	2,64	2,64	-0,25
stfdem	How satisfied with the way democracy works in country (as above)	3,20	3,20	3,21	3,21	3,21	0,30

--Last column presents relative difference between estimates with new weights (cut at 4) and with design weights, i.e. $(dw-w4)/w4*100$

--For more details see <http://mi.ris.org/upload/editor/DnD1364559786ESSR5resultsPostStrat.xlsx>

a) Weighting procedure

The **weighting procedure** used **raking** on two sets of variables: (i) **cross-tabulation of age, gender, and education** (18 cells) and (ii) **Region** (with 2 cells). For details see Tables 2 and 3 below.

Question 1a: Do you identify any problems with the above weighting procedure?

Question 1b: Are there any essential weighting variables that we have missed and are typically used for weighting in your country?

Question 1b: Do you have any other suggestions for improvements?

b) Margins of control variables (Control source: [Labour Force Survey])**Table 2: Structure for control variables gender, age and education for ESS and [LFS]**

Year	2002		2004		2006		2008		2010	
Data	ESS	LFS	ESS	LFS	ESS	LFS	ESS	LFS	ESS	LFS
Gender										
Male	47,60	48,49	44,94	48,52	45,19	48,65	46,35	49,21	46,40	49,21
Female	52,34	51,51	52,84	51,48	54,81	51,35	53,65	50,79	53,46	50,79
Missing	0,07	0,00	2,22	0,00	0,00	0,00	0,00	0,00	0,14	0,00
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Age										
15-34	33,44	34,20	32,32	33,64	30,96	32,19	30,95	31,66	29,44	31,03
35-54	37,00	35,95	34,05	35,91	33,13	36,01	33,90	35,24	31,79	34,63
55+	29,56	29,85	32,66	30,45	35,57	31,80	35,15	33,09	37,49	34,35
Missing	0,00	0,00	0,97	0,00	0,34	0,00	0,00	0,00	1,28	0,00
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Education										
Lower	30,02	31,67	30,31	29,84	27,85	27,68	28,23	26,46	23,88	24,96
Medium	54,71	55,84	54,16	55,66	52,24	55,71	50,70	56,04	55,02	56,27
Higher	14,68	10,85	15,33	14,45	19,78	16,61	20,84	17,50	20,88	18,77
Missing	0,59	1,64	0,21	0,05	0,14	0,00	0,23	0,00	0,21	0,00
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ESS data are weighted by *dweight* (design weight), which accounts for differential probabilities of selection due to sampling design.

Question 2a: To the best of your knowledge, do the numbers and margins in the table above reflect accurate population values?

Question 2b: In general, how do you evaluate the quality of [Labour Force Survey] in your country, which has served in ESS as a control benchmark for population weighting?

Question 2c: Do you think that the [Labour Force Survey] is an appropriate source for population estimates in your country? If not, what alternative sources would you suggest?

Question 2d: Any other comments regarding Table 2 or Table 1?

c) Region variable (control source: [LFS])**Table 3: Region structure used in weighting procedure**

Region	2002		2004		2006		2008		2010	
	ESS	LFS	ESS	LFS	ESS	LFS	ESS	LFS	ESS	LFS
Vzhodna Slovenija	57,41	54,13	57,28	54,09	56,71	53,90	57,93	53,76	58,95	53,13
Zahodna Slovenija	42,59	45,87	42,72	45,91	43,29	46,10	42,07	46,24	41,05	46,87
Total	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

ESS data are weighted by dweight. For details see <http://mi.ris.org/uploadi/editor/DnD1363613945ESSRegionPostStrat.xlsx>

Question 3a: We have [12] regions available in the ESS data for your country and there are [2] NUTS2 regions in the [LFS]. We selected the number of regions corresponding to the lowest common denominator, in this case [2 regions]. Do you have any comments regarding this solution?

Question 3b: Do control values from [Labour Force Survey] in Table 3 look correct? In case of discrepancies – which estimates seem more accurate, those from the ESS or those from the [LFS]?

Question 3c: Do you know of any suitable and substantially better alternative source of regional control data?

More information:

- Methodology development and data preparation for ESS population weighting: http://mi.ris.org/uploadi/editor/DnD1364916446DACE_PostStratW_reviewed_final4.docx
- Control Data for Gender, Age and Education (ESS and LFS): <http://mi.ris.org/uploadi/editor/DnD1364559786ESSGAETablePostStrat.xlsx>
- Data for Region (ESS and LFS): <http://mi.ris.org/uploadi/editor/DnD1363613945ESSRegionPostStrat.xlsx>
- ESS weighting results for R5: <http://mi.ris.org/uploadi/editor/DnD1364559786ESSR5resultsPostStrat.xlsx>

Appendix E: Country-specific answers

- Austria (<http://mi.ris.org/uploadi/editor/1370096085Austria.doc>)
- Belgium (<http://mi.ris.org/uploadi/editor/1366806624Belgium.doc>)
- Bulgaria (<http://mi.ris.org/uploadi/editor/1368690791Bulgaria.docx>)
- Croatia (<http://mi.ris.org/uploadi/editor/1368084955Croatia.doc>)
- Cyprus (<http://mi.ris.org/uploadi/editor/1368690780Cyprus.doc>)
- Czech Republic (<http://mi.ris.org/uploadi/editor/1366806651CzechRepublic.doc>)
- Denmark (<http://mi.ris.org/uploadi/editor/1395694175Denmarkempty.doc>)
- Estonia (<http://mi.ris.org/uploadi/editor/1368084915Estonia.doc>)
- Finland (<http://mi.ris.org/uploadi/editor/1368690813Finland.docx>)
- France (<http://mi.ris.org/uploadi/editor/1373482004France.doc>)
- Germany (<http://mi.ris.org/uploadi/editor/1368084945Germany.doc>)
- Greece (<http://mi.ris.org/uploadi/editor/1370096021Greece.doc>)
- Hungary (<http://mi.ris.org/uploadi/editor/1373481989Hungary.doc>)
- Iceland (<http://mi.ris.org/uploadi/editor/1370096108Iceland.doc>)
- Ireland (<http://mi.ris.org/uploadi/editor/1368690801Ireland.docx>)
- Israel (<http://mi.ris.org/uploadi/editor/1373560350Israel.doc>)
- Italy (<http://mi.ris.org/uploadi/editor/1370504045Italy.doc>)
- Latvia (<http://mi.ris.org/uploadi/editor/1373481976Latvia.doc>)
- Lithuania (<http://mi.ris.org/uploadi/editor/1368764474Lithuania.doc>)
- Luxembourg (<http://mi.ris.org/uploadi/editor/1370096070Luxembourg.doc>)
- Netherlands (<http://mi.ris.org/uploadi/editor/1366806632Netherlands.doc>)
- Norway (<http://mi.ris.org/uploadi/editor/1373481944Norway.doc>)
- Poland (<http://mi.ris.org/uploadi/editor/1368690825Poland.doc>)
- Portugal (<http://mi.ris.org/uploadi/editor/1393090160Portugal.doc>)
- Romania (<http://mi.ris.org/uploadi/editor/1370096056Romania.doc>)
- Russia (<http://mi.ris.org/uploadi/editor/1370096043Russia.doc>)
- Slovakia (<http://mi.ris.org/uploadi/editor/1369039755Slovakia.doc>)
- Slovenia (<http://mi.ris.org/uploadi/editor/1366806641Slovenia.doc>)
- Spain (<http://mi.ris.org/uploadi/editor/1368108446Spain.docx>)
- Sweden (<http://mi.ris.org/uploadi/editor/1370096097Sweden.doc>)
- Switzerland (<http://mi.ris.org/uploadi/editor/1368084926Switzerland.doc>)
- Turkey (<http://mi.ris.org/uploadi/editor/1393438018Turkey.doc>)
- Ukraine (http://mi.ris.org/uploadi/editor/1368108434Ukraine_Andrii.doc)
- United Kingdom (<http://mi.ris.org/uploadi/editor/1373481960UnitedKingdom.doc>)

Appendix F: Comments regarding potential problem with ESS design weights

- **Ukraine:** *"In 2009 and in 2010 I have sent to ESS sample design panel several messages about problems with design weight with tables very similar with Table 3 in this document. The problem of dweight in ESS is that it damages regional and urban-rural proportions (as you partly demonstrate in Table 3)."*
- **Slovakia:** *"These results are significantly different from reality. We do not know exactly how you weighted the data, but we don't recommend this weighting. It's not correct to achieve such different values. For example for Bratislavsky kraj: according to the table 30%, but according to number of sample points it was possible to get maximum 16% of all interviews."*
- **Portugal:** *"Concerning the second point of your email, yes, you are right, the dweight is damaging the original structure. As you can see in the excel file the differences between the unweighted distribution and Census data are lower than the differences between the dweight figures and Census data. We must discuss this with Sabine Header and see what she can suggest in order to minimize this effect."*
- **Israel:** *"A second issue to note is that several months ago we discovered the DW for 2008 and 2010 were not calculated properly by our sampling expert. Unfortunately this was after the data were published. We sent the new DW to Mathias but we assume you used the old ones."*
- **Turkey:** *"When I have some time, I shall dig into the old files and will try to help. However, in the meantime, I suggest removing the weights altogether."*

Appendix G: Report to NSD about problems

Dear ESS team,

During our weighting procedure we discovered that in certain countries there are significant discrepancies between the ESS data and control data in region variable. We found out that such discrepancies arise due to design weights (dweight) which are added in the ESS data. Therefore we suspect that existing design weights are probably damaging the original structure of the ESS data in certain countries such as Turkey, Slovakia, Ukraine and Hungary (maybe also Portugal).

Here is the illustration of discrepancies between unweighted and dweighted ESS data for specific countries (dweight problematic countries):

<http://mi.ris.org/uploadi/editor/1369218376Dweightproblematiccountries.docx>

During weight validation with NCs we already got a confirmation email from Ukraine and Slovakia that something is wrong when design weights are applied:

- Ukrainian NC: *"In 2009 and in 2010 I have sent to ESS sample design panel several messages about problems with design weight with tables very similar with Table 3 in this document. The problem of dweight in ESS is that it damages regional and urban-rural proportions (as you partly demonstrate in Table 3)."* URL: [Country-specific feedback on weighting \(Ukraine\)](#)
- Slovak NC: *"These results are significantly different from reality. We do not know exactly how you weighted the data, but we don't recommend this weighting. It's not correct to achieve such different values. For example for Bratislavsky kraj: according to the table 30%, but according to number of sample points it was possible to get maximum 16% of all interviews."* URL: [Country-specific feedback on weighting \(Slovakia\)](#)

For Turkey, Hungary and Portugal we have not received any confirmation yet. As we can see, some countries (e.g. Ukraine) claim that they already complained in past years to ESS. Do you have any information about this problem?

Furthermore, we found out that the ESS data contain another problem - a mismatch in coding for region variable for Croatia. Our Croatian NC colleague confirmed that problem:

"yes you are right there is error in coding for region variable. We checked with original sample list and questionnaires and the region variable for Croatia should be recoded: HR03 to HR01, HR01 to HR02, HR02 to HR03. I apologize because of this mistake, and that we did not check it earlier. Thank you for noticing this."
URL: [Croatian Answer on mismatch in coding for region variable](#), [Country-specific feedback on weighting \(Croatia\)](#)

Kirstine, please confirm that you have received this email.

Sincerely,
Vasja Vehovar