

### European Values Study 2008: project and data management

Brislinger, Evelyn; Nijs Bik, Emile de; Harzenetter, Karoline; Hauser, Kristina; Kampmann, Jara; Kurti, Dafina; Luijkx, Ruud; Ortmanns, Verena; Rokven, Josja; Sieben, Inge; Solanes Ros, Ivet; Stam, Kirsten; Weijer, Steve van de; Vlimmeren, Eva van; Zenk-Möltgen, Wolfgang

Veröffentlichungsversion / Published Version  
Arbeitspapier / working paper

Zur Verfügung gestellt in Kooperation mit / provided in cooperation with:  
GESIS - Leibniz-Institut für Sozialwissenschaften

#### Empfohlene Zitierung / Suggested Citation:

Brislinger, E., Nijs Bik, E. d., Harzenetter, K., Hauser, K., Kampmann, J., Kurti, D., ... Zenk-Möltgen, W. (2011). *European Values Study 2008: project and data management*. (GESIS-Technical Reports, 2011/14). Köln: GESIS - Leibniz-Institut für Sozialwissenschaften. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-288600>

#### Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

#### Terms of use:

This document is made available under Deposit Licence (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual and limited right to using this document. This document is solely intended for your personal, non-commercial use. All of the copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public.

By using this particular document, you accept the above-stated conditions of use.



gesis

Leibniz Institute  
for the Social Sciences

TECHNICAL *Reports*

2011 | 14



European *Values* Study

EVS 2008

Project and Data Management

*Evelyn Brislinger, Emile deNijsBik, Karoline Harzenetter,  
Kristina Hauser, Jara Kampmann, Dafina Kurti,  
Ruud Luijkx, Verena Ortmanns, Josja Rokven, Inge Sieben,  
Ivet Solanes Ros, Kirsten Stam, Steve van de Weijer,  
Eva van Vlimmeren, Wolfgang Zenk-Möltgen*



GESIS-Technical Reports 2011 | 14

## European Values Study 2008 Project and Data Management

*Evelyn Brislinger, Emile deNijsBik, Karoline Harzenetter, Kristina Hauser,  
Jara Kampmann, Dafina Kurti, Ruud Luijkx, Verena Ortmanns,  
Josja Rokven, Inge Sieben, Ivet Solanes, Kirsten Stam, Steve van de Weijer,  
Eva van Vlimmeren, Wolfgang Zenk-Möltgen*

GESIS – Leibniz Institute for the Social Sciences 2011

## GESIS-Technical Reports

GESIS - Leibniz-Institut für Sozialwissenschaften

50667 Köln

Unter Sachsenhausen 6-8

Germany

Phone: +49 (0)221 / 476 94-0

Fax: +49 (0)221 / 476 94-199

E-Mail: [evelyn.brislinger@gesis.org](mailto:evelyn.brislinger@gesis.org)

ISSN:

1868-9043 (Print)

ISSN:

1868-9051 (Online)

Herausgeber,

Druck und Vertrieb:

GESIS - Leibniz-Institut für Sozialwissenschaften

Unter Sachsenhausen 6-8, 50667 Köln

[info@gesis.org](mailto:info@gesis.org), [www.gesis.org](http://www.gesis.org)

---

## Acknowledgements

---

The EVS 2008 project would not have been possible without financial support by [Renovabis](#) – Solidarity initiative of the German Catholics with the people in Central and Eastern Europe<sup>1</sup> and the sponsors in the EVS member countries.

An overview of all national sponsors is provided on the website of the European Values Study <http://www.europeanvaluesstudy.eu/evs/sponsoring.html>.

The close collaboration of the different actors has been the basis of the project: the EVS advisory groups at Tilburg University, the National Program Directors and their teams in EVS member countries, CEPS/Institute Luxembourg, Gallup Europe, and the EVS teams at Tilburg University and at the GESIS Data Archive for the Social Sciences.

### *European Values Study at Tilburg University*

Information on the members of the EVS groups guiding the project is given on the EVS web pages: [Theory Group](#), [Methodology Group](#), and [Executive Committee](#).

Members of the data processing team are: Emile deNijsBik, Anja Habraken, Ruud Luijckx (project manager), Josja Rokven, Inge Sieben, Kirsten Stam, Anouk van Pul, Eva van Vlimmeren, Ellen Verbaakel, and Steve van de Weijer.

### *EVS member countries*

An overview of the National Program Directors is given on web page [Council of program directors](#).

### *GESIS Data Archive*

Members of the EVS data processing team are: Evelyn Brislinger (coordinator), Andrea Britze, Karoline Harzenetter, Kristina Hauser, Jara Kampmann, Anabel Kuntz, Dafina Kurti, Houdä ben Mchalla, Verena Ortmanns, Timo Pfortner, Iveta Solanes, Pamela Wronski, Wolfgang Zenk-Möltgen.

Staff supporting the project within the Data Archive: Jochen Bartz, Petra Brien, Markus O. Czesla, Uwe Jensen, Reiner Mauer, Alexander Mühlbauer, and Marlies Post.

### *CEPS/Institute Luxembourg (ACTP - Administrative Center for Translation Procedure)*

Coordination of the translation process was undertaken by Monique Borsenberger, Paola Dumet, Ioana Salagean, Konrad Skoczylas, Marie Valentova, and Lucie Waltzer.

### *Gallup Europe*

The questionnaire translation system WebTrans was provided by Gallup with technical assistance of Peter Husztik.

Fieldwork for 15 EVS member countries was coordinated by Maria Fodor.

---

<sup>1</sup> Renovabis: Project No. MOE016847.



---

## Contents

---

Introduction .....	11
1 Organisational structure and project data management .....	14
2 Data and information transfer .....	17
3 Questionnaire development and data collection .....	20
3.1 Questionnaire design and translation .....	20
3.1.1 Development of English Master Questionnaire .....	21
3.1.2 Translation of field questionnaire .....	22
3.1.3 Country information on questionnaire translation .....	24
3.2 Data collection .....	25
4 Data processing .....	30
4.1 Working and public-use data files .....	31
4.2 Data processing steps .....	33
4.3 Data processing rules .....	35
4.3.1 Rules for country-specific data editing .....	35
4.3.2 Country information on data editing and quality measures .....	36
4.3.3 Rules for centralised data editing .....	36
5 Data Documentation .....	40
5.1 Study level documentation .....	40
5.2 Variable level documentation .....	42
5.2.1 EVS 1999/2008: Link between variable documentation and translation process .....	42
5.2.2 EVS 2008: English and multilingual variable documentation .....	43
6 Internal and external review procedures on outcomes .....	48
6.1 Internal review procedures .....	48
6.2 External review procedures .....	48
7 Publication concept .....	50
8 Preservation .....	52
9 Tools, software and standards used .....	55



## List of Figures, Tables, and Appendices

Figure 1:	EVS surveys 1981 to 2008.....	11
Figure 2:	Released EVS 2008 data and EVS workshops 2009-2011 .....	12
Figure 3:	Actors and collaboration during the EVS 2008 project.....	14
Figure 4:	Guidance and review procedures .....	15
Figure 5:	Data and documentation provided for EVS 2008 .....	16
Figure 6:	EVS project portal and long-term preservation.....	17
Figure 7:	Languages fielded and shared in EVS 2008.....	23
Figure 8:	Data processing workflow.....	31
Figure 9:	Content of working and user datasets.....	32
Figure 10:	Steps in data processing.....	33
Figure 11:	Study level documentation workflow .....	41
Figure 12:	Documentation and translation workflow for trend variables of EVS 1999/2008.....	42
Figure 13:	Variable level documentation workflow .....	45
Figure 14:	Interpreting the bilingual variable documentation.....	46
Figure 15:	Interrelation between preservation system and publication.....	52
Figure 16:	Overview of data and documentation for long-term preservation .....	53
Figure 17:	Current applications and workflow .....	55
Table 1:	Compliance with EVS 2008 guidelines and recommendations.....	20
Table 2:	Thematic categories and related variables in EVS 2008.....	21
Table 3:	Response and non-response according to AAPOR classification .....	28
Table 4:	Data processing: Overview of type and content of syntax files.....	38
Appendix 1:	EVS 2008: Country codes (ISO 3166-1).....	59
Appendix 2:	Data and documentation files uploaded on the EVS project portal.....	60
Appendix 3:	Use of the web-based questionnaire translation system – WebTrans .....	61
Appendix 4:	Questionnaire translation – responsible agent(s) and translation procedure(s).....	62
Appendix 5:	Fieldwork period .....	63
Appendix 6:	Interviewer training.....	64
Appendix 7:	Control operations – number of units selected for back-checking.....	65
Appendix 8:	Control operations – number of back-checks achieved .....	66
Appendix 9:	Control operations – number of units where outcome was confirmed .....	67
Appendix 10:	Control operations – types of back-checks (personal, telephone, mail) .....	68

Appendix 11: Enhancing measures and incentives .....69

Appendix 12: Mode of data collection and verification of questionnaire .....70

Appendix 13: Outcome rates calculated according to AAPOR Classification .....71

Appendix 14: Characteristic of sample: response and non-response (numbers).....72

Appendix 15: List of abbreviations.....73



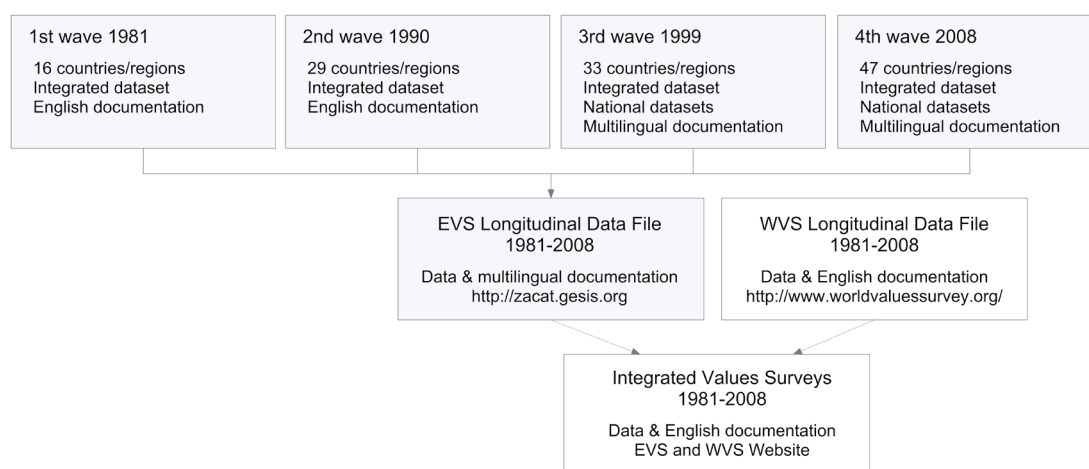
## Introduction

The report at hand deals with the fourth European Values Study wave carried out between 2008 and 2010 in 47 European countries/regions. The data and documentation of the full release of EVS 2008 has been available since December 2010. It is integrated into the pre-release of the EVS Longitudinal Data File 1981–2008 published in June 2011, and will be updated along with EVS waves 1981, 1990, and 1999 for the final release of the EVS Longitudinal Data File scheduled for February 2012.

The European Values Study website, section [Surveys](#), provides easy access to all up to date data and documentation. The integrated dataset and the national datasets are published via [ZACAT](#) - Online Study Catalogue. An overview of Version History & Errata on each dataset is given in the [GESIS Data Catalogue](#). Publications using EVS data can be entered and searched in the [EVS Repository](#) providing bibliographical information, partly full text as well as links to dataset information.

In Figure 1, an overview of EVS surveys which have been conducted since 1981 is given. All surveys are provided along with comprehensive English language documentation covering study level information on the origin and content of the data, and variable level information on the questions of the master questionnaire. For the 1999 and 2008 wave, additionally the national datasets are accessible and documented with the original questions as fielded in the languages of EVS member countries.

Figure 1: EVS surveys 1981 to 2008



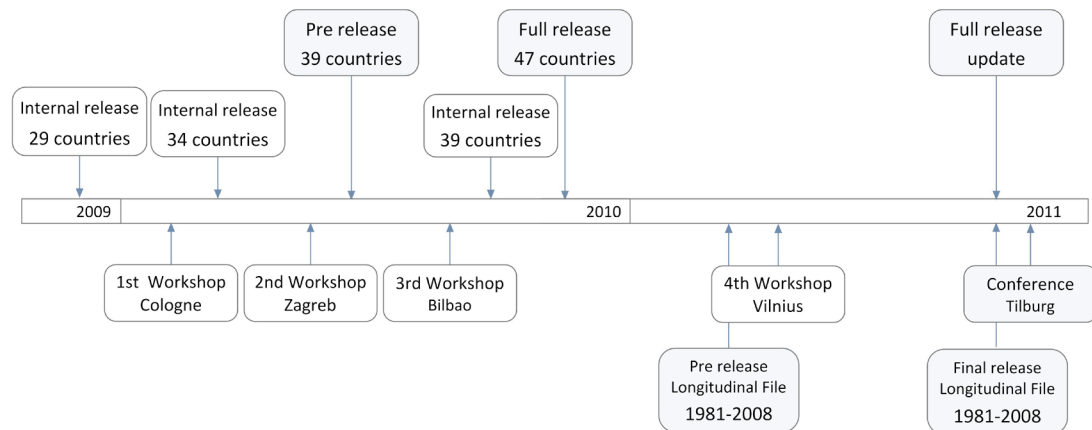
The four EVS waves are integrated into a Longitudinal Data File covering 49 countries and altogether 125 national surveys.

The European Values Study and the World Values Survey include a large number of questions, which have been replicated since the early eighties. To assist users in comparative analyses both longitudinal files were harmonised using a common dictionary. Further, up to date information on the content of the data files and assistance on how to merge both files is provided on the EVS and the WVS websites. The resulting data file is called Integrated Values Surveys and includes altogether 102 countries and 305 national surveys.

Figure 2 shows the timeline of some events related to EVS 2008 data releases and workshops conducted. Internal-use releases, publicly available pre-releases, and workshops were used for reviewing the data and documentation and getting feedback from the teams in the EVS member countries and from secondary researchers. The full release of the EVS Longitudinal Data File 1981–2008 and the

international conference "The Values of Europe" at Tilburg University are two events scheduled for the end of November 2011.

Figure 2: Released EVS 2008 data and EVS workshops 2009-2011



The close collaboration between the EVS groups at Tilburg University, EVS member countries, survey organizations, and the Data Archive was the basis for the data management plan designed. It allowed from the outset of the project considerations on which kind of data and information should be produced, which review procedures are necessary to improve their quality, and which types of outcomes may facilitate user-friendly access.

The Theory Group, the Council of National Program Directors (PD), and the Methodology Group agreed on EVS 2008 Recommendations and Guidelines fostering a harmonised and monitored data creation and data processing. The EVS at Tilburg University and CEPS/Instead Luxembourg were responsible for the translation process and the coordination of fieldwork. Data processing and documentation was undertaken by the EVS teams at Tilburg University and the Data Archive in close collaboration with the National Program Directors and their teams.

The Data Archive is the official archive of the European Values Study. In the long run, it has a special responsibility for providing persistent access to data and documentation for the EVS at Tilburg University, the teams in the EVS member countries, and the scientific community for secondary research. The long-term character of the EVS project allows building on experiences and results of previous waves. It also requires keeping the coming EVS waves in mind with regard to collecting and preserving all key data and information that will be useful to it.

Considering the nine-year cycle of EVS waves, the report at hand might assist in the preparation of the next EVS wave and enable a secure migration to advanced or newly designed data processing and preservation systems.

### *Structure and contents of the report*

The report describes the main steps that had to be taken to adhere, as close as possible, to the recommendations on the production of comparable data.

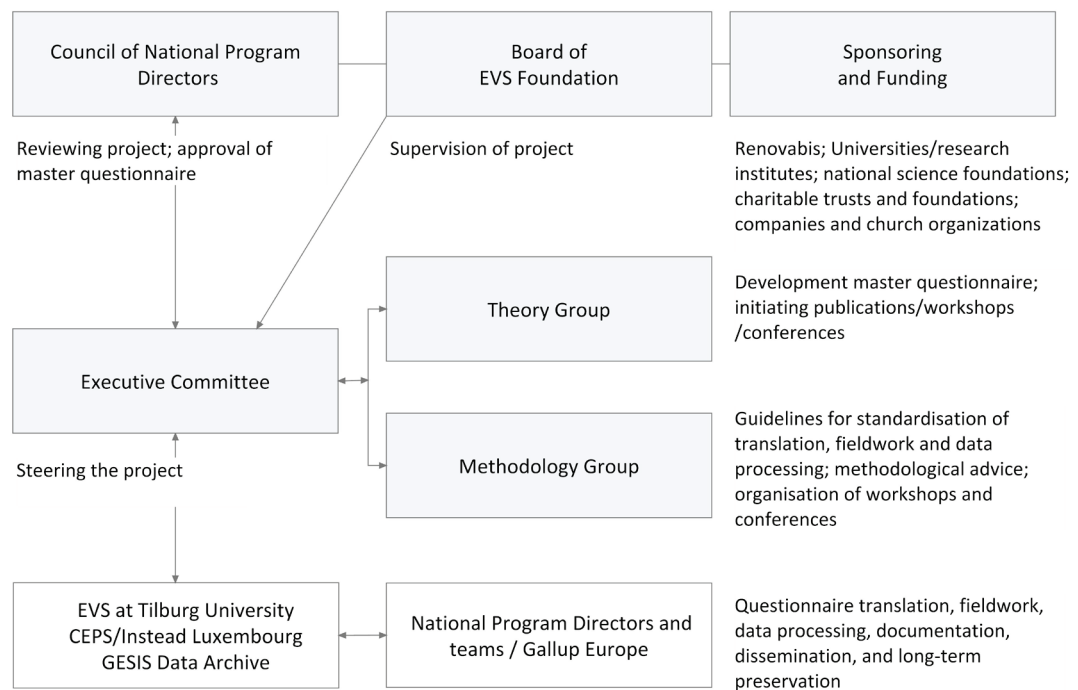
The *project data management* for the Survey 2008 comprised the main project phases and regulations from data creation to publication of the outcomes regulated by the bodies implemented with the organisational project structure.

- At the outset, the project organised a platform for stable and secure data and information transfer. The Guidelines and Recommendations document was the first information uploaded on the *EVS Project Portal*.
- The harmonised *questionnaire development* and *questionnaire translation* as well as the *data collection* in the countries are described briefly in the following section. The focus here is on collection and preparation of substantial and methodological information becoming relevant in the later stages of data processing and documentation and finally in sharing data and project outcomes with secondary researchers.
- The *data processing workflow* covers supporting standards and project-specific routines to control, edit, and integrate the data. It includes the original data and different kinds of working and published data files. The integrated dataset and national datasets are generated aiming on a high degree of harmonisation and standardisation based upon the recommended project standards.
- In the subsequent *documentation process*, information recorded in prior phases and relevant to share, for re-use or to understand the data is compiled as complete as possible. Study level information is processed and published along with multilingual variable-related information.
- A special section is dedicated to *review procedures* by the EVS teams, the EVS countries, and secondary researchers. Only data and documentation reviewed by the countries was published. Internal-use releases and EVS workshops enabled the different actors to exchange information and to provide feedback on the data and documentation across the project phases. Special features invite secondary users to play an active role in using the outcomes and reporting on results and problems detected.
- The *publication concept* covers direct access to the data including versioning, persistent identifier, and errata services. Guidelines, study and variable level information, questionnaires, and the report at hand are available along with integrated and country-specific data.
- The *long-term preservation* includes qualified curation and management of all incoming data and documentation files, key working, and released files. This allows for tracing back all data conversions or data problems and supporting the preparation of the coming EVS wave.
- Finally, *tools and software* used during the project are compiled to ease and improve daily work procedures as well as to assist later updates and the transformations of the information into further developed databases and workflows.

## 1 Organisational structure and project data management

Quality standards in data creation, processing, and documentation are prerequisites to achieve trustworthy data for comparative research<sup>2</sup>. The project data management for the Survey 2008 comprised the main project phases and regulations from data creation to publication of the outcomes. It was designed and reviewed by the Theory Group, the Council of National Program Directors, and the Methodology Group in cooperation with the Data Archive. As a result, a high degree of transparency with regard to information created on the single project phases could be achieved allowing for bringing together the perspective and expertise of Principal Investigators, the Data Archive, and secondary researchers/users. In Figure 3, a brief insight in the collaboration of the different actors involved in the project is given.

Figure 3: Actors and collaboration during the EVS 2008 project



<sup>2</sup> For information on guidelines for best practice in cross-cultural surveys and data management see e.g.: Survey Research Center. (2010). Guidelines for Best Practice in Cross-Cultural Surveys. Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan. <http://www.ccsr.isr.umich.edu/>, ISBN 978-0-9828418-0-8.

ICPSR Guidelines for Effective Data Management Plans. <http://www.icpsr.umich.edu/icpsrweb/ICPSR/dmp/index.jsp> Managing and Sharing Data. Best Practice for Researchers. UK Data Archive, University of Essex. Third edition, fully revised, 2011, ISBN: 1-904059-78-3. <http://www.data-archive.ac.uk/media/2894/managingsharing.pdf>.

ESS ESS 2006 Data Protocol. Edition 1.4, August 2006. NORWEGIAN SOCIAL SCIENCE DATA SERVICES. Online: <http://www.europeansocialsurvey.org/> (see Downloads/Data Archive Documentation).

Koch, A., Blom, A. G., Stoop, I., and Kappelhof, J., 2009: Data Collection Quality Assurance in Cross-National Surveys: The Example of the ESS. Methoden – Daten – Analysen, 2009, Jg. 3, Heft 2, S.219-247. <http://www.gesis.org/publikationen/zeitschriften/mda/>.

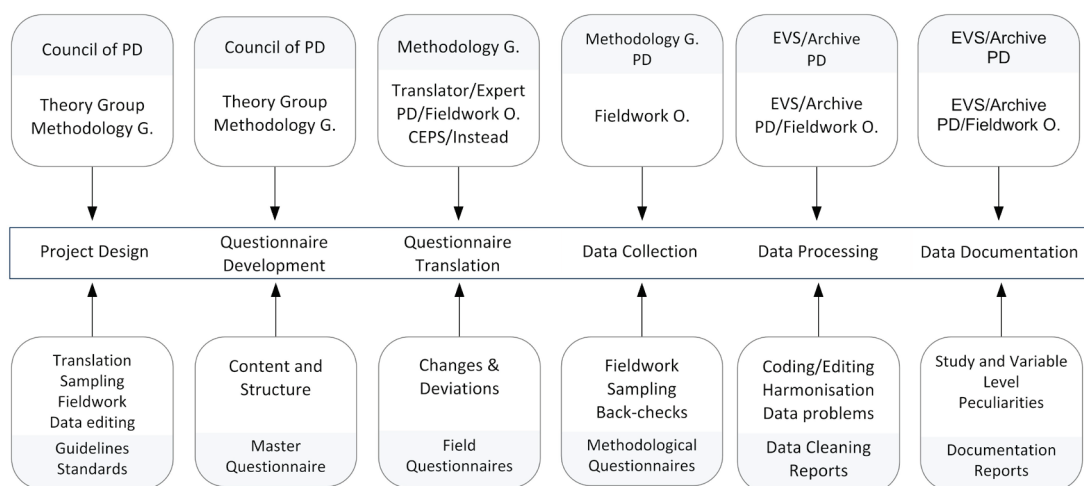
Supervision of the project lay with the Board of the EVS Foundation and the Council of National Program Directors bringing together the centralised and country-specific perspectives at the outset of the project<sup>3</sup>.

A Theory Group and a Methodology Group developed the main standards, provided assistance to national teams, and implemented review procedures for finding a good balance between main recommendations and country-specific adaptation.

The Executive Committee has been steering the project and organising the collaboration between the several actors across the project workflow: the EVS teams at Tilburg University, the Data Archive in Cologne, the EVS member countries, CEPS/Instead, and Gallup Europe.

The next figure depicts how this organisational structure worked for the several project phases. The line shows the single phases of the workflow. The boxes above the line comprise the actors in charge of the phase (blue marked) and further actors involved. The boxes below the line include main issues or tasks of the phase and the information and documentation finally created.

Figure 4: Guidance and review procedures



In the phase *Project Design* the guidelines covering recommendations on translation process, sampling, fieldwork, and data processing have been created by the Theory and Methodology Group and critically reviewed and approved by the Council of National Program Directors.

The same procedure has been applied to the following phase *Questionnaire Development* focusing on the creation of the English Master Questionnaire, the approval of the trend variables as well as the development of new topics and questions to be included in EVS 2008.

Several actors (National Program Directors, translators, experts in the EVS member countries) were involved in the *Questionnaire Translation* phase. A centralized translation system was used for creating the field questionnaires in all languages used. All deviations from the master questionnaire were documented.

<sup>3</sup> For more information on the organisational structure of EVS, see web page *About EVS* at <http://www.europeanvaluesstudy.eu/evs/about-evs/>.



Both the Methodology Group and the National Program Directors guided the *Data Collection* phase. Information on the process, quality measures implemented in the countries, and outcomes were summarised in methodological questionnaires and provided by each EVS member country.

The EVS teams at Tilburg University and GESIS in close collaboration with the teams in the EVS member countries undertook *Data Processing* and *Data Documentation*. All steps in editing, harmonisation, and documentation of the national data files were recorded in data cleaning and documentation reports.

All key information produced and processed during the project phases, covering the guidelines and standards developed to produce comparable data as well as detailed information on peculiarities of the national data at study level and variable level, is included in the documentation provided for EVS 2008. An overview is given in Figure 5.

Figure 5: *Data and documentation provided for EVS 2008*

Guidelines and Recommendations	Master Questionnaire Field Questionnaires
Integrated Dataset (IDS) National Datasets (NDS)	<i>Project and Data Management</i>
Method Reports for IDS and NDS	Variable Reports for IDS and NDS

The report EVS 2008 - *Project and Data Management* is intended to supplement the existing and available study related and variable related documentation on EVS 2008.

It aims to provide insights into the origin of the data and documentation, the decisions made, the workflows designed and tools used in the course of the study.

#### *Data management principles*

The main data management principles and workflow regulations the project tried to comply with can be summarised as follows

- Compliance to agreed guidelines and recommendations
- Close collaboration between EVS teams and EVS member countries across the workflow
- Quality controls, data security and review procedures across the workflow
- Transparency regarding internal workflows and outcomes
- Easy access to data and documentation for project members and secondary users
- Cross-linked metadata on variable level and study level
- Cross-linked data and publications
- Versioning, updates, and errata service for uniquely identifiable and citeable data files
- Long-term preservation and data-sharing of key data and documentation.

## 2 Data and information transfer

*Goals:* Assist interaction of project members; easy and controlled access to and secure exchange of data and documentation files; automated notification about new information; support division of tasks and overview of work status; provide files for long-term preservation.

*Recommendations:* See Data Cleaning Rules for EVS 2008 (App. D) and Deliverables after Fieldwork in EVS 2008 Guidelines and Recommendations.

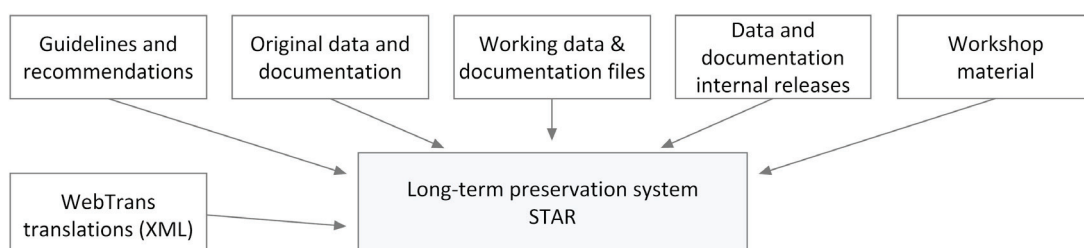
*Software/Tools:* DNN DotNetNuke

One of the main requirements of the EVS 2008 project was the availability of key data and documentation that cover the whole process of data and metadata creation and processing. The EVS project portal was maintained with a twofold intent. All original data and documentation, key working files as well as internally published files should be collected in one place. Furthermore, the portal should serve as a workspace for the project-internal information transfer. Its purpose was to

- Guarantee *transparency* of the information that was necessary for the EVS member countries and the project teams in Tilburg and Cologne. A notification system was incorporated to inform the respective project members about new data and documentation uploads.
- Provide *easy and controlled access* to information for different project members. Guidelines and other supporting material uploaded by the EVS were accessible by all portal members. Whereas the original data and information uploaded by the countries were accessible by the respective country team and the EVS teams only.
- *Prevent data and information loss.* All data and documentation were preserved on the Data Archive's preservation system immediately after the automated notification about new portal uploads arrived.

Figure 6 depicts the different sections and the data and documentation provided. All files uploaded on the portal are preserved on the Data Archive's preservation system STAR.

Figure 6: EVS project portal and long-term preservation



The availability of original and working data and documentation files as well as released files in the long run will help trace back the original data in case of problems that might emerge in later steps of data processing or secondary analyses.

### *Structure of the EVS project portal*

The portal is structured in six sections. Each section provided a controlled access to specific information necessary for data processing and documentation as well as review procedures by the EVS teams in Tilburg and Cologne, and in the EVS member countries.

(1) Section “*Data and Documentation EVS 2008*” comprised two sub-sections. The main page “*EVS Documentation*” was accessible for all portal members. The EVS uploads information on procedures and specifications for data processing and documentation, which were of interest to all countries involved.

Files provided by EVS:

- Data Processing Guidelines
- SPSS Standard Syntax file
- Contact data SPSS setup file
- Interviewer data Excel setup file

(2) *Special pages “Country”* were provided for each EVS member country. The national teams used this space for delivering their data and documentation files. Uploaded files were visible to all project members in the countries, but accessible to the respective country team and the EVS teams only.

Files required from the EVS member countries:

- ODS                    Original Dataset
- MDS1                Modified Dataset 1
- SPS Setup          File for creating the Modified Dataset 1 (MDS1)
- CDS                 Contact Dataset
- IDS                 Interviewer Dataset
- FQ (2 versions)    Field Questionnaire including Show cards for publication along with the data; internal field questionnaire version with deviations from translation set up in the web-based questionnaire translation system WebTrans (Gallup Europe) highlighted
- Engl. T.             Translation of the country-specific questions into English (if any)
- MQ                  Methodological Questionnaire
- Sample             Sampling design description

Altogether, more than 600 data and documentation files, including updates, were supplied. The majority of countries provided most of the required information. An overview of countries participating in EVS 2008 including country abbreviation (ISO 3166-1 alpha-2) and Archive Study Number is given in App. 1. The data and documentation files delivered by each country are summarised in App. 2.

(3) Section “*EVC Internal*”<sup>4</sup> was intended as a working space for supporting data and information transfer between the EVS teams in Tilburg and Cologne.

Files and information exchanged:

- Key working data and documentation files
- Information on the data standardisation and harmonisation process
- Overviews on division of tasks, common schedules, and progress of data cleaning.

---

<sup>4</sup> The European Values Study Centre (EVC) consisting of the EVS groups at Tilburg University and the GESIS Data Archive was created for coordinating and conducting data processing and documentation.

---

(4) Section “*Internal-use releases*” was set up for publication of preliminary dataset versions. It supported the review and feedback procedures of finished data and documentation within the data processing and documentation phase. This section was unrestrictedly accessible for countries whose data were integrated in the released data file. Altogether three internal-use releases were provided to be reviewed by the country teams (see Figure 2).

Files and documentation provided:

- Integrated dataset
- National datasets
- Variable report (Integrated dataset)
- Field questionnaires

(5) Section “*EVS Workshops*” covers information about four EVS workshops organised so far (see Figure 2).

Information available:

- Programs
- Presentations of lectures
- Country-reports
- Other materials (as pictures)

(6) Section “*Contacts*” gives an overview of registered portal members (name and E-Mail address). To date more than 100 project members have been continuously involved in data processing and documentation of EVS 2008 or supported specific tasks.

### 3 Questionnaire development and data collection

Large efforts were taken to guarantee high scientific quality standards of the survey. The English Master Questionnaire was designed by a Theory and Methodology Group and critically reviewed and approved by the Council of National Program Directors. The translation process and fieldwork procedures were standardised according to the jointly developed Guidelines and Recommendations. In Table 1 an overview of a number of agreed EVS guidelines is given. It also shows the proportion of EVS member countries (N=47) which managed to reach the targets<sup>5</sup>. More summarized information on quality measures and outcomes of the questionnaire translation and data collection process is given in section 3 and 4 (including Appendices 3 to 15).

Table 1: Compliance with EVS 2008 guidelines and recommendations

Guidelines and recommendations	Compliance (N=47 countries/regions)
Translation process: Use of web-based translation system WebTrans (not fully)	37 (8)
Pre-tests by means of try-out interviews	39
Mode of data collection: face-to-face (online/postal)	45 (2)
Field work period: April to July 2008 (4 months)	6 (36)
Number of visits: 1+3 revisits	43
No substitution principle	44
Training of interviewer	43
Quality control back-checks: Interview, Refusal, Non-Contacts	43/29/29
Universe: 18 years or older, private household (15 years; age limit 74)	45 (2)
Random sample (+ sample size) <sup>6</sup>	47
Selection eligible person: last/closest birthday, Kish Grid	21
Response Rate ( $\geq 70$ / $\geq 50$ )	16/36

#### 3.1 Questionnaire design and translation

*Goals:* Develop a master questionnaire in consideration of a centralised as well as country-specific perspective; implement a harmonised, monitored and well documented translation system; create centrally reviewed field questionnaires; establish a link between multilingual variable documentation and translation procedure in the long term.

*Recommendations:* See Translation Process and Data Cleaning Rules for EVS 2008 (App. D) in EVS 2008 Guidelines and Recommendations.

<sup>5</sup> The overview is based on information provided by the EVS member countries and compiled in: Method Report EVS 2008 - Integrated Dataset, European Values Study and GESIS Data Archive for the Social Sciences at <http://www.europeanvaluesstudy.eu/evs/surveys/survey-2008/dataanddocumentation/> or Extended Study Description for European Values Study 2008, 4th wave, Integrated Dataset at <http://info1.gesis.org/EVS/Studies/>.

<sup>6</sup> For descriptions of different sampling procedures in each country, see: Method Report EVS 2008 and Extended Study Description, respectively.

*Software/Tools:* Web-based translation system WebTrans; Dataset Documentation Manager (DSDM);  
Documentation standard: DDI-Codebook/XML

### 3.1.1 Development of English Master Questionnaire

The English Master Questionnaire developed for EVS 2008 is a mixture of trend questions and newly constructed questions. Table 2 gives an overview of the thematic categories used in EVS 2008 and the numbers of (new) variables belonging to the single categories.

Table 2: *Thematic categories and related variables in EVS 2008*

Preceding character	Thematic category	New category	Number of variables	Number of new variables	Number of variables used in EVS 1999 and 2008
A	Perceptions of life		155	12	73
B	Environment		14	6	1
C	Work		63	5	25
D	Family		71	7	24
E	Politics and Society		160	9	63
F	Religion and Morale		164	8	46
G	National identity		30	20	4
S	Archive/ID variables and Interviewer characteristics (common dictionary)		33	4	25
	Archive/ID variables and Interviewer characteristics (GESIS Data Archive)	x	6	6	-
U	Life experiences	x	12	12	-
V	Respondent's parents	x	28	26	-
W	Respondent's partner	x	20	18	-
X	Socio demographics		115	48	17

Trend questions adopted from the previous EVS wave 1999<sup>7</sup> (more than 250 questions) are to a large extent comparable to questions of the World Values Survey 1995 and/or 2000. A few additional questions were adopted from other survey programs as ISSP 2003 (six questions) and ESS-Round 3 (three questions). The new questions and items were proposed by the EVS Theory Group, which made sure that all questions are standardised between waves and between countries. The cross-cultural perspective was considered by the Council of National Program Directors before the English Master Questionnaire had been finalised.

The commonly agreed Master Questionnaire was the starting point for a centralized translation process and the creation of draft field questionnaires with a harmonised layout for every language and language version used in the EVS member countries.

<sup>7</sup> Loek Halman: The European Values Study: A third wave. Source book of the 1999/2000 European Values Study. EVS, WORC, Tilburg University, 2001 at <http://www.europeanvaluesstudy.eu/evs/surveys/survey-1999-2000/dataanddocumentation/>.

### 3.1.2 Translation of field questionnaire

A harmonised, closely monitored and well documented translation procedure was designed by the EVS groups at Tilburg University, CEPS/Instead Luxembourg and Gallup Europe. For a better coordination of the process, the EVS Methodology Group created the Administrative Centre for Translation Procedures (ACTP) at CEPS/Instead.

Translations were required for each language used as a first language by more than 5 percent of the population in a particular country. The translation process of the agreed English Master Questionnaire was conducted by means of the web-based questionnaire translation system WebTrans provided by Gallup Europe. All countries were asked to use the WebTrans system for the translation and adaptation of the English master questions to their cultural/language contexts<sup>8</sup>.

*In the translation of field questionnaires three procedures were possible:*

- The *review procedure* applied to countries that participated in EVS 1999 or countries for which a translation of EVS 2008 questions already existed in WVS 1995 or WVS 2000. The main task here was to check the national translation of the questions used, document problems and, if necessary, correct mistakes. The review process of the trend variables used in EVS 1999 and EVS 2008 was supported by the multilingual variable documentation set up for EVS 1999 by means of the documentation tool DSDM (see section 5.2).
- The *adaptation procedure* applied to countries sharing the same language(s). The adapted translation was checked for expressions that were not familiar or not used in the given language/cultural context. If applicable, the inappropriate wording had to be replaced by suitable ones.
- The *new translation procedure* was used for new questions added to the Master Questionnaire as well as for countries that did not participate in EVS 1999 and did not use the adaptation procedure for shared languages.

In accordance with the EVS guidelines, all translations should be realised by two independent translators. The National Program Director or an independent expert was in charge of synthesizing the translations.

Slight and major modifications of the question texts made during the review or translation procedure had to be marked. All comments of the translators and National Program Directors were documented by the system. In the following step, this allowed the EVS Methodology Group with support of the ACTP at CEPS/Instead to go through all suggested changes or comments and approve or disapprove them. In this way, all general EVS questions have undergone a process of controlled translation. After finishing the translation process, draft field questionnaire(s) with a harmonised layout could be exported by each country in various ways: in Word and Acrobat format, as CAPI output, and as XML file.

The EVS gave strong recommendation to the country teams and the field institutes not to alter the general EVS questions in the exported (WebTrans) draft field questionnaire anymore. Necessary alterations had to be marked and agreed on with the EVS Methodology Group beforehand.

---

<sup>8</sup> A detailed description of the questionnaire translation process is given in: Borsenberger, Monique; Valentova, Marie; Skoczylas, Konrad: ACTP – Administrative Center for Translation Procedure, Final Report 2007-2010, July 2010 (internal publication).

However, in some countries additional changes were made to the exported draft field questionnaire. For example, question wording was modified or additional country-specific questions were added. To keep transparency regarding the alterations for next steps in data processing and documentation, these countries were asked to upload two versions of the final field questionnaire to the EVS portal:

Published version: final field questionnaire as used in the countries

- All general EVS questions are phrased the same way as in the Master Questionnaire and the same response categories are used.
- All compulsory questions (education, political parties, religion, and income, etc.) necessary for harmonised variables are completed corresponding to national classifications.
- All general EVS variables are assigned the variable name used in the dataset.
- All additional country-specific questions are characterised by a country-suffix and placed in the field questionnaire according to the recommendations.

Internal version: field questionnaire with all alterations highlighted

- All alterations made to the field questionnaire after the export out of the WebTrans system denoted by the country teams were treated carefully in the next steps of data processing and documentation.

The English Master Questionnaire has been translated into or adapted to 38 languages and altogether 65 language versions. In 14 countries the survey has been conducted in more than one language and 12 languages were fielded in more than one country. Figure 7 gives an overview of all languages fielded.

Figure 7: Languages fielded and shared in EVS 2008

Integrated Dataset English Master Questionnaire							
Albania Albanian	Armenia Armenian	Austria German	Azerbaijan Azerbaijani Russian	Belarus Russian	Belgium Flemish/Dutch French	Bosnia- Herzegovina Bosnian	Bulgaria Bulgarian
Croatia Croatian	Cyprus Greek	Northern Cyprus Turkish	Czech Republic Czech	Denmark Danish	Estonia Estonian Russian	Finland Finnish	France French
Georgia Georgian Russian	Germany German	Great Britain English	Greece Greek	Hungary Hungarian	Iceland Icelandic	Ireland English	Italy Italian
Kosovo Albanian Serbian	Latvia Latvian Russian	Lithuania Lithuanian	Luxembourg Luxembourgish German French Portuguese English	Netherlands Dutch	Northern Ireland English	Norway Norwegian	Macedonia Macedonian Albanian
Malta Maltese English	Moldova Moldovan Russian	Montenegro Montenegrin		Poland Polish	Portugal Portuguese	Romania Romanian Hungarian	Russian Russian
Serbia Serbian	Slovak Republic Slovak Hungarian	Slovenia Slovenian	Spain Spanish	Sweden Swedish	Switzerland German French Italian	Turkey Turkish	Ukraine Ukrainian Russian

The blue boxes indicate countries sharing one or more languages. Shared languages are marked in red.



### 3.1.3 Country information on questionnaire translation

Information on questionnaire translation as well as control procedures in the EVS member countries is given in the methodological questionnaires. The information provided by countries is summarized in App. 3 and 4. In the following, some recommendations of the EVS and their realisation in countries are listed.

*The questionnaire will be produced by the National Program Directors using the WebTrans system*

- Most countries used the WebTrans system for translation of the field questionnaire.
- WebTrans was not utilized (fully) in Austria, Great Britain, Finland, Moldova, Italy, Russia, and Turkey.
- In Ireland, Latvia and Sweden, WebTrans was not used fully either, but questions were updated.
- In some countries, the fieldwork agency was responsible for the translation process (Albania, Bosnia-Herzegovina, Cyprus, Iceland, Kosovo, Lithuania, Malta, Moldova, Northern Cyprus, Russia, Serbia, and Slovenia).

*Changes in translation and translation problems*

- Changes in translations since EVS 1999 were reported by Austria, Belarus, Bulgaria, Croatia, France, Germany, Italy, Latvia, Lithuania, Poland, Romania, Spain, and Ukraine.
- Specific translation problems were reported by Croatia, Denmark, Estonia, Germany, Latvia, Macedonia, Poland, Spain, and Turkey. Information on related variables can be found on the EVS website: [EVS 2008 - Method reports](#); [Extended Study Description for European Values Study 2008, 4<sup>th</sup> wave, Integrated Dataset](#); [Compare question texts in EVS 2008](#).

*Professional translators should be involved in the translation process*

- The following countries cooperated with professional translators: Albania, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Georgia, Greece, Hungary, Italy, Kosovo, Lithuania, Luxembourg, Malta, Moldova, Portugal, Romania, Russia, Serbia, Spain, Sweden, and Switzerland.

*Type of translation procedure*

- For questionnaire translation, the simple-back-translation was the procedure that most countries followed.
- The iterative back-translation was followed in Belgium, Croatia, Estonia, Germany, Italy, Romania, Russia, and Slovenia.
- Belarus was the only country that used another back-translation procedure; Bulgaria, Finland, France, Latvia, Netherlands, Portugal, Switzerland, and Turkey used none of the listed back-translation procedures.

## 3.2 Data collection

*Goals:* Apply to standardised fieldwork procedures on basis of uniform instructions; implement quality measures throughout the process; record on questionnaire translation and fieldwork procedure in methodological questionnaire.

*Recommendations:* See Guidelines, Contact form (App. B) and Methodological Questionnaire (App. E) in EVS 2008 Guidelines and Recommendations.

### Monitored fieldwork procedure

In nearly all countries, fieldwork was conducted on the basis of detailed and uniform instructions prepared by the EVS advisory groups. A representative multi-stage or stratified random sample of the adult population of the country, 18 years and older, was approached for face-to-face interviews. The closest birthday/last birthday/Kish Grid method was used for selection of eligible respondents. Interviewers were trained before they went into the field and made at least three revisits in case of not reaching the selected respondent at the first visit. No substitution principle applied. Interviewers completed a predefined contact form for each visit and quality control back-checks were made.

For the following countries fieldwork as well as first steps in data processing and documentation was organized centrally by Gallup Europe: Albania, Armenia, Bosnia Herzegovina, Cyprus, Cyprus (North), Estonia, Greece, Kosovo, Latvia, Lithuania, Malta, Moldova, Montenegro, Russian Federation, and Ukraine.

### *Country information on fieldwork procedure and quality measures*

Information on fieldwork procedure and quality measures in the EVS member countries is given in the methodological questionnaires. The information provided by the countries is summarized in App. 5 to 12. Countries' responses to EVS recommendations are listed in the following.

### *Mode of data collection: Face-to-face interview*

Face-to-face surveys were conducted during the respective fieldwork periods in countries, with the exception of Finland and Sweden, where the survey was conducted in online and postal mode respectively.

### *Fieldwork period (between April and July 2008)*

The recommended fieldwork period was set for April to July 2008. Belarus, Bosnia-Herzegovina, Bulgaria, Romania, Russia, Serbia, and Spain were able to complete their fieldwork within this time frame. Most of the other countries conducted their fieldwork within 2008: Germany, Hungary, and Turkey in 2008/09; Belgium, Italy, and Finland in 2009; Great Britain, Iceland, and Sweden in 2009/10.

### *Universe: Persons 18 years or older who are resident within private households, regardless of nationality, citizenship or language*

- The net sample size (in the sense of completed interviews) is 1500 respondents per country, except Northern Cyprus and Northern Ireland (with 500 interviews each), Iceland (808), Cyprus (1000), Ireland (1013), Norway (1090), Finland (1134), Sweden (1187), Switzerland (1272), France (random sample: 1501, two additional quota samples: 1570), and Germany (disproportional sample East: 1004, West: 1071).

- In all participating countries, eligible respondents were those 18 years or older who are resident within private households, regardless of nationality, citizenship or language. In Armenia also those 15 years or older were eligible, in Finland the age limit was 74.

#### *Sampling Methodology: Sampling must be random*

- The requested number of visits for a successful interview was generally set to four (1+3 revisits), but some national deviations can be found. Only two visits were required in Azerbaijan, three in Georgia, Norway and Ukraine, and five in France, Germany, and Slovenia. Latvia reported as total number of minimum visits per respondent/sampling unit 1-4 and 6-10.
- For the selection of eligible respondents in a household, various methods were applied. Austria, Belarus, Croatia, and Portugal proceeded with the last birthday method, whereas Georgia, Greece, Ireland, the Netherlands, Northern Ireland, and Slovak Republic applied the next birthday method. France used the closest anniversary date. Albania, Bosnia-Herzegovina, Bulgaria, Czech Republic, Great Britain, Italy, Kosovo, Montenegro, Serbia, and Spain applied the Kish scheme for choosing eligible respondents.
- Sampling proceeded in three or more stages in most countries (32 countries). For identifying primary sampling units the use of population registers or election lists were most commonly.
- Although generally the "no substitution" principle applied, in some countries the samples had to be extended due to unexpectedly low response rates. Belgium, Denmark, and Germany reported on that.

#### *Training of interviewers*

- In almost all countries, the majority of interviews were conducted by experienced interviewers. In Cyprus inexperienced interviewers were employed but received specific training for this survey. As Finland and Sweden conducted online and postal surveys respectively, interviewer training was not an issue in these countries.
- Except for Germany and the Netherlands, which did not report on specific training of interviewers, all countries engaged in specific training measures. Montenegro (100/110) and Romania (87/97) trained most of them, Great Britain only a small share amounting to 12 out of 151.
- Interviewers in almost all countries participated in a specific training programme for refusal conversion. This is not true for Azerbaijan, Croatia, Denmark, Germany, Great Britain, Luxembourg, the Netherlands, Poland, Spain, and Switzerland. Furthermore, all countries but Spain worked with the written specific EVS instructions.
- Pre-tests of the interviews were conducted in all countries. Information on pre-tests is not available for Denmark, Germany, Great Britain, Ireland, Northern Ireland, Slovenia, and Sweden.

#### *Quality control back-checks of interviews, refusals, and non-contacts*

- Quality control back-checks of *interviews* were performed on 5% of respondents in all countries but Finland, Norway, Spain, and Sweden where no back-checks were performed.
- Back-checks of *refusals* and on *non-contacts* were neglected in Austria, Croatia, Estonia, Finland, Germany, Great Britain, Ireland, Luxembourg, Macedonia, Malta, Moldova, Northern Ireland, Norway, Romania, Slovenia Spain, Sweden, and Turkey.

- Back-checks were performed not only in person or by telephone, but also by mail.

The number of back-checks achieved by country is given in App. 9.

#### *Enhancing measures and incentives*

- Researchers in most of the countries sent advance letters and/or used written instructions to enhance response rates.
- Most countries did not offer incentives to the respondents. However, in the Netherlands an unconditional monetary incentive was offered. In Germany, Hungary, Iceland, Luxembourg, Norway, Spain, Switzerland, and Ukraine conditional monetary incentives were offered.
- Unconditional non-monetary incentives were offered in Albania, Great Britain, and Turkey. Conditional non-monetary incentives were given in Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Portugal, Russia, Slovakia, Sweden, and Switzerland.

An overview of the enhancing measures and incentives can be found in App. 11.

#### *Verification of the field questionnaire*

##### *CAPI questionnaire*

- CAPI questionnaires were checked by countries in several ways (App. 12). Most common were manual checks and the use of pre-tests with special regard to filters, routings and country specifications.
- Austria and Portugal also engaged in script checking. Hungary applied a special computer assisted checking program and Norway used the interview program "Blaise".
- The checking of CAPI questionnaires was frequently accomplished by both, the field agencies and the National Program Directors.
- In Denmark, Portugal, and Spain, only the field agencies checked the questionnaire, whereas in Germany the questionnaire was only checked by the National Program Director.

##### *PAPI questionnaire*

- Checking the PAPI questionnaire was accomplished by the scanning of optical or keying questionnaire.
- A double checking by the field agency and the National Program Directors took place in Estonia, Ireland, Moldova, Northern Ireland, and Slovenia.
- In Azerbaijan, Belarus, Luxembourg, Macedonia, Poland, and Turkey the National Program Directors checked the PAPI questionnaires. In all other countries the field agency performed the task.

#### *Approximate proportion of questionnaires checked*

- Armenia, Cyprus, Estonia, Italy, Lithuania, Northern Cyprus, Poland, Russia, Slovenia, and Turkey managed to check all questionnaires.
- A proportion of 20 to 30 percent of questionnaires was checked in Albania, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Kosovo, Luxembourg, Macedonia, Moldova, Serbia, and Slovak Republic. There was no information given on the number of questionnaires checked in Austria, Belgium, Czech Republic, Denmark, Finland, France, Georgia, Germany, Hungary, Iceland, Latvia, the Netherlands, Norway, Portugal, Romania, Spain, Switzerland, and Ukraine.

### Response Rates

The outcome rates for In-Person Household surveys were calculated on basis of the AAPOR Standard Definitions<sup>9</sup> using information on the final response status contained in the methodological questionnaires and information on the national dataset (final number of cases).

Table 3 gives an overview of the disposition status of sample cases as used in EVS 2008 and their assignment to the AAPOR main groups of survey cases.

Table 3: Response and non-response according to AAPOR classification

AAPOR main groups of survey cases	Items in EVS Methodological Questionnaire
	A Total number of issued sample units (addresses, households or individuals)
1. Interviews	Z Valid interviews Y Invalid interviews
2. Eligible cases that are not interviewed (non-respondents)	C Refusal by proxy (or household or address refusal) B Refusal by respondent D No contact (after at least 4 visits) G Respondent unavailable throughout the fieldwork period for other reasons L Respondent moved abroad/unknown destination M Respondent deceased F Respondent mentally or physically unable to co-operate throughout fieldwork period E Language barrier
3. Cases of unknown eligibility, non-interview	J Address not traceable O Other
4. Cases that are not Eligible	H Address not residential (institution, business/industrial purpose) I Address not occupied (not occupied, demolished, not yet built) K Other ineligible address
	X Number of units not accounted for (A-[sum of B to M,Y,Z]): if all sample units are accounted for, X will=0

Source: Method Report EVS 2008 - Integrated Dataset, European Values Study and GESIS Data Archive for the Social Sciences at <http://www.europeanvaluesstudy.eu/evs/surveys/survey-2008/dataanddocumentation/> or Extended Study Description for the European Values Study 2008, 4th wave, Integrated Dataset at <http://info1.gesis.org/EVS/Studies/>.

On the basis of this assignment, the different outcome rates (Response Rates (RR1), Refusal Rates (REF1), Cooperation Rates (COOP1), and Contact Rate (CON1) were calculated by means of the AAPOR Outcome Rate Calculator<sup>10</sup>.

<sup>9</sup> The American Association for Public Opinion Research. Revised 2009. Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. AAPOR retrieved from [http://www.aapor.org/Standard\\_Definitions2.htm](http://www.aapor.org/Standard_Definitions2.htm) (Download: 2010-11-17).

<sup>10</sup> AAPOR Outcome Rate Calculator, Version 3.0.1, October 2010 retrieved from [http://www.aapor.org/Standard\\_Definitions2.htm](http://www.aapor.org/Standard_Definitions2.htm). (Download: 2010-11-17).

$$\text{AAPOR Response Rates: RR1} = \frac{I}{(I + P) + (R + NC + O) + (UH + UO)}$$

$$\text{EVS 2008 Response Rates: RR1} = \frac{Z}{(Y+Z) + [(C+B) + (D+G+L) + (M+F+E)] + (J)}$$

An overview of calculated outcome rates by country is given in App. 13. The number of sample cases grouped as eligible cases that are not interviewed, cases of unknown eligibility, and not eligible cases is provided in App. 14. The legend can be found in the upper part of App. 16 (List of abbreviations).

#### *Problems arising in the Data Collection phase*

- For some countries information delivered was not complete. Review procedures were used to check and supplement the information.
- There are differences between Master Questionnaire and field questionnaire as mixed value item batteries in field questionnaire or translations which deviate from the underlying concept of the master question which were not reported by the country teams. The web page [Compare question texts in EVS 2008](#) has been designed to provide a platform for problems detected and reported by principal investigators, secondary users, or the Data Archive.

## 4 Data processing

---

*Goals:* Comply to data processing recommendations, agreed international standards and EVS specific coding frames; generate a master dataset as basis for data processing, updates, and data documentation; provide copies of all key data and documentation files for preservation; apply quality measures; implement review procedures; publish only datasets confirmed by the National Program Directors.

*Recommendations:* See Data Cleaning Rules for EVS 2008 (App. D), Official Classifications (App. C), Weighting information (App. A), SPSS Standard Syntax (PDF attachment) in EVS 2008 Guidelines and Recommendations.

*Software/Tools:* IBM SPSS Statistics: SPSS 17, 18, 19; Beyond Compare 2; StatTransfer 10; Microsoft Office Excel 2007; Online Variable Overview for EVS 1981–2008 (<http://info1.gesis.org/EVS/Variables/>).

The data processing workflow is based on the recommendations made in the document *Data Cleaning Rules for EVS 2008*. To provide all the data collected in the countries, the integrated dataset and the national datasets were processed and released. The EVS teams in Tilburg and Cologne in collaboration with the National Program Directors were in charge of the data. They agreed on the division of tasks and designation of clear responsibilities for the different data processing steps.

The National Program Directors were responsible for delivering the original dataset and the edited national dataset. Tilburg and Cologne took over all further steps concerning data editing, standardisation/harmonisation, and publication of the final data. The Cologne team was in charge of the variables v1 to v301 and the administrative variables; the team in Tilburg treated all socio demographic variables including the weight variables. Created SPSS Syntax files and resulting data files were back-checked by both teams. The integration of the national data files for the first internal-use releases (11/2009 and 03/2010) was done in Tilburg, whereas the third internal-use release (10/2010), the first public-use release (v1.0.0, June 2010), and the full data releases (v2.0.0, December 2010 and v.3.0.0 December 2011) were implemented in Cologne.

Besides the guidelines and recommendations, the following information was required to process the data efficiently.

- *English Master Questionnaire:* for checking the structure and metadata of the national datasets, such as variable names and labels, filters, or the order of questions and responses; for identification of additional variables or response categories that had not been reported by the EVS teams in the countries.
- *SPSS Standard Syntax file:* created on basis of the Master Questionnaire and provided to every national team to facilitate the transfer of the original dataset (ODS) into the modified dataset (MDS1).
- *Methodological questionnaires:* cover information about the fieldwork procedure in the countries, alterations in field questionnaires, and additional country-specific information assisting the harmonisation of variables (e.g. electoral systems, political parties, education, occupation, and region).
- *Field questionnaires (internal version):* with all deviations from the field questionnaire after the export out of the WebTrans system highlighted for checking the structure and metadata of the national dataset (see 3.1.2 Translation of field questionnaire).

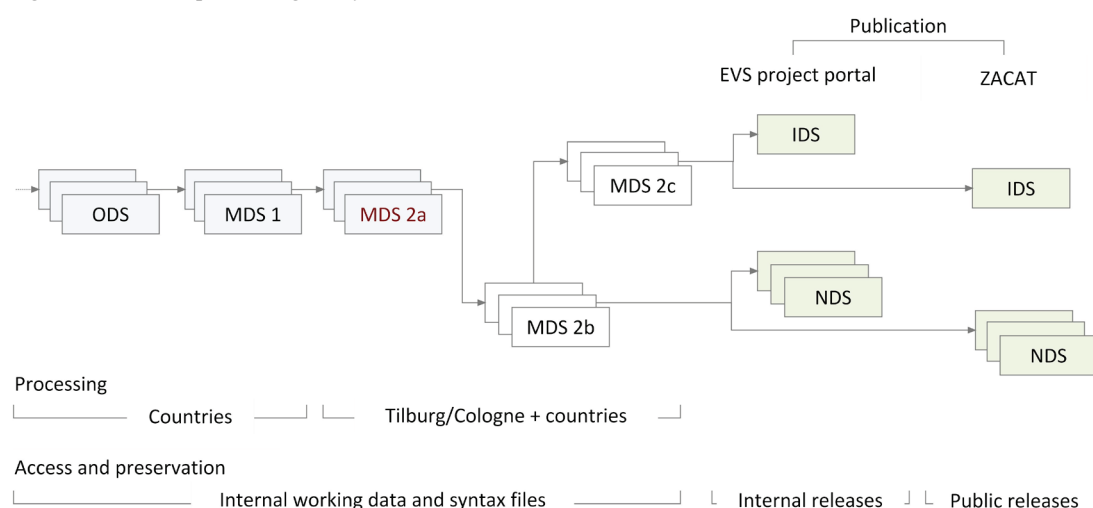
- *English translation of additional country-specific variables and altered questions:* to control the conformity of country-specific variables in the field questionnaire with those entered in the national dataset; to check variable and value labels and to assist a bilingual variable documentation with English/original language question texts.
- *Information on international standards and EVS coding frames of current and previous EVS waves:* to facilitate standardisation and harmonisation of EVS 2008 data.
- *Cross-linked information on trend variables:* to facilitate standardisation and harmonisation across EVS waves.
- *Feedback by the National Program Directors:* communication on data processing and confirmation of final national datasets was based on country-specific *Data cleaning reports*.
- *Guidelines and procedures used for EVS 1999:* to check for compliance with collection-specific data processing roles and standards.

#### 4.1 Working and public-use data files

Figure 8 gives an overview of the different kinds of datasets created during the data processing workflow. It also shows the division of tasks between the project members, the different access to project internal and released data files and the preservation goal covering both key working files and internal/public released files.

The working datasets are indicated in blue and refer to the different data processing steps. The user datasets are marked in green and indicate the files that are published for project internal use through the EVS project portal and for scientific use through the ZACAT – Online Study Catalogue.

Figure 8: Data processing workflow



The original dataset ODS (often an obligation of the field institute) served as the basis for further data processing steps. All countries preserved their original data and documentation files in the Data Archive to permit the reconstruction of the working or published datasets in case of any data problems or data loss. The preparation of the country-specific modified (edited and cleaned) dataset MDS1 was the main task of the National Program Director and their teams. This dataset was the basis for the third working dataset MDS2a generated in Tilburg and Cologne. This master dataset is the most com-



prehensive one and serves as starting point for all future updates, the variable related documentation, and for both kinds of user datasets: the integrated dataset (IDS) and the national datasets (NDS) including additional country-specific variables.

Datasets released for secondary analyses are the modified national datasets MDS2b and MDS2c. The MDS2b dataset is published as national dataset. The MDS2c is generated as a subset of the MDS2b dataset (country-specific variables are dropped) and integrated into the international dataset. MDS2c data exists as integrated dataset only, not as national datasets. In Figure 9, the master dataset MDS2a and the two user datasets (MDS2b and MDS2c) are compared with regard to the variables included.

Figure 9: Content of working and user datasets

MDS1	→	MDS2a	→	MDS2b	→	MDS2c
-		Administrative v.		Administrative v.		Administrative v.
- General EVS variables		General EVS v.		General EVS v.		General EVS v.
-		Harmonized v.		Harmonized v.		Harmonized v.
-		Compiled v.		Compiled v.		Compiled v.
-		Computed v.		Computed v.		Computed v.
Compulsory v.		Compulsory v.		-		-
Write in v.		Write in v.		-		-
Sensitive v.		Sensitive v.		-		-
Additional country-specific v.		Additional country-specific v. (including weights)		Additional country-specific v. (including weights)		-
<i>For internal use</i>		<i>For internal use</i>		<i>For public use</i>		<i>For public use</i>
<i>Edited original dataset (ODS)</i>		<i>Master data file Basis for data processing and variable documentation</i>		<i>National dataset (NDS)</i>		<i>National subset for Integrated Dataset (IDS)</i>

In addition to the variables included in MDS1, the master dataset MDS2a contains administrative variables, harmonised and standardised variables as well as the compiled and newly generated variables. The three datasets MDS2a, MDS2b, and MDS2c are comparable with regard to the

- Administrative variables, e.g. Study No., Version No., Respondent ID No.
- General EVS variables of the English Master Questionnaire
- Harmonised variables constructed on basis of the compulsory variables for e.g. religious denomination/affiliation, party preference, education, income, occupation, and region
- Compiled variables containing country identifier and the country-specific categories of the field questionnaire
- Newly constructed variables (e.g. weight, income, and flag variables).

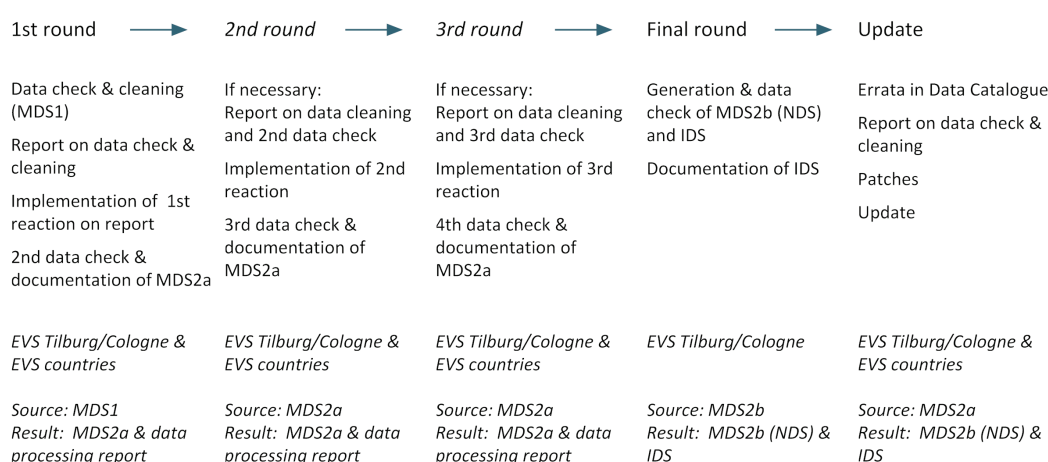
The compulsory country-specific variables which are necessary for the construction of the harmonised and standardised variables, the 'Write in' variables and variables which contain 'sensitive information' are dropped in the released datasets MDS2b and MDS2c. Moreover, the country-specific variables, which are based on additional questions that some countries included into their field questionnaire after the controlled translation process in WebTrans, are dropped in the dataset MDS2c and thus are not available in the integrated dataset.

## 4.2 Data processing steps

The general procedure for transforming the original datasets ODS into the user datasets MDS2b and MDS2c covers six main steps including review procedures. Depending on the amount and nature of data problems, for some countries one review round was sufficient, for other countries two or more rounds were necessary to discuss and solve the problems.

The whole process starting with the construction of the master dataset MDS2a and ending with the maintenance of errata lists and patches for released data files is depicted in Figure 10.

Figure 10: Steps in data processing



### (1) Creation of the modified dataset MDS1 by the countries

The delivery of the original datasets ODS and the construction of the modified dataset MDS1 was in the responsibility of the National Program Directors. The ODS had to be uploaded to the EVS project portal immediately after the data collection. The creation of MDS1 was guided by the *SPSS Standard Syntax file* designed on basis of the English Master Questionnaire in compliance with the *Data Cleaning Rules for EVS 2008*. The syntax covered variable names, variable and value labels in English for all general EVS variables and could be used in the countries as long as no major alterations (e.g. variable names, change in the order of items or answer categories) had been made in the field questionnaire. Although it was strictly recommended to keep a one-to-one correspondence to the variable names and value codes in the Master Questionnaire, there arose some problems by non-compliance in the field questionnaire and national dataset. Such deviations were subject of the following data processing and review steps.

After finishing data editing, the countries uploaded the modified national dataset MDS1 along with the complete SPSS country syntax to the EVS project portal.

### (2) Creation of the master data file MDS2a by EVS teams

The most comprehensive master dataset MDS2a has been created on the basis of the edited national datasets MDS1. This was the responsibility of the EVS teams in Tilburg and Cologne in collaboration with the countries. SPSS syntax files transforming the MDS1 dataset into the MDS2a master dataset were delivered to the countries along with a *Data cleaning report*. All necessary modification (e.g.

further data editing, standardisation and harmonisation of variables, supplement of administrative and newly constructed variables) as well as unsolved data problems were communicated there.

Alterations, on which the country team agreed, were implemented in the SPSS country syntax files and documented by the EVS teams. On this basis, a new data check was started in Tilburg and Cologne. In case of unsolved open questions or new data problems, the SPSS country syntax files and the *Data cleaning report* were updated and sent again to the country team for review purpose. This continuous 'check – update – review process' was performed until all the known problems could be solved (see Figure 10). In a common *Overview of reaction data cleaning* the state of affairs regarding still open questions or the final confirmation was documented by the EVS teams in Tilburg and Cologne.

Remarks and comments continuously collected during the data coding and editing process were in the following step provided to the data documentation team (see section 5.2). They could be references to applied international standards or EVS coding frames, data problems, or specific national characteristics.

### *(3) Creation of the public-use data files MDS2b and MDS2c by EVS teams*

On basis of the finally confirmed national master dataset MDS2a, the datasets MDS2b and MDS2c were generated for publication purposes. The MDS2b is a national dataset, which includes the additional country-specific variables. The MDS2c is a subset that excludes all country-specific variables. For combining the national data into the final integrated dataset, some additional alterations with regard to administrative and flag variables were done.

Both EVS teams constantly exchanged their finished country-specific syntax for conjunction. To keep all EVS team members informed, the progress of data cleaning has been reported in the overview *Progress of data cleaning* on the EVS project portal, section EVC Internal.

### *(4) Errata lists and patches between released data files*

For data problems occurring between data releases, an online *Errata List* is being maintained for each dataset in the standard study description of the GESIS Data Catalogue. For each erratum a variable related documentation including information on how to solve the problem is being provided in a timely fashion. For correction of major data problems, additionally, patches related to the most recent dataset version are provided there for download.

### *(5) Creation of a new dataset version*

If an update of national or integrated datasets is necessary due to errors or changed standards, the new dataset version is generated from MDS1. This means, a new MDS2a is being constructed on this basis. The national and integrated data (MDS2b and MDS2c) will be released with a new version number and a new *Digital Object Identifier (DOI)* as well as an updated study related and/or variable related documentation.

### *(6) Versioning of public-use data files*

The first *public-use data file* (national dataset, integrated dataset, and longitudinal data file) is assigned *Version 1.0.0* using all three digits to refer to major, minor and sub minor (revision) changes.

- First digit for major changes indicates the inclusion of a) new countries/waves in an integrated/cumulated dataset or b) new variables/cases in a national dataset.
- Second digit for minor changes represents changes in the data affecting analysis or supplements of internal meta data

- Third digit indicates revision, i.e. corrections of typographic errors or other changes that do not affect analysis.

To indicate *an internal-use data file* zero were used on the first position. The second and third digit were candidates for distinction between new countries/variables/cases included (second digit) and updates of previous internal-use data files (third digit).

### *(7) Digital Object Identifier (DOI)*

In order to uniquely identify a dataset and to make access to data easier, each dataset is assigned a GESIS Study No., a version no. and version date, and a DOI. The DOI is linked to the study description of the corresponding dataset in the online Data Catalogue containing summarised information on the origin of data and notes about *Version History & Errata*.

Metadata entered in the study description and associated with a DOI are provided to the *Registration agency for social science data* (da|ra) at <http://www.gesis.org/dara/en/home/about-dara/>. Run by GESIS da|ra aims to making primary social science research data permanently identifiable, citeable and accessible with DOI names.

The DOI is assigned to each national and integrated dataset included in the EVS 2008 releases. It is part of the bibliographic citation recommended for each dataset in the accompanying study related and variable related documentation.

Example:

EVS (2011): European Values Study 2008, 4th wave, Integrated Dataset. GESIS Data Archive, Cologne, Germany, ZA4800 Data File Version 3.0.0 (2011-11-20), [doi:10.4232/1.11004](https://doi.org/10.4232/1.11004).

## 4.3 Data processing rules

The division of tasks within the EVS team Tilburg/Cologne and between EVS and EVS member countries required clearly defined procedures for checking and editing the data, standardisation and harmonisation of variables, and for construction of new variables. On basis of the workflow described above the following steps were taken and types of syntax files were created and applied.

### 4.3.1 Rules for country-specific data editing

The national datasets MDS1 should include cleaned data. The recommendations on editing the data with regard to variable names, value codes, missing values, and the order of variable and answer categories were based on the agreed English Master Questionnaire and the procedure used for questionnaire translation. In the result of the translation process by means of the WebTrans system, field questionnaires with a harmonised layout could be prepared for all countries and used as common starting point for data processing.

#### *Data editing steps*

- Check for one-to-one correspondence between variable names, valid and missing values codes as well as the sequence of values in the Master and field questionnaire: see EVS 2008 Guidelines and Recommendations.

- Apply the SPSS Standard Syntax: check for double assigned case IDs, variable names, variable and value labels, and missing definition.
- Edit the general EVS variables: check for wild codes, system missing, filter inconsistencies, contradictions between variables.
- Edit the compulsory country-specific variables, e.g. education, religious denomination/affiliation, party preference: check for wild codes, system missing, filter inconsistencies, contradictions between variables, provide mapping rules for harmonisation the variables according to EVS 1999 variables, provide translation into English language if possible.
- Edit additional country-specific variables and country-specific variation of general EVS variables: check for wild codes, system missing, filter inconsistencies, contradictions between variables, provide translation into English language if possible.

#### 4.3.2 Country information on data editing and quality measures

More information on data editing applied in the EVS member countries is given in the methodological questionnaires. The information provided by the countries is summarized in App. 15. Below are listed the EVS recommendations concerning data editing and quality measures and the reported activities that country teams implemented with regard to this matter.

##### *Data checking*

- Data was checked for consistency in all participating countries.

##### *Editing the data*

- Except for Iceland, the Netherlands and Norway, all countries edited the consistency-checked data accordingly.

##### *Filter corrections*

- In most countries, the data was corrected according to the filter instructions. Exceptions were made by Bulgaria, Denmark, Germany, and Romania.

##### *Who did the data corrections?*

- Data corrections were made by the National Program Directors in Armenia, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Denmark, Estonia, Georgia, Germany, Ireland, Latvia, Luxembourg, Macedonia, Moldova, Northern Ireland, Poland, Romania, Sweden, Switzerland, and Turkey.
- In all other countries data corrections were performed by the fieldwork agencies.

#### 4.3.3 Rules for centralised data editing

The following centralised data processing steps linked up with the standardised MDS1 dataset delivered by the national teams. The focus was on checking all data coding and editing that were undertaken in the countries as well as further harmonisation (of compulsory variables as education, religious denomination/affiliation, party preference), standardisation of variables (e.g. added ISO country codes), and the supplement with administrative variables necessary for identification of data files and cases.

*Check of MDS1 and creation of MDS2a (working data files)*

- Check of data processing steps undertaken in EVS member countries (see section 4.3.1).
- Create flag variables for indicating inconsistent answer patterns (1st/2nd choice variables, 'None' item batteries, multiple response questions)
- Generate standardised and harmonised variables on the basis of information provided by the countries (coding schemes and context information in methodological questionnaires) as well as on an *Overview of applied international and EVS specific coding schemes*
- Construct administrative, socio-demographic, and weight variables
- Check new generated variables: system missing, missing values definition
- General check of number of variables and cases, order of variables, variable and value labels, format definition
- Document data processing steps in country-specific *Data cleaning reports*
- Provide notes on data editing for next steps in variable documentation: information on filter correction, flag variables, coding schemes for harmonised variables, data modifications, and national peculiarities.

*Creation and check of MDS2b and MDS2c (user datasets)*

- Construct administrative variables (MDS2c)
- Construct and check flag variables for the IDS
- Exclude additional country-specific variables (MDS2c)
- Final check of number of variables and cases, order of variables, variable and value labels, format definition, and system missing.

*Problems arising in the Data Processing phase*

- Incomplete translation of meta data of national datasets (missing variable and value labels in original language)
- Not signified deviations between Field questionnaire and Master Questionnaire
- Inconsistencies of item batteries and 1st/2nd choice variables
- Deviation of skip patterns
- Missing standard variables and additional country-specific variables in national dataset
- Harmonisation problems: e.g. different opinions in countries concerning harmonisation of religious denominations.

Problems discovered were documented, marked by flag variables, or corrected, as a general rule after consulting the EVS teams in the countries.

*Structure and content of syntax files*

For the construction of the modified data files (MDS1, MDS2a, MDS2b, and MDS2c) a system of syntax files was applied. An overview of type and content of general and country-specific syntax files created for the single data processing steps is given in Table 4.

*Syntax for construction of MDS1:* A SPSS Standard Syntax file was provided to all national teams as basis for data processing. This syntax file was adjusted in the countries if necessary or directly integrated in the country-specific syntax which was used for editing the national dataset and generating the MDS1 out of the original data. After finishing data processing the country-specific syntax files

were uploaded along with the original dataset (ODS) and the modified dataset (MDS1) on the EVS project portal.

*Syntax for construction of MDS2a:* The EVS teams in Tilburg and Cologne built up two different kinds of syntax files to create MDS2a data files. On the one hand, country-specific syntax files containing modifications that take the national characteristics into consideration and on the other hand, general syntax files that were used in case of standard changes that account for all national datasets in the same way. The general syntax files were integrated as sub syntax files in each country-specific syntax file. They include standard procedures like the macro definition of a path directory, recode of standardised variables into international standards (occupation: ISEI, SIOPS, EGP 11, and ESeC), labelling of standard variables, implementation of missing values, construction of additional variables (flag variables, weight, income-purchasing power parity), and filter correction.

Table 4: Data processing: Overview of type and content of syntax files

Data processing step	Syntax type*	Content of syntax
ODS → MDS1	Standard syntax files MDS1	Standardised English variable and value labels
	Country-specific syntax files MDS1	Data cleaning based on EVS 2008 Guidelines and Recommendations
MDS1 → MDS2a	Country-specific syntax files MDS2a	Cleaning general EVS variables, compulsory and country-specific variables: <ul style="list-style-type: none"> <li>- Harmonization of variables (religion, party preference, education, income and region)</li> <li>- Construction of variables (flag variables, administrative variables, weight variables)</li> <li>- Correction of data structure (variable format, type, and order)</li> </ul>
	General syntax files MDS2a	Directory for country-specific and general syntax files Construction of additional variables (e.g. weight) Adjustment of English labels of standard variables and values Transformation of harmonised variables into further international standards
MDS2a → MDS2b	Country-specific syntax files MDS2b	Dropping variables Correction of variable order
	General syntax files MDS2b	Final check of system missing and wild codes of standard variables
MDS2b → IDS	General syntax file IDS	Adjustment administrative variables for IDS Dropping additional country-specific variables Integration of national datasets

\*Country-specific syntax with green background; general syntax with blue background

*Syntax for construction of MDS2b:* For generating the national datasets MDS2b also country-specific syntax files were constructed to drop sensitive, functional, write-in and compulsory variables. A general syntax file was used for the final check of the national datasets, searching systematically for system missing and wild codes of standard numeric variables.

*Syntax for construction of MDS2c:* In the final step, a general syntax file served for the merging process of all national datasets to create the integrated dataset. Last modifications were implemented before distribution, i.e. adjustment of administrative variables for the integrated dataset, exclusion of additional country-specific variables, and construction of flag variables.



## 5 Data Documentation

---

The documentation process of EVS 2008 started very early in the project with the goal to enable easy discovery, comparability, and good re-use of EVS 2008 data. To support the questionnaire development and translation of the fourth EVS wave a multilingual variable documentation was set up for the third wave in 2006/2007. Even during the following phases of *Data collection* and *Data processing*, the documentation activities continuously focused on collecting and processing of all necessary study level and variable level metadata.

### 5.1 Study level documentation

*Goals:* Collect and document all necessary study level information; apply to DDI-Codebook/XML standard; implement review procedures; publish only documentation confirmed by the National Program Directors.

*Recommendations:* See Data Cleaning Rules for EVS 2008 (App. D) in EVS 2008 Guidelines and Recommendations; Documentation standard of the Data Archive<sup>11</sup>.

*Software/Tools:* SdEdit; DBKEdit.

The study related documentation provides standardised information on the survey implementation and fieldwork procedures in the EVS member countries. Metadata processed by means of the SdEdit database includes all information given in the methodological questionnaire supplied by the EVS teams in the countries or the fieldwork organization. The content is structured in accordance with the international metadata specification for the social and behavioural sciences, established by the Data Documentation Initiative (DDI). The DDI-Codebook standard includes the sections: Bibliographic citation, Study scope, Methodology and progress, Data access, and additionally Country-specific documentation. The information is provided for both the integrated dataset and the national datasets:

- Integrated dataset: General information and summarised country-specific information on study scope, principal investigator, funding agency, data depositor, data access, etc.
- National datasets: Country reports providing comprehensive country-specific information on sampling procedure, mode of data collection, fieldwork procedure, etc. Additional country-specific information was collected on harmonised variables (electoral systems, political parties, education, occupation, and region). The method reports further include a section 'Other Documents' covering tables and overviews (e.g. geographic units, sampling information) that were too comprehensive to be included into the standardised Country reports.

#### *Information necessary for study level documentation*

Information that arose and was processed in the previous phases of questionnaire development and translation, fieldwork, and data processing has been used for the documentation.

- *Methodological questionnaires:* information on creation and outcomes of questionnaire translation and fieldwork procedures.

---

<sup>11</sup> Data documentation standards, guidelines, and information on tools and workflows are compiled in workshop materials "Creation of Variable Reports": Evelyn Brislinger, Dafina Kurti, Alexander Mühlbauer, Ivet Solanes, Wolfgang Zenk-Möltgen. GESIS Data Archive, February 2011.

- *Sampling description*: information on sampling methodology, sampling frames, and units additionally provided by the countries.
- *Dataset information*: for reporting on dataset structure and content.
- *Master Questionnaire*: as PDF-document.
- *Field Questionnaires*: as PDF-document.

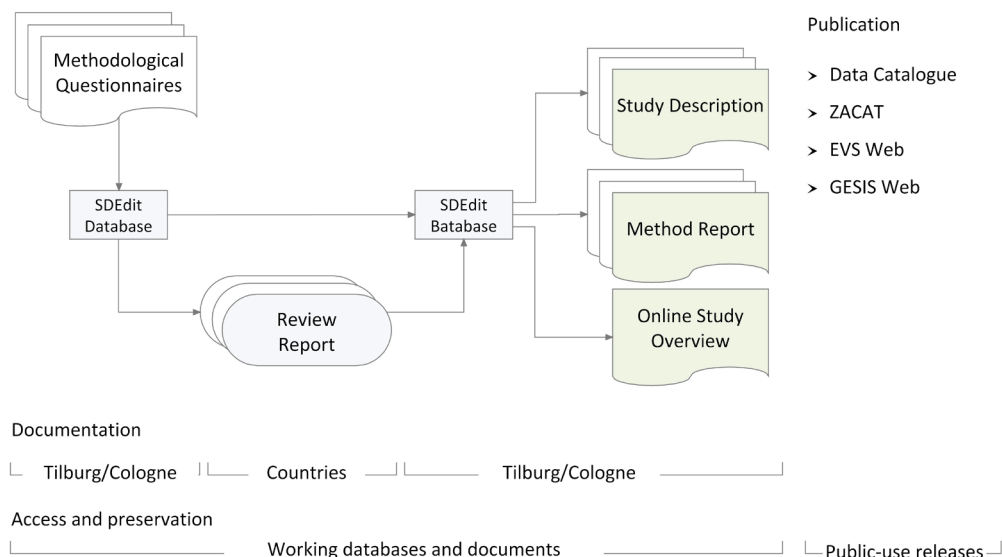
### (1) Study level documentation workflow

The workflow designed for the creation of method reports comprised three stages.

1. The EVS team in Tilburg reviewed the information of the methodological questionnaires provided by the countries.
2. Information was entered into the SDEdit database by the teams in Tilburg and Cologne. Complex tables and graphics were imported as jpg-file.
3. Country-specific method reports were created and forwarded to the national team and/or fieldwork organization for reviewing.

After confirmation from the countries the method reports were finished. In total a method report on the integrated dataset and 47 reports on the national datasets were prepared. SDEdit allows the publication of information in different output formats: besides method reports (PDF file) the study level information has been published through the Data Archive's retrieval system ZACAT, the Data Catalogue, and as Online Study Overview (<http://info1.gesis.org/EVS/Studies/>).

Figure 11: Study level documentation workflow



### (2) Master questionnaire and field questionnaires

The English Master Questionnaire and the field questionnaires are available as PDF files including show cards and some context information.

- Each questionnaire contains information about access to data and documentation on the EVS 1981–2008 as well as bookmarks and metadata. The metadata include title, author, subject, topics, PDF file producer, and PDF file distributor.
- The field questionnaires are provided in all languages fielded in a certain country. In case CAPI was used as data collection mode, this questionnaire version was included in the PDF file as well.
- Show cards are available for all countries but Finland (internet panel) and Sweden (postal questionnaire).

## 5.2 Variable level documentation

*Goals:* Create English and bilingual variable documentation; apply to DDI-Codebook/XML standard; establish a link between the multilingual documentation and translation procedure in the long term; implement review procedures; publish only documentation confirmed by the National Program Directors.

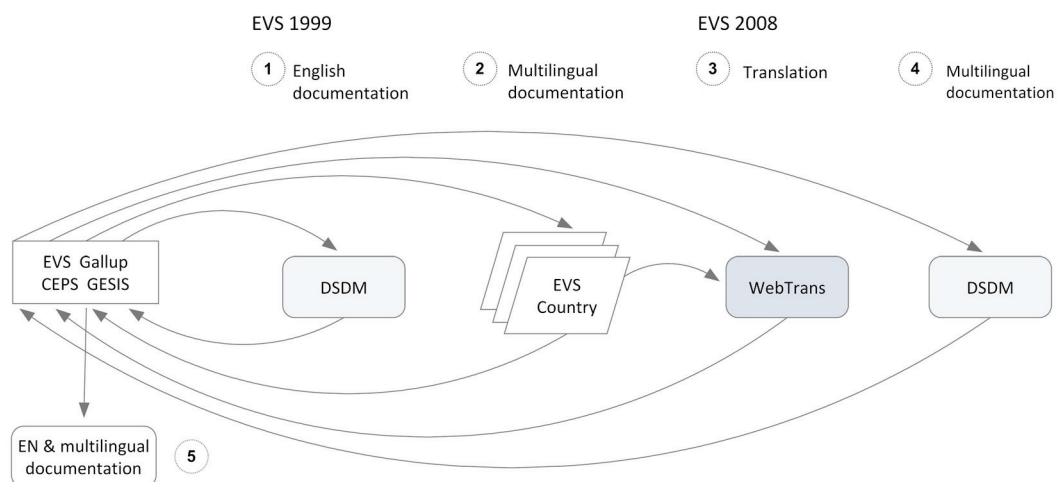
*Recommendations:* See Data Cleaning Rules for EVS 2008 (App. D) and Translation Process in EVS 2008 Guidelines and Recommendations; Documentation standard of the Data Archive.

*Software/Tools:* Web-based translation system WebTrans; Dataset Documentation Manager (DSDM); CodebookExplorer (CBE); Online Variable Overview for EVS 1981–2008 (<http://info1.gesis.org/EVS/Variables/>); IBM SPSS Statistics: SPSS 17, 18, 19.

### 5.2.1 EVS 1999/2008: Link between variable documentation and translation process

The translation procedure of EVS 2008 was closely linked to the Data Archive's documentation workflow. The main goal was the establishment of a workflow that allows both procedures to support each other within and across waves. It comprises five stages, which are depicted schematically in Figure 12.

Figure 12: Documentation and translation workflow for trend variables of EVS 1999/2008



The collaboration between the EVS team at Tilburg University, the National Program Directors, re-

search organisations, CEPS/Instead, and the Data Archive formed the basis for the workflow designed for questionnaire translation and documentation.

#### *Documentation and translation workflow EVS 1999 and 2008*

1. The starting point of the whole workflow was in 2003 when the variables of the integrated dataset and national datasets of EVS 1999 were documented with the question texts of the English Master Questionnaire. The documentation was done by means of the Data Archive tool DSDM.
2. The multilingual documentation of EVS 1999 started in 2007 with the twofold aim, namely to support the questionnaire translation for the next EVS wave in 2008 and to assist users who want to check original question wording for comparative analyses. Therefore, each EVS team in the countries participated in EVS 1999 was provided with a DSDM database containing the English question documentation of the national dataset. They were asked to set up the original language documentation by replacing the English questions by the original question texts of the field questionnaire. Before publishing the resulting multilingual language documentation of EVS 1999 in ZACAT, it was checked in the Data Archive and reviewed by the countries.
3. In the next step, this language documentation was used to facilitate the questionnaire translation process of EVS 2008. Therefore, the DSDM documentation of all questions of the 1999 questionnaire that were part of EVS 2008, were imported into the WebTrans system. On this basis, a review procedure for the trend variables used in both EVS 1999 and 2008 took place.

Furthermore, new questions and languages introduced in EVS 2008 were translated and languages shared by two or more countries were adopted from the master field questionnaire and adjusted to the respective social context (e.g. Portuguese questionnaire of Luxembourg was adopted from Portugal). All slight and major modifications of the question wording and comments of translators were documented by the WebTrans system (see section 3.1.2).

4. After the completion of the translation process, all resulting field questionnaires including comments were transferred back to the Data Archive and imported into the DSDM database. Based on this, the multilingual variable documentation of EVS 2008 was produced (see section 5.2.2).
5. With its publication in ZACAT-Online Study Catalogue and the Online Variable Overview of EVS 1981-2008, comparisons of the original question wording across languages and countries became possible for EVS 2008.

#### **5.2.2 EVS 2008: English and multilingual variable documentation**

The variable documentation is set up by means of DSDM in accordance with the DDI-Codebook/XML standard. The documentation combines the variable description (variable name, values, and labels) of a SPSS dataset with the exact wording and sequence of all question components (question text, interviewer instruction, response categories, etc.) and show cards from a master or field questionnaire. General remarks and comments referring to a certain variable are defined as variable notes.

#### *Information necessary for variable level documentation*

The following information processed in previous phases of the project were necessary for documentation of the datasets with English or original language question texts and additional notes.

- *English Master Questionnaire*: required for English variable documentation of the integrated dataset and all national datasets set up in DSDM.

- *Draft field questionnaires*: were set up in the WebTrans system and transferred as DDI-Codebook/XML files to the Data Archive to be imported into the DSDM database; required for the original language variable documentation of the national datasets.
- *Final field questionnaires*: with deviations from the field questionnaire exported out of the WebTrans system highlighted; necessary for the documentation of alterations made after the closure of the translation process.
- *Show cards*: to be linked to the English and original language variable documentation by means of the CodebookExplorer database; necessary to show possible deviations between answer categories in field questionnaire and Show card.
- *Methodological questionnaires*: containing information about the translation process and alterations in field questionnaires made in the EVS member country.
- *English translation of additional country-specific variables*: added to the English language variable documentation.
- *Dataset information*: added to the English language variable documentation (missing values, values and labels of standardised and harmonised variables, etc.).
- *Information on applied international standards and EVS coding frames*: entered as notes to the English language variable documentation.
- *Information on data processing*: supplemented as notes to the English language variable documentation (recoded or newly generated variables, data problems etc.).
- *Information on translation peculiarities or problems*: provided as notes in the English and original language variable documentation.
- *Cross-linked information on trend variables including the source of the variable*: defined as additional notes to the English language variable documentation.

The workflow of the English and multilingual variable documentation developed in collaboration with the EVS country teams comprised four main steps.

#### *(1) English variable documentation (EN)*

The English documentation of the integrated dataset and all national datasets includes the exact wording of the English master questions and additional notes and archival comments.

- At first, each variable of the integrated dataset (IDS/MDS2c) was documented with the respective question in the English Master Questionnaire by means of DSDM. Harmonised, standardised and newly generated variables were documented by a reference to the source variable(s) and a brief information on the standard applied.
- In the next step, the master questions as well as the documentation of harmonised, standardised, and newly generated variables were assigned automatically to the respective variables in each national dataset (MDS2a). Some further adjustments had to be done. Country-specific variables additionally used in some countries were documented by English translations of original questions. Notes on other specifics of the particular national dataset were added.

As a result, 48 English variable documentations for the integrated dataset and national datasets were set up.

(2) Original language variable documentation (OL)

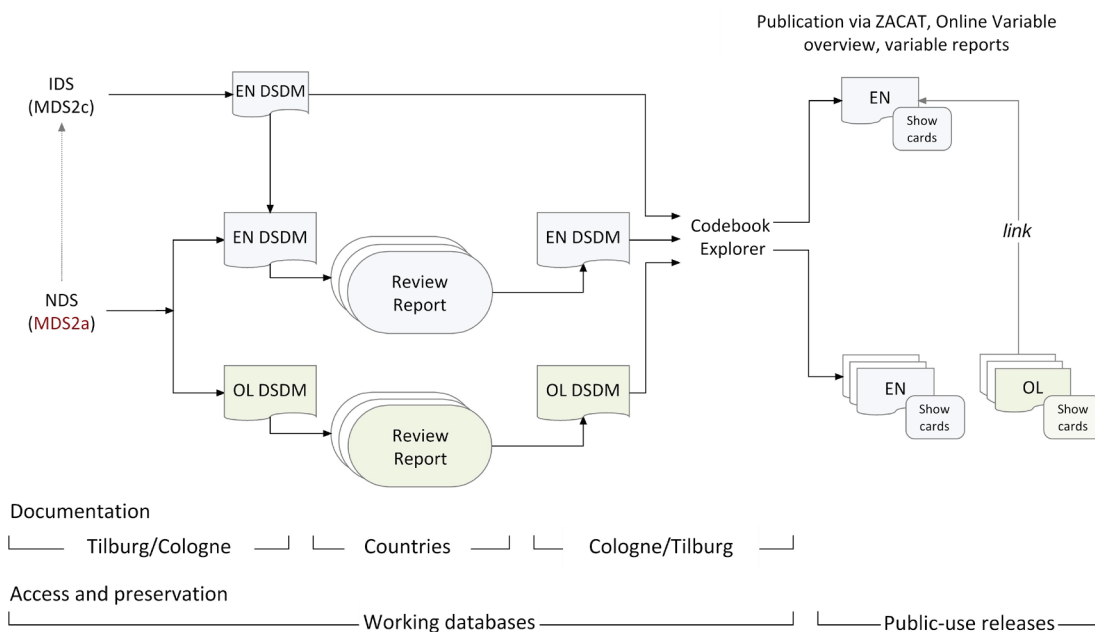
The original language documentation of the national datasets comprises the translations set up in the WebTrans system and exported as draft field questionnaires. All translations were checked with regard to the field questionnaire finally used in the country. The focus was on documenting all the highlighted changes and spotting further alterations made to the field questionnaire finally used in the country. The following steps give a brief explanation of the process.

- Import of the translations set up by means of the WebTrans system into DSDM and correction of problems, which occurred due to the import procedure.
- Adjustment of deviations due to CAPI system (e.g. filter and coding instructions) and a brief description in an internal archive note.
- Adjustment of alterations made to the field questionnaire used recently in the country. Adaptation of new deviations detected only after confirmation by the country.
- Documentation of harmonised, standardised, and newly generated variables; note on the country-specific source variable(s) added.
- Supplement of notes referring to the original language documentation (e.g. errors in field questionnaire, missing value information).

These steps result in a documentation of each national dataset with original questions from field questionnaires in all languages used. Altogether, 65 English/original language variable reports were produced on the basis of the variable documentation.

Figure 13 illustrates the workflow, comprising four main steps, of the English and multilingual variable documentation developed in collaboration with the country teams.

Figure 13: Variable level documentation workflow



### (3) Review procedure

- Bilingual (English and original language) variable reports were created for each language in which the survey was conducted. The EVS team in Cologne sent draft reports to the countries along with an overview of all suggested changes and problems found during the documentation process.
- Before publication, each bilingual variable report had to be confirmed by the country team.

### (4) Creation of a CodebookExplorer database

- The CodebookExplorer (CBE) database was set up, among others, for publication of cross-linked trend information, original language question texts, and English/original language Show cards.
- It additionally supports the design of reports, online variable overviews and the publication of the English/original language variable documentation in ZACAT.

The archive workflow allows the distribution of information in different output formats: English or bilingual variable reports on the integrated dataset and all national datasets, variable descriptions for the Data Archive's retrieval systems ZACAT, and as Online Variable Overview.

An example of the bilingual variable report created for Armenia is given in Figure 14. It shows questions and Show cards in English and original language and provides some hints about the source of the information used, the missing values documentation, and the kind of notes added.

Figure 14: Interpreting the bilingual variable documentation

<p>v8 taking all things together how happy are you (Q3) Q3 &lt;SHOW CARD 3&gt; Taking all things together, would you say you are:</p> <p>-5 other missing -4 question not asked -3 nap -2 na -1 dk 1 very happy 2 quite happy 3 not very happy 4 not at all happy</p>	<p>Variable Name &amp; Label</p> <p>Question No. &amp; Text</p> <p>Missing Values</p> <p>Notes &amp; Remarks</p> <p>Show Cards</p>	<p>taking all things together how happy are you (Q3) Q3 &lt;ՑՈՒՑԱՒԻՇՔ ԶԱՄԱՐ 3 ՔԱՐԿ&gt; Ընդամասը ստանալով, կարո՞ղ եմ ասել, որ Դուք:</p> <p>1 Շատ երջանիկ եմ 2 Բավականին երջանիկ եմ 3 Այնքան էլ երջանիկ չեմ 4 Բույրանք երջանիկ չեմ 8 Ձեզուհի (անզգայանություն) 9 Պատասխան չեմ (անզգայանություն)</p> <p>Note: Missing values from field questionnaire recoded into -1 to -5 values in IDS and NDS.</p>
<p>CARD 3</p> <p>very happy quite happy not very happy not at all happy</p>	<p>ՔԱՐԿ 3</p> <p>Շատ երջանիկ եմ Բավականին երջանիկ եմ Այնքան էլ երջանիկ չեմ Բույրանք երջանիկ չեմ</p>	

Source: Bilingual variable report (English/Armenian) on Armenian dataset EVS 2008

### Archival notes added to the English/original language variable documentation

Notes could be references to trend/comparability information, applied international standards or EVS coding frames, problems in questionnaire translation, but also references to other data problems or specific characteristics.

The documentation procedure allows a distinction between four types of variable notes. The following notes were added to the variable documentation:

*(1) Notes with reference to all national datasets*

- Harmonised variables (religion, left/right political preference, education, income, region coded NUTS-2 and NUTS-1): reference to international standards or EVS coding frames used for harmonisation; notes on the respective standardised country-specific variable in national dataset or integrated dataset compiling all country information (“\_cs” and “\_LR” variables).
- Standardised country-specific variables: compiled variable constructed for religion, political party preference, education, and income containing country identifier (ISO 3166-1) and partly the given order of country-specific categories in the field questionnaires. Reference to respective harmonised variable in integrated dataset added.
- Standardised variables with reference to international standards (e.g. nationality ISO 3166-1 alpha2 code, region – NUTS code, education – ISCED97, and occupation – ISCO88/SIOPS, ISEI, EGP, ESeC ).
- Information on coding of open-ended questions and multiple response questions.

*(2) Additional notes with reference to a single national dataset*

- Notes referring to deviations of field questionnaire from Master Questionnaire, and translation problems.
- Notes referring to data problems.

*(3) Notes with reference to original language documentation of the dataset*

- Notes that refer to the recoding of missing values in the integrated dataset and national datasets.
- Notes on harmonised variables with reference to the original country-specific variables.
- Notes on errors in field questionnaires (e.g. typing error).

*(4) Notes on comparability of the variables*

- Comparability of variables to other EVS waves and international data collections.

*Problems arising in the Data documentation phase*

- Incompleteness of information provided in the methodological questionnaires and on deviations between the translations set up in WebTrans and the finally used field questionnaire.
- Difficulties in collecting post hoc missing information in the EVS member countries.

Problems detected were documented in Method Report and Variable Documentation set up for EVS 2008.



## 6 Internal and external review procedures on outcomes

---

*Goal:* Implement project internal and external review procedures on different outcomes to ensure their accuracy and completeness; connect the perspective and expertise of Principal Investigators, Data Archive, and secondary researcher; ensure transparency on and utilisation of feedback for questionnaire translation, data, and publications.

### 6.1 Internal review procedures

The EVS teams at Tilburg University, in the EVS member countries and at the Data Archive are the actors in the internal review procedures incorporated across the several phases of data creation and processing. Furthermore, all team members were asked to review internal data releases and provide feedback on any problems.

#### *EVS 2008 internal-use data releases*

Internal-use releases played an important role as they posed an additional review procedure for data and documentation and were a good preparation for a full data release. The three internal-use releases were provided to the EVS countries through the EVS project portal. They consisted of the integrated dataset, Variable Report for the integrated dataset, national datasets, and field questionnaires. The second and third release additionally included updated datasets of the previous internal-use release(s) (see Figure 2).

- 11/30/2009: first internal-use release including 29 national datasets
- 03/31/2010: second internal-use release including 34 national datasets; all datasets of the 1st internal-release updated
- 10/15/2010: third internal-use release including 39 national datasets; all datasets of the 1st public release 10/7/2010 updated

#### *EVS 2008 workshops*

The four workshops organized during the project were proper dialogue and feedback mechanisms with the team members of the EVS countries. The most recent dataset versions were introduced in the workshops, presented in national reports, and used in lectures and sessions (see Figure 2).

- 1st EVS Workshop 11-15 January 2010, Cologne, Germany
- 2nd EVS Workshop 8-11 June 2010, Zagreb, Croatia
- 3rd EVS Workshop 19-22 October 2010, Bilbao, Spain
- 4th EVS Workshop 30 June – 1 July 2011, Vilnius, Lithuania

### 6.2 External review procedures

After publishing the data and documentation secondary researchers are asked to play an active role in using and re-using the outcomes, and in reporting on any errors or problems detected. This type of review procedure is based on the one hand on the high degree of transparency regarding data and metadata the project tried to achieve. It is supported on the other hand by several user-friendly online approaches to evaluate questions, data, and publications.

### *Questions in master questionnaire and field questionnaire*

The web page [Compare question texts in EVS 2008](#) serves users who want to check the translations of the English master questions, compare original questions across languages, countries, or waves, detect problems or peculiarities, and report on the findings. All problems in original question texts spotted and reported to date were checked and are listed on this page as well. To support that step, information on translation procedure, fieldwork in the countries, related languages, and language families which might help trace back and clarify the source of emerging problems is assembled and presented. Searches for and comparisons of original questions are facilitated by ZACAT as well as by the Online Variable Overview of EVS 1981-2008.

### *Data in integrated and national datasets*

Section [Errata and Version](#) in the study description of the GESIS Data Catalogue provides all errata detected to date and related to the last dataset version. For major problems, patches for solving the data problems are provided. This information is intended to assist users who want to report on data problems detected or access previous data file versions to replicate analyses. In order to easily identify a dataset, each data release is assigned a version number and a persistent identifier. This information is placed in the reports related to the data. By clicking on the identifier users will always be guided to the Data Catalogue and get up to date information about the data.

### *Publications and theoretical concepts*

The [EVS repository](#) provides bibliographic information on publications based on EVS data and checks the availability of full text. Moreover, it contains publications enhanced by information on how the theoretical concepts have been measured. Links to the dataset version and variables used as well as information on the syntax codes researchers have worked with makes it easier to investigate and replicate the outcomes of other projects and report on the findings. Information on resulting publications can be entered into the repository and enhanced by means of a wizard.

## 7 Publication concept

---

*Goal:* Provide integrated and country-specific data along with complete study level and variable level documentation as timely as possible; establish links between EVS website and Data Archive retrieval systems; offer cross-linked general information and country-specific information; provide different user-friendly approaches to data and metadata; apply to persistent identification of dataset versions.

The publication concept for EVS 2008 covers the integrated dataset and national datasets along with study related and variable related information. The archive workflow allows exporting the processed information in different output formats: online retrieval systems, reports, and interactive online overviews. This again allows secondary researches to choose between several approaches to the metadata. The EVS website is the first place for users to get a comprehensive approach to EVS data and documentation. It contains, comparable to the GESIS web page, active links to the Data Archive's retrieval and preservation systems. This makes it possible to release the data and documentation at the same time through both the EVS web and the GESIS web and guarantees users access to the most recent file version no matter if they approach EVS or GESIS web pages.

### *Data and documentation available for EVS 2008*

*Data:* Besides the integrated dataset, the national datasets, including additional country-specific variables, are provided for national rather than multinational use.

*Reports:* Standards and recommendations designed by the EVS advisory groups for all countries are compiled in the report *EVS 2008 Guidelines and Recommendations*. The information is mainly related to the questionnaire development and translation process, fieldwork, and data processing.

The *EVS 2008 Method Report* includes both summarized information on the integrated dataset and country reports with country-specific information on the origin of the national datasets. It is based on the methodological questionnaires submitted by all EVS member countries.

The English variable documentation on the integrated dataset and the bilingual variable report on each national dataset are available as *EVS 2008 - Variable Reports*.

*Questionnaires:* The *English Master Questionnaire* and the *field questionnaires* in all languages fielded in participating countries are available for download.

### *General study information*

The [EVS Website](#) covers information on the origin of the project, and provides access to all data and documentation available.

### *Retrieval and analysis systems*

[GESIS Data Catalogue](#) provides an overview of version history and errata. It contains study descriptions for all EVS datasets with information about updates, errors, and error corrections.

[ZACAT](#) - GESIS Online Study Catalogue provides data of all EVS waves for retrieval purposes, data exploration, and free download. It supports full access to datasets and documentation and assists users in identifying trend variables of all four waves. Furthermore, ZACAT enables comparisons of original questions in survey languages of the third and fourth wave.

### *Online overviews*

Online study description and variable overview offer comprehensive metadata on the EVS datasets and variables.

The [Online Study Overview](#) of the EVS 2008 provides country-specific information on the origin and outcomes of the national surveys.

The [Online Variable Overview](#) is available for the four EVS waves 1981, 1990, 1999, and 2008 and the Longitudinal Data File 1981-2008. It allows identification of country-specific deviations in the question wording within and across the waves.

### *Full-text retrieval*

The Qbase-retrieval system is a facility for word/phrase searches in EVS reports and questionnaires.

[Method report retrieval](#) supports full-text searches in EVS 2008 guidelines and method reports of both integrated and national datasets.

[Question text retrieval](#) serves for full-text searches in the Master Questionnaire and variable reports of integrated datasets of all EVS waves 1981-2008 and in bilingual variable reports of national datasets.

### *EVS Repository*

The [EVS Repository](#) contains publications based on the EVS data released by the Data Archive. Part of the publications is enhanced with direct links to the datasets and variables researchers have used. The necessary information (data file version, variable information, and question texts) on the data release is provided by the Data Archive.

### *Announcements*

For announcement of data releases, updates, and errata as well as for exchange of information several formats are used: RSS Feed [EVS Data and documentation News](#); [The European Values Study mailing list](#); GESIS News: [New Data](#); and the [GESIS Report](#) (published bimonthly in electronic PDF format).

## 8 Preservation

*Goal:* Guarantee preservation of all incoming data and documentation files, key working files, and shared files within a trusted and secure archive environment; convert data and documentation to standard formats; use standardised procedures; allow for migration of data and information into on-going developments of applied standards, tools, and platforms.

The preservation concept covers all phases of the project workflow – from creation of data and documentation to their processing and sharing. The Data Archive pursues three main goals:

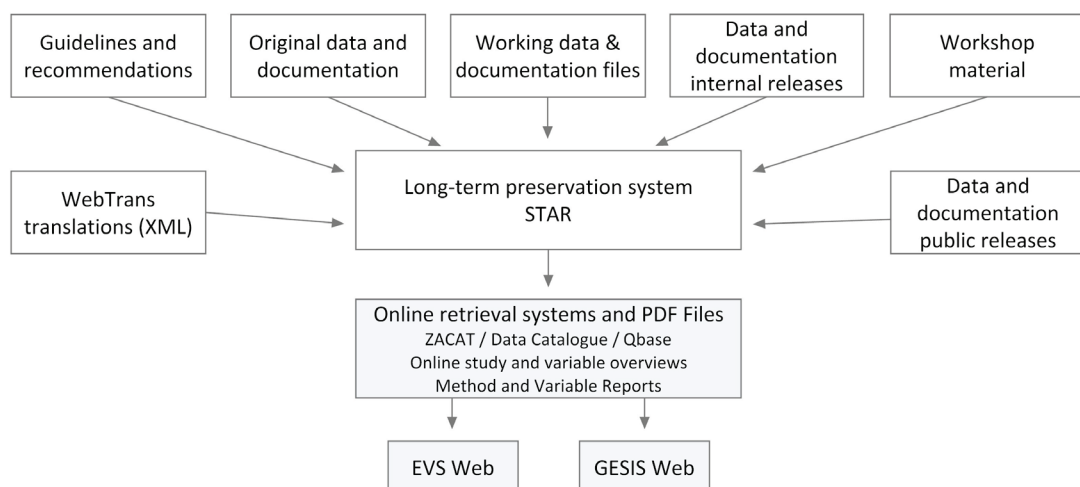
- First, to assist secondary users who want to replicate previous analyses and investigate the outcomes of other projects. This requires uniquely identifiable data files and easy access to all dataset versions released.
- Second, to allow the Data Archive staff to trace back original or working data files in case of errors or problems were detected in the data. This objective requires the preservation of all original data and documentation files as well as key working files.
- And third, to assist the EVS project staff in preparation of the next wave scheduled for 2017. Good documentation of the whole project workflow as well as data and documentation in up to date standard formats are a prerequisite for setting up the new EVS wave on the experiences and results of the previous waves.

Preservation activities at the Data Archive regard three major functions of the EVS 2008 workflow

- Ingest: delivery and control of partner files and exchange of revisions
- Preservation: storage of original files, versioned working files, and releases
- Access: publication of final files (data and documentation) and new releases.

Figure 15 depicts the link between original, processed and released data and documentation provided on the EVS project portal, their long-term preservation in STAR, as well as their publication through the websites of EVS and GESIS.

Figure 15: *Interrelation between preservation system and publication*



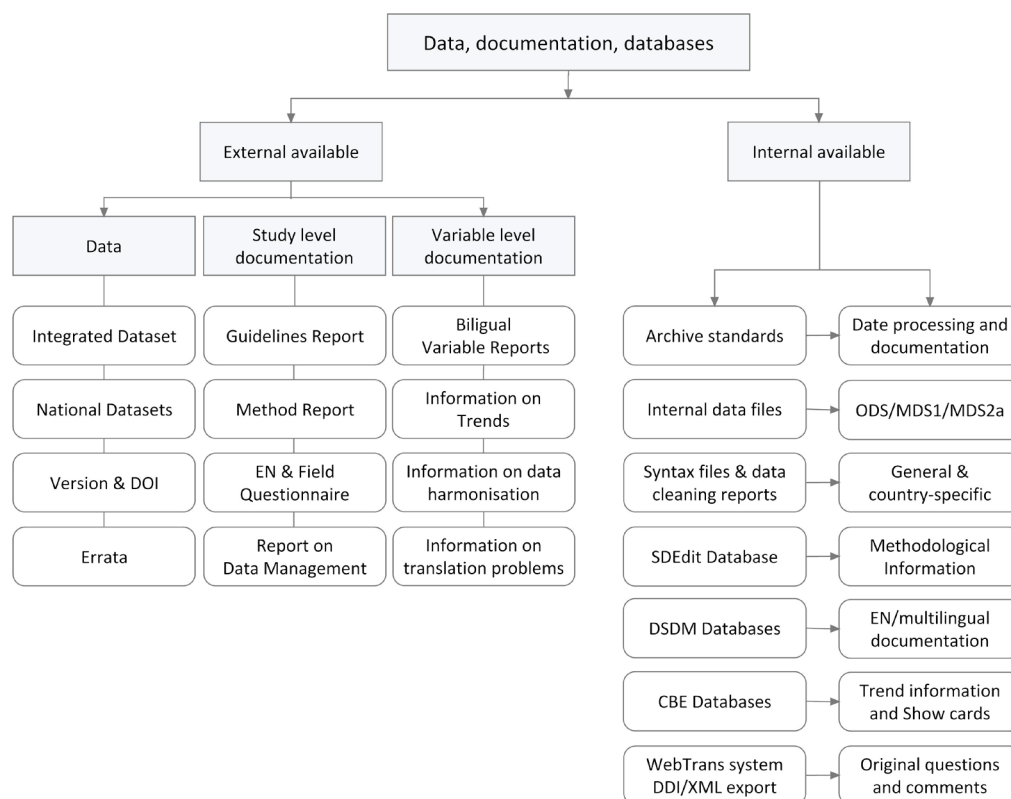
All incoming data and documentation files are managed according to the agreed project conventions on "Data and information transfer" (section 2). The project portal is part of the technical infrastructure of the Data Archive and underlies all respective technical and administrative regulations that guarantee controlled access and physical integrity of the data.

The data and documentation files were preserved in the Data Archive's preservation system STAR. In congruence with the OAIS reference model (Open Archival Information System)<sup>12</sup> the long-term preservation strategy of the different file types can be grouped by three basic information objects

- The Submission Information Package (SIP) consists of the original data and documentation files as received from the EVS member countries.
- The Archival Information Package (AIP) comprises the versions of the processed datasets and related documentation (key working files, final versions, and releases).
- Files of the AIP which are published and provided to users in suitable formats via different services are separately packed in so-called Dissemination Information Packages (DIP).

Figure 16 gives an insight into types of data, documentation, and databases which have been produced during the EVS 2008 project. It covers both externally (DIP) and internally (SIP; AIP) available data and documentation which need to be actively managed and converted into suitable formats over time to serve secondary users as well as the EVS project in the long run.

Figure 16: Overview of data and documentation for long-term preservation



<sup>12</sup> Reference Model for an Open Archival Information System (OAIS). CCSDS 650.0-B-1, Blue Book, January 2002. Online: <http://public.ccsds.org/publications/archive/650x0b1.pdf>.

The management of the EVS 2008 files is based on the logical and technical concepts of the STAR system (the study archive) and related regulations to administrate access and content of the system. The STAR system is logically organised by a dedicated directory structure and consistent file naming schema to host all materials per study and to reflect the different stages of the study-lifecycle at the archive. Files are stored by a set of standard file formats. Access is rigid restricted to allow authorised handling of all objects by the responsible personal only (uptake, transfer, transformation etc.).

## 9 Tools, software and standards used

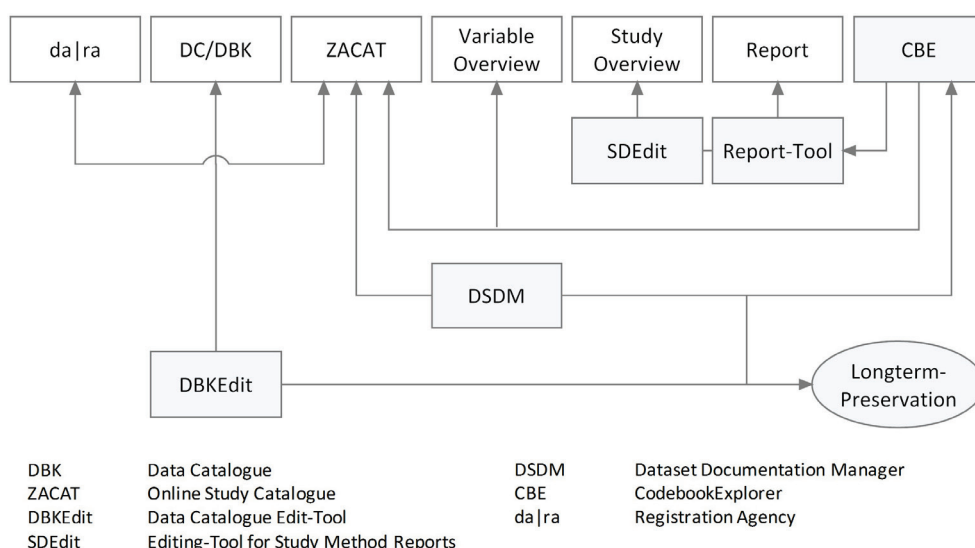
*Goal:* Provide workflows and tools for publication of all necessary study level and variable level information; stick to the general Data Archive workflow including new developments for project-specific demands; apply to DDI-Codebook/XML standard.

The software and tools listed below were used for creation of the major data and documentation outcomes of the EVS 2008 project. They are partly open source software and partly developed by the Data Archive. Some special tools as SDEdit for study level documentation, the online study and variable overviews as well as the workflow for creating English and bilingual variable reports were developed during the EVS project. Almost all new tools are based on DDI-Codebook/XML. They are going to be further developed and integrated into the general Data Archive workflow to support further comparative data collections.

Figure 17 gives an overview of online and offline publications. It depicts different user-friendly approaches to study level and variable level documentation on the one hand and tools used for the creation the metadata on the other hand.

The upper part shows the Data Archive's online retrieval systems Data Catalogue, ZACAT, online variable and study overviews. Reports are a further way of publishing good descriptive metadata. They cover methodological information on context and creation of a dataset and detailed variable documentation describing the content and structure of the data. The CodebookExplorer serves multiple goals: publishing complex data (on CD-ROM), structuring huge variable holdings, and providing multi-lingual documentation, trend information and Show cards for publication in ZACAT.

Figure 17: Current applications and workflow



The blue boxes indicate Data Archive tools; the white ones mark online and offline tools for data and documentation releases.



The tools for generating the metadata are listed below. Study level information is set up by means of DBKEdit and SDEdit. DSDM is used for the creation of the variable level documentation. All necessary data, documentation, and databases are preserved in the Data Archive's preservation system.

#### *Overview of software, tools, and standards used*

##### *Adobe Acrobat 9 Pro*

PDF Files are created by means of Adobe Acrobat 9 Pro. To each file standard metadata are added describing the file by title, author, subject, topics, PDF file producer, and PDF file distributor.

##### *Beyond Compare 2*

Beyond Compare 2 was useful for comparing content of data and documentation files and SPSS data folders.

##### *CodebookExplorer (CBE)*

The CBE is a Windows program with a local database developed in the Data Archive. This database is filled by an export from DSDM with the help of a CBE Wizard. In addition to data, also context information about data collection such as trend information, original language documentation, show cards, and tables are provided. The CBE has two functions: (1) It assists end-users through the presentation of complex data and metadata in an easily accessible form and (2) it serves as 'work equipment' supporting the publication of context information (multilingual variable documentation, trends, and show cards).

The CBE Wizard is an in-house tool for setting up a CodebookExplorer database. The procedure covers the establishment of database design, the import of documentation on study level and variable level, and the update of data and documentation. The CBE Report tool is an in-house tool for the creation of variable reports on a dataset in one or more than one language.

##### *Dataset Documentation Manager (DSDM)*

The documentation on variable level is set up by means of DSDM, an in-house Windows program that uses a local database. The Data Archive provides this tool also to external projects to support the (multilingual) variable related documentation of comparative data.

Special emphasis is on the documentation of (1) exact question and answer texts of the field questionnaire(s), (2) deviating question texts in questionnaires used in longitudinal or international comparative studies, and (3) additional archival notes on harmonisation standards, recoding etc.

The tool "Overwrite Variable" enables reusing questions and variable information already documented by means of DSDM. This is helpful for the documentation of study collections, such as EVS, where (part of the) English master questions do not change for national datasets of one wave or between waves as well as for documentation of standardised notes. The data and metadata can be published via ZACAT and CodebookExplorer. The database supports export into a DDI-Codebook or DDI-Lifecycle (variable lists) compatible format. This is used for publication with NESSTAR, long-term preservation, or the Enhanced Publication Editor of the EVS Repository.

### *DBKEdit*

The documentation on study level by means of DBKEdit (based on DDI-Codebook/XML) is set up for each dataset made available to users. The information is published as standard study description via the Data Catalogue and ZACAT.

### *DDI-Codebook*

The Data Documentation Initiative (DDI) is an international standard for the content, presentation, transfer, and preservation of documentation about data (study level, dataset level, and variable level). DDI metadata accompanies and enables data conceptualization, collection, processing, distribution, discovery, analysis, repurposing, and archiving (see: <http://www.ddialliance.org/what>).

### *DNN DotNetNuke*

The EVS project portal has been created by means of the DNN – DotNetNuke software (Content management System). The DNN provides modules for a number of tasks such as upload/download modules, notification of project partners or html content.

### *Excel*

For the construction of special variables as weights, Excel tables were used additionally covering population statistics.

### *Online Variable Overview for EVS 1981-2008*

Data processing and documentation is supported by the online overview allowing for easy identification of deviations in question wording between countries.

### *SDEdit*

The documentation on study level is done by means of SDEdit an in-house program that uses a local database. Structure and content of the information applies to DDI-Codebook. The information is published as method reports and as Online Study Overview.

### *IBM SPSS Statistic v.17, v.18, v. 19*

SPSS has been used for generating the data dictionary and almost all data processing tasks.

The data exported out of ZACAT (Nesstar based) are in local or Code Page Mode. Some variables in the integrated dataset (e.g. political parties, education) include country-specific special characters as provided by the countries. To maintain this information Unicode settings are necessary. For correcting the value labels in the data file exported from ZACAT a Unicode patch has been provided.

### *StatTransfer 10*

StatTransfer has been used for generating and transferring dictionary information of an existing SPSS data file to other formats.

### *Web-based translation system WebTrans*

WebTrans is an online questionnaire translation system developed by GALLUP Europe. It assisted the EVS countries with the organisation of the translation process offering several translation

procedures. Variable documentation based on DDI-Codebook/XML could be transferred between the Data Archive's documentation tool DSDM and WebTrans.

#### *ZACAT, based on Nesstar*

ZACAT is a social science data portal allowing searching for, browsing, analysing, and downloading social science survey data. Data analyses and data downloads are available after registration.

The data is provided as SPSS files (Code Page Mode) and in further file formats. Data is extensively documented: Study level and multilingual variable level information is displayed, method reports and multi-lingual variable reports, master questionnaires, and country-specific field questionnaires are provided as printable PDF files.

#### *Further programs*

Typo3 and Adobe Dreamweaver CS4 for maintaining GESIS and EVS web pages; SmartDraw 2009 for graphics and charts; Adobe InDesign CS4 for covers of method and variable reports, and questionnaires.

## Appendix 1: EVS 2008: Country codes (ISO 3166-1)

Country/Region	Country abbreviation ISO 3166-1 alpha-2	Study No.
Albania	AL	4783
Armenia	AM	4784
Austria	AT	4754
Azerbaijan	AZ	4785
Belarus	BY	4782
Belgium	BE	4759
Bosnia-Herzegovina	BA	4786
Bulgaria	BG	4774
Croatia	HR	4775
Cyprus	CY	4787
Northern Cyprus	CY-TCC*	4788
Czech Republic	CZ	4770
Denmark	DK	4760
Estonia	EE	4766
Finland	FI	4762
France	FR	4751
Georgia	GE	4789
Germany West	DE-W*	4753
Germany East	DE-E*	4753
Great Britain	GB-GBN	4752
Greece	GR	4776
Hungary	HU	4772
Iceland	IS	4763
Ireland	IE	4765
Northern Ireland	GB-NIR	4764
Italy	IT	4755
Kosovo	RS-KM	4790
Latvia	LV	4767
Lithuania	LT	4768
Luxembourg	LU	4779
Macedonia, Republic of	MK	4792
Malta	MT	4778
Moldova, Republic of	MD	4793
Montenegro, Republic of	ME	4794
Netherlands, The	NL	4758
Norway	NO	4795
Poland	PL	4769
Portugal	PT	4757
Romania	RO	4773
Russian Federation	RU	4777
Serbia	RS	4796
Slovak Republic	SK	4771
Slovenia	SI	4780
Spain	ES	4756
Sweden	SE	4761
Switzerland	CH	4797
Turkey	TR	4791
Ukraine	UA	4781

\*No official ISO 3166-1 alpha-2 code; ISO 3166-2 is applied for the United Kingdom subdivisions

## Appendix 2: Data and documentation files uploaded on the EVS project portal

EVS project portal – uploaded files										
Country/Region	ODS	SPS	MDS1	CDS	IDS	FQ	EN T.	MQ	Sample	Other
AL*	2	3	2	1	1	1	-	1	1	
AM	2	3	2	1	1	1	-	2	1	
AT	1	1	1	1	1	2	1	1	2	
AZ	1	1	1	1	1	2	-	1	2	
BY	1	2	2	3	1	2	-	2	1	
BE	1	2	2	3	2	4	-	1	1	
BA	1	1	1	1	1	1	-	2	1	
BG	1	1	1	1	1	2	-	2	1	
HR	1	1	1			4	1	1	2	1
CY	1	1	1	1	1	1	-	2	1	
CZ	1	1	1	1	1	1	-	2	1	
DK	1	2	2	1	1	2	1	7	1	
EE	1	1	1	1	1	3	1	1	1	
FI	2	3	2	1	1	4	-	2	1	
FR	3	2	2	-***	-***	2	-	1	3	
GE	2	1	1	1	1	4	1	1	1	
DE	1	2	1	1	1	2	-	1	1	
GB-GBN	1	1	1	2	1	2	2	1	1	
GR	1	2	2	1	1	1	-	4	1	
HU	1	3	3	1	1	1	-	3	1	
IS	1	2	2	2	1	2	1	1	1	
IE	1	7	2			4	1	3	2	
IT	1	2	2	1	1	1	-	4	1	
RS-KM*	1	1	2			2	-	2	1	
LV	1	1	1	1	2	1	-	3	1	
LT	1	2	2	1	1	4	-	2	1	
LU	1	1	1	1	1	2	-	2	1	
MK	2	2	1	1	1	1	-	2	1	
MT	1	1	2	3		5	1	2	1	
MD	2	1	2			2	-	1	**	
ME	2	2	1	1	1	2	-	2	1	
NL	2	2	1	1	1	4	-	4	**	
CY-TCC	1	3	3	1	1	1	-	3	1	
GB-NIR	1	1	3	1	1	4	-	1	1	
NO	3	2	2			2	-	3	1	
PL	1	6	5	2	1	3	1	2		1
PT	1	3	2	3	1	4	1	1	1	
RO	1	2	1		1	7	1	1	3	2
RU	2	3	2	1	1	1	-	2	1	
RS	2	3	2	1	1	1	-	2	2	
SK	1	-	1	1	1	3	2	2	1	
SI	1		1	1		2	-	2	1	2
ES	1		1	1	1	2	1	1	3	
SE	1	1	2	-***	-***	1	1	2	1	
CH	1	1	4	1	1	14	-	2	2	
TR	1		1			2	-	****		
UA	1	1	1	1	1	2	-	3	1	
Total	61	84	80	49	39	121	17	93	55	6

Source: EVS project portal, Overview Data and Documentation June, 2011 (accessible for EVS members only)

\* For country names see App. 1; \*\*Included in methodological questionnaire; \*\*\*Mode of data collection: internet panel and postal interview respectively; \*\*\*\*Information provided

## Appendix 3: Use of the web-based questionnaire translation system – WebTrans

WebTrans					
Country/Region	Fully used	Not fully used/update	Not fully used	Changes	Problems
AL	x			nap	
AM	x			nap	nap
AT			x	x	
AZ	x				
BY	x			x	
BE	x			nap	
BA	x			nap	
BG	x			x	
HR	x			x	x
CY	x			nap	
CZ	x			nap	
DK	x			nap	x
EE	x			nap	x
FI			x		
FR	x			x	
GE	x			nap	
DE	x			x	x
GB-GBN	no translation necessary				
GR	x				
HU	x			nap	
IS	x				
IE		x		nap	
IT			x	x	
RS-KM	x			nap	
LV		x		x	x
LT	x			x	
LU	x				
MK	x				x
MT	x				
MD			x		
ME	x			nap	
NL	x				
CY-TCC	x			nap	
GB-NIR	x			nap	
NO	x				
PL	x			x	x
PT	x				
RO	x			x	
RU			x		
RS	x			nap	
SK	x			nap	
SI	x				
ES	x			x	x
SE		x			
CH	x			nap	
TR			x	nap	x
UA	x			x	

Source: Method Report EVS 2008 – Integrated Dataset, European Values Study and GESIS Data Archive for the Social Sciences at EVS Data and Documentation and Online Study Overview at <http://info1.gesis.org/EVS/Studies/>.

Appendix 4: Questionnaire translation – responsible agent(s) and translation procedure(s)

Agent and Procedure									
Country/Region	FA*	PD	OTHER	PT	SBT	IBT	Other BT	TRADP	none
AL	x			x	x				
AM		x		nap					
AT		x			x				
AZ		x		x	x				
BY		x		x			x		
BE		x			x	x			
BA	x			x	nap				
BG		x		x					x
HR		x	x	x		x			
CY	x				x				
CZ				x	nap				
DK		x		x	nap				
EE		x				x			
FI		x	x						x
FR		x							x
GE		x		x	nap				
DE		x				x			
GB-GBN	no translation necessary								
GR		x		x	x				
HU		x		x	nap				
IS	x	x			x				
IE		x			x				
IT			x	x		x			
RS-KM	x			x	nap				
LV		x			x				
LT	x	x		x	nap				
LU		x		x	x				
MK		x			x				
MT	x			x	x				
MD	translations adapted								
ME	x			x	nap				
NL		x							x
CY-TCC	x				x				
GB-NIR		x			x				
NO		x			x				
PL		x			x				
PT			x	x					x
RO		x	x	x		x			
RU	x			x		x			
RS	x			x	nap				
SK		x	x		x				
SI	x	x			x	x			
ES			x	x	x				
SE			x	x	x				
CH			x	x					x
TR		x							x
UA		x							

\*See Appendix 15: List of abbreviations

## Appendix 5: Fieldwork period

Fieldwork period		
Country/Region	from	to
AL	10-Jul-2008	9-Sep-2008
AM	16-Jun-2008	19-Sep-2008
AT	21-Jul-2008	22-Oct-2008
AZ	11-Jul-2008	10-Aug-2008
BY	11-Jun-2008	31-Jul-2008
BE	30-Apr-2009	2-Aug-2009
BA	12-Jul-2008	31-Jul-2008
BG	21-Apr-2008	15-Jun-2008
HR	31-Apr-2008	31-Oct-2008
CY	25-Oct-2008	28-Nov-2008
CZ	5-May-2008	2-Nov-2008
DK	1-Apr-2008	15-Sep-2008
EE	1-Jul-2008	31-Aug-2008
FI	9-Jul-2009	15-Jul-2009
FR	7-May-2008	4-Sep-2008
GE	21-Aug-2008	30-Sep-2008
DE	19-Sep-2008	10-Feb-2009
GB-GBN	1-Aug-2009	10-Mar-2010
GR	12-Sep-2008	26-Oct-2008
HU	26-Nov-2008	28-Jan-2009
IS	15-Jul-2009	15-Mar-2010
IE	7-Jun-2008	31-Aug-2008
IT	2-Oct-2009	30-Dec-2009
RS-KM	15-Jul-2008	13-Oct-2008
LV	1-Jun-2008	31-Oct-2008
LT	21-Jul-2008	25-Aug-2008
LU	3-May-2008	15-Dec-2008
MK	3-Jul-2008	13-Oct-2008
MT	16-Jun-2008	23-Sep-2008
MD	2-Jul-2008	4-Oct-2008
ME	12-Nov-2008	8-Dec-2008
NL	21-May-2008	31-Oct-2008
CY-TCC	28-Oct-2008	4-Dec-2008
GB-NIR	26-Sep-2008	23-Oct-2008
NO	7-Apr-2008	2-Sep-2008
PL	27-Jun-2008	28-Sep-2008
PT	26-May-2008	31-Aug-2008
RO	24-Apr-2008	30-Jun-2008
RU	28-Jun-2008	26-Jul-2008
RS	14-Jul-2008	31-Jul-2008
SK	14-Jul-2008	29-Aug-2008
SI	2-Mar-2008	18-Jun-2008
ES	28-May-2008	15-Jul-2008
SE	25-Sep-2009	10-Jan-2010
CH	8-May-2008	6-Oct-2008
TR	26-Nov-2008	1-Mar-2009
UA	12-Jul-2008	9-Oct-2008



## Appendix 6: Interviewer training

Interviewers and Training					
Country/Region	Interviewers	EI*	Training	WI	TR
AL	67	67	67	x	x
AM	74	74	74	x	x
AT	150	150	150	x	x
AZ	63	54	63	x	
BY	119	119	119	x	x
BE	104	87	104	x	x
BA	74	74	74	x	x
BG	136	131	136		x
HR	132	44	132	x	
CY	32	0	32	x	x
CZ	101	82	101	x	x
DK	114	93	114	x	
EE	136	136	136	x	x
FI	nap	nap	nap	nap	nap
FR	169	169	169	x	x
GE	56	56	56	x	x
DE	246	227	0	x	
GB-GBN	151	151	12	x	
GR	61	61	61	x	x
HU	91	90	91	x	x
IS	42	16	42	x	x
IE	66	66	66	x	x
IT	172	150	172	x	x
RS-KM	83	65	83	x	x
LV	93	82	93	x	x
LT	114	106	114	x	x
LU	120	76	120	x	
MK	19	12	19	x	x
MT	34	30	34	x	x
MD	76	62	76	x	x
ME	110	85	100	x	x
NL	278	276	0		
CY-TCC	31	31	31	x	x
GB-NIR	28	28	28	x	x
NO	120	120	120	x	x
PL	158	110	158	x	
PT	56	47	56	x	x
RO	97	87	87	x	x
RU	174	153	174	x	x
RS	154	114	154	x	x
SK	124	124	124	x	x
SI	116	40	116	x	x
ES	24	22	24		
SE	nap	nap	nap	nap	nap
CH	34	31	34	x	
TR	170	170	170	x	x
UA	99	99	99	x	x

\*See Appendix 15: List of abbreviations

*Appendix 7: Control operations – number of units selected for back-checking*

Units selected for back-checking			
Country/Region	Interviews	Refusals	Non-contacts
AL	75	15	2
AM	75	33	33
AT	30%	0	0
AZ	80	15	20
BY	150	30	12
BE	1935	119	37
BA	75	30	2
BG	600	153	98
HR	130	0	0
CY	100	35	15
CZ	586	85	20
DK	75	98	20
EE	171	0	0
FI	0	0	0
FR	199	565	194
GE	100	70	40
DE	419	0	0
GB-GBN	175	0	0
GR	1500	633	152
HU	500	100	100
IS	50	474	98
IE	10%	0	0
IT	107	51	72
RS-KM	80	39	3
LV	225	35	20
LT	150	50	20
LU	322	0	0
MK	200	0	0
MT	150	0	0
MD	256	0	0
ME	150	120	14
NL	250	814	77
CY-TCC	60	22	14
GB-NIR	10%	0	0
NO	0	0	0
PL	165	44	18
PT	652	102	58
RO	10%	0	0
RU	548	256	238
RS	224	45	8
SK	5%	10%	10%
SI	1366	0	0
ES	0	0	0
SE	0	0	0
CH	303	917	545
TR		0	0
UA	195	29	72

*Appendix 8: Control operations – number of back-checks achieved*

Number back-check achieved			
Country/Region	Interviews	Refusals	Non-contacts
AL	93	15	2
AM	75	33	33
AT	0	0	0
AZ	74	15	12
BY	150	30	5
BE	308	57	14
BA	102	30	2
BG	345	65	32
HR	130	0	0
CY	84	24	15
CZ	260	14	6
DK	65	73	14
EE	161	0	0
FI	0	0	0
FR	134	556	182
GE	75	53	25
DE	222	0	0
GB-GBN	151	0	0
GR	1010	260	106
HU	451	82	13
IS	40	400	40
IE	10%	0	0
IT	107	51	72
RS-KM	92	33	3
LV	225	29	20
LT	125	38	20
LU	210	0	0
MK	168	0	0
MT	150	0	0
MD	185	0	0
ME	120	120	14
NL	76	100	43
CY-TCC	50	15	9
GB-NIR	10%	0	0
NO	0	0	0
PL	165	44	18
PT	602	79	35
RO	321+~1100	0	0
RU	548	256	238
RS	133	37	20
SK	76	46	28
SI	854	0	0
ES	351	0	0
SE	0	0	0
CH	303	469	293
TR	1520	0	0
UA	195	29	72

*Appendix 9: Control operations – number of units where outcome was confirmed*

Number units outcome confirmed			
Country/Region	Interviews	Refusals	Non-contacts
AL	93	15	2
AM	75	33	33
AT	0	0	0
AZ	74	15	12
BY	150	30	5
BE	304	53	14
BA	102	14	2
BG	342	64	32
HR	130	0	0
CY	84	24	15
CZ	260	14	6
DK	51	28	7
EE	150	0	0
FI	0	0	0
FR	108	506	173
GE	75	53	15
DE	199	0	0
GB-GBN	151	0	0
GR	907	202	106
HU	442	80	12
IS	40	398	40
IE	100%	0	0
IT	106	51	72
RS-KM	92	29	2
LV	225	29	20
LT	125	30	20
LU	210	0	0
MK	168	7	25
MT	150	0	0
MD	185	0	0
ME	117	113	12
NL	76	100	43
CY-TCC	50	15	9
GB-NIR	100%	0	0
NO	0	0	0
PL	155	44	18
PT	587	67	9
RO	280	0	0
RU	548	256	238
RS	127	20	17
SK	65	30	18
SI	854	0	0
ES	291	0	0
SE	0	0	0
CH	302	469	293
TR	1501	0	0
UA	172	29	72

Appendix 10: Control operations – types of back-checks (personal, telephone, mail)

Control Operations - types of back-checking									
Country/Region	INP/ttl.*	INT/ttl.	INM/ttl.	RFP/ttl.	RFT/ttl.	RFM/ttl.	NCP/ttl.	NCT/ttl.	NCM/ttl.
AL		x		x			x		
AM	x/25	x/50		x/33			x/33		
AT	x/20%	x/10%							
AZ	x			x			x	x	
BY	x/30	x/120		x/30			x/12		
BE		x			x			x	
BA	x	x		x			x		
BG	x/168	x/177		x/37	x/28		x/32		
HR		x							
CY		x		x			x		
CZ	x/99	x/304	x/183			x/85			x/20
DK		x			x			x	
EE		x							
FI									
FR	x/181	x/603	x/150						
GE	x/20	x/50		x/53			x/25		
DE									
GB-GBN		x							
GR	x/220	x/687		x/202			x/106		
HU		x/451		x/82			x/13		
IS		x			x			x	
IE		x							
IT		x/99	x/8		x/51			x/72	
RS-KM		x		x			x		
LV	x/70%	x/30%		x/70%	x/30%		x/100%		
LT	x/30%	x/70%		x/100%			x/100%		
LU		x							
MK	x	x		x	x		x	x	
MT		x							
MD	x/118	x/67							
ME		x		x			x		
NL		x			x			x	
CY-TCC		x		x			x		
GB-NIR		x							
NO									
PL		x			x		x		
PT	x	x		x	x		x		
RO	x/110	x/211							
RU		x		x			x		
RS		x		x			x		
SK			x			x			x
SI		x							
ES	x/78	x/273							
SE									
CH		x			x/45	x/424		x/19	x/274
TR		x							
UA	x			x			x		

\*See Appendix 15: List of abbreviations; \*\* 10% back-checking of routes taken by interviewers to make sure that they followed the random route regulations and that addresses marked as non-residential

## Appendix 11: Enhancing measures and incentives

Enhancing measures and incentives										
Country/Region	AL/use of WI*	No Incentive	UMI	CMI	UNMI	CNMI	Other	EM	RC	Pretested interviews
AL	x				x					15
AM		x							x	20
AT	x	x							x	30
AZ		x								51
BY		x						x	x	32
BE	x	x						x	x	8
BA	x	x							x	15
BG	x					x			x	30
HR	x	x								126
CY		x						x	x	11
CZ						x				30
DK	x	x						x		nap
EE	x		x			x				10
FI		x						x	nap	25
FR	x	x						x	x	30
GE		x								20
DE	x			x						nap
GB-GBN	x				x			x	x	nap
GR	x	x						x	x	10
HU	x			x		x				25
IS	x			x				x	x	6
IE		x								nap
IT	x	x						x	x	172
RS-KM	x	x							x	15
LV	x					x			x	10
LT	x	x							x	30
LU	x			x				x		15
MK	x	x								150
MT	x	x							x	10
MD		x							x	12
ME	x	x								15
NL	x		x	x**				x	x	5
CY-TCC		x						x	x	10
GB-NIR		x								nap
NO	x			x					x	nap
PL		x						x		15
PT	x					x		x	x	50
RO	x	x						x		20
RU						x			x	10
RS	x	x							x	15
SK	x					x			x	4
SI	x	x								nap
ES	x			x				x	x	32
SE	x					x		x	x	nap
CH	x			x		x		x	x	15
TR	nap				x					35
UA	x			x				x	x	10

\*See Appendix 15: List of abbreviations; \*\* After refusal conversion.

## Appendix 12: Mode of data collection and verification of questionnaire

Verification of questionnaire									
Country/ Region	CAPI*	Check FA	Check PD	other	PAPI	Check FA	Check PD	other	Proportion checked
AL					x	x			20
AM					x	x			100
AT	x	x	x						na
AZ					x	x	x		20
BY					x		x		20
BE	x	x	x						na
BA					x	x			20
BG					x	x			33
HR					x			x	3
CY					x	x			100
CZ	x	x	x						na
DK	x	x							na
EE					x	x	x		100
FI								online	na
FR	x	x	x						na
GE					x	nap			na
DE	x		x						na
GB-GBN					x	x			4,8
GR					x	x			10
HU	x	x	x						na
IS	x	x	x						na
IE					x	x	x		10
IT					x	x		x	100
RS-KM					x	x			20
LV					x	x			na
LT					x	x			100
LU					x		x		20
MK					x		x		30
MT					x	x			10
MD					x	x	x		10
ME					x	x			20
NL	x	x	x						na
CY-TCC					x	x			100
GB-NIR					x	x	x		10
NO	x	x	x						na
PL					x	x	x		100
PT	x	x							na
RO					x	nap			na
RU					x	x			100
RS					x	x			20
SK					x	x			25
SI					x	x	x		100
ES	x	x							na
SE					x	x		postal	0
CH	x	x	x						na
TR					x	x	x		100
UA					x	x			na

\*See Appendix 15: List of abbreviations

## Appendix 13: Outcome rates calculated according to AAPOR Classification

Country/Region	A (Total)*	Z (Valid)*	RR1*	COOP1*	REF1*	CON1*
AL	1751	1534	0,879	0,888	0,061	0,990
AM	2430	1500	0,660	0,768	0,186	0,859
AT	2262	1510	0,739	0,823	0,134	0,898
AZ	1734	1505	0,935	0,960	0,027	0,975
BY	2075	1500	0,762	0,815	0,151	0,935
BE	3021	1509	0,525	0,630	0,225	0,833
BA	1845	1512	0,826	0,837	0,152	0,987
BG	2059	1500	0,751	0,832	0,136	0,902
HR	2443	1525	0,659	0,734	0,218	0,898
CY	1419	1000	0,753	0,775	0,169	0,971
CZ	2995	1821	0,629	0,688	0,271	0,914
DK	2950	1507	0,513	0,567	0,347	0,906
EE	2313	1518	0,670	0,793	0,160	0,846
FI	1300	1134	0,872	0,872	0,102	1,000
FR	3993	1501	0,400	0,484	0,386	0,825
GE	2853	1500	0,602	0,712	0,213	0,846
DE	5146	2075	0,445	0,545	0,325	0,816
GB-GBN	6720	1561	0,245	0,358	0,410	0,686
GR	4562	1500	0,368	0,419	0,443	0,879
HU	2981	1513	0,509	0,589	0,340	0,865
IS	1500	808	0,538	0,594	0,316	0,906
IE	2152	1013	0,479	0,526	0,383	0,911
IT	2500	1519	0,624	0,737	0,148	0,846
RS-KM	2169	1601	0,744	0,782	0,178	0,952
LV	2088	1506	0,732	0,816	0,158	0,897
LT	2313	1500	0,659	0,710	0,232	0,928
LU	5233	1610	0,320	0,438	0,370	0,731
MK	2092	1500	0,732	0,779	0,185	0,940
MT	4463	1500	0,514	0,612	0,306	0,840
MD	3303	1551	0,471	0,684	0,177	0,688
ME	1728	1516	0,884	0,888	0,110	0,995
NL	3176	1554	0,500	0,545	0,372	0,919
CY-TCC	571	500	0,891	0,894	0,103	0,996
GB-NIR	1735	500	0,298	0,655	0,150	0,454
NO	1934	1090	0,564	0,643	0,313	0,877
PL	1821	1510	0,831	0,870	0,122	0,955
PT	2232	1553	0,712	0,755	0,227	0,943
RO	2792	1489	0,590	0,729	0,187	0,810
RU	4239	1504	0,359	0,506	0,305	0,710
RS	2221	1512	0,700	0,760	0,208	0,921
SK	2662	1509	0,597	0,753	0,179	0,794
SI	2250	1366	0,617	0,733	0,202	0,842
ES	2953	1500	0,574	0,613	0,348	0,935
SE	2600	1187	0,457	0,928	0,027	0,492
CH	2966	1272	0,440	0,522	0,392	0,844
TR	4347	2384	0,592	0,680	0,255	0,870
UA	2871	1507	0,602	0,726	0,200	0,829

\*A: Total number of issued sample units; Z: Number of valid interviews; Response Rate: RR1; Refusal Rate: REF1; Cooperation Rate: COOP1; Contact Rate: CON1.



Appendix 14: Characteristic of sample: response and non-response (numbers)

Country/ Region	A*	Z	Y	C	B	D	G/L	M	F	E	J	O	H	I	K	X
AL	1751	1534	0	25	82	2	15	0	5	82	0		3	3	0	
AM	2430	1500	1	308	114	53	263	0	18	11	4		14	140	4	
AT	2262	1510	4	179	95	102	106	0	21	25	0		24	0	3	193
AZ	1734	1505	0	35	9	15	11	0	19	0	15		125	0	0	
BY	2075	1500	27	122	200	12	115	0	17	0	0		81	48	5	
BE	3021	1509	27	22	624	293	114	11	112	92	60	12	93	25	27	
BA	1845	1512	0	176	103	7	15	0	10	5	2		10	5	0	
BG	2059	1500	8	7	264	134	45	3	20	0	17		5	56	0	
HR	2443	1525	12	78	427	187	50	0	35	1	0		0	40	0	184
CY	1419	1000	1	148	76	4	34	0	15	50	0		43	48	0	
CZ	2995	1821	3	444	342	144	101	6	21	9	5		4	32	13	50
DK	2950	1507	0	49	968	176	98	3	100	32	2		1	10	1	3
EE	2313	1518	0	244	119	207	142	0	14	20	0		49	0	0	
FI**	1300	1134	34		132											
FR	3993	1501	0	1000	451	424	195	9	75	65	37		30	82	124	
GE	2853	1500	3	288	242	253	131	0	49	25	0		0	362	0	
DE	5146	2075	40	335	1184	562	229	26	116	32	68		14	54	0	411
GB-GBN	6720	1561	114	2163	445	1796	115	0	29	54	84		81	218	60	
GR	4562	1500	1	1278	530	267	227	0	37	238	0		155	325	4	
HU	2981	1513	22	40	971	128	254	5	18	0	20		1	8	1	
IS	1500	808	0	0	474	98	43	3	57	18	0		0	0	0	
IE	2152	1013	4	276	533	0	187	0	31	69	1		6	33	0	
IT	2500	1519	13	66	294	179	131	9	155	4	59		3	20	43	5
RS-KM	2169	1601	0	148	235	10	93	0	40	24	0		2	16	0	
LV	2088	1506	0	140	185	56	156	0	10	5	0		30	0	0	
LT	2313	1500	0	181	348	39	124	0	13	71	0		37	0	0	
LU	5233	1610	0	245	1614	585	545	0	98	106	223		89	40	76	2
MK	2092	1500	41	17	362	83	27	6	0	0	13		32	11	0	
MT	4463	1500	2	771	121	162	301	0	29	29	3		298	584	650	13
MD	3303	1551	14	244	340	551	476	0	55	62	0		0	0	0	10
ME	1728	1516	0	155	33	1	7	0	3	0	0		1	1	11	
NL	3176	1554	2	255	900	164	68	0	107	34	0	21	0	71	0	
CY-TCC	571	500	0	23	35	0	2	0	0	1	0		6	4	0	
GB-NIR	1735	500	0	142	110	884	33	0	4	7	0		0	55	0	
NO	1934	1090	0	0	606	201	37	0	0	0	0		0	0	0	
PL	1821	1510	0	20	201	30	50	0	3	2	1		0	1	3	
PT	2232	1553	0	277	218	70	55	0	6	2	0		9	33	9	
RO	2792	1489	38	215	256	344	116	0	32	12	20		16	18	104	132
RU	4239	1504	7	760	518	1051	163	0	150	31	0		6	16	30	3
RS	2221	1512	0	253	197	79	88	0	16	11	3		22	32	8	
SK	2662	1509	2	191	262	274	217	0	39	2	30		0	122	0	
SI	2250	1366	0	48	400	150	130	4	41	5	70		0	0	36	
ES	2953	1500	0	0	909	142	0	0	11	25	27		105	0	0	234
SE**	2600	1187	0	0	1353	0	0	9	13	0	38		0	0	0	
CH	2966	1272	3	727	406	409	38	0	9	21	3		25	33	31	
TR	4347	2384	73	938	90	383	118	0	12	9	23		0	317	0	
UA	2871	1507	1	306	194	291	133	0	61	6	4		71	297	0	

\*See Appendix 15: List of abbreviations; \*\* Finland and Sweden conducted the survey in online and postal mode, respectively.

## Appendix 15: List of abbreviations

List of abbreviations		
A	Total number of issued sample units (addresses, households or individuals)	Categories for characteristic of sample: response and non-response
B	Refusal by respondent	
C	Refusal by proxy (or household or address refusal)	
D	No contact (after at least 4 visits)	
E	Language barrier	
F	Respondent mentally or physically unable to co-operate throughout fieldwork period	
G/L	Respondent unavailable throughout the field fieldwork period for other reasons/Respondent moved abroad/unknown destination	
H	Address not residential (institution, business/industrial purpose)	
I	Address not occupied (not occupied, demolished, not yet built)	
J	Address not traceable	
K	Other ineligible address	
M	Respondent deceased	
O	Other	
X	Number of units not accounted for (A-[sum of B to M,Y,Z]): if all sample units are accounted for, X will=0	
Y	Number of Invalid interviews	
Z	Number of valid interviews	
AL	Advance letter	
BT	Other types of back-translation procedure	
CMI	Conditional monetary incentives	
CNMI	Conditional non-monetary incentives	
EI	Experienced Interviewers	
EM	Enhancing measures	
FA	Field Agency	
IBT	Iterative back-translation	
INM	Interview: mail	
INP	Interview: personal	
INT	Interview: telephone	
NCM	Non-contact: mail	
NCP	Non-contact: personal	
NCT	Non-contact: telephone	
PCI	Payment per completed interview	
PD	Program director or its team	
PT	Professional translators	
RC	Refusal conversion strategies	
RFM	Refusal: mail	
RFP	Refusal: personal	
RFT	Refusal: telephone	
SBT	Simple back-translation	
TR	Training in refusal conversion	
ttl.	total number	
UMI	Unconditional monetary incentives	
UNMI	Unconditional non-monetary incentives	
WI	Written instructions	