

**The Europeanisation of Everyday Life:
Cross-Border Practices and Transnational Identifications
Among EU and Third-Country Citizens**

Technical Report of the Quantitative EUCROSS Survey

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The research consortium is formed by:

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The EUCROSS project and this working paper series are coordinated by Ettore Recchi at the Università 'G. d'Annunzio' di Chieti-Pescara.

For additional information: www.eucross.eu.

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Executive summary

This report summarises the methodological approach and practical implementation of the quantitative survey which has been carried out as part of the project “The Europeanisation of Everyday Life: Cross-Border Practices and Transnational Identifications among EU and Third-Country Citizens (EUCROSS)”. The report has been compiled as part of the public release of the EUCROSS dataset and is meant as a supporting document for researchers who intend to use these data for their own analyses. A more global description of the methods employed in EUCROSS can be found in the EUCROSS Final Report (<http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395269>). The EUCROSS questionnaires in all survey languages are published in separate files in the document section of the GESIS data archive.

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Steffen Pöttschke¹

1. Project overview

As part of EUCROSS, computer assisted telephone interviews (CATI) were realised in Denmark, Germany, Italy, Spain, Romania and the United Kingdom. The field period lasted from June 2012 to April 2013. The target populations in the mentioned countries consisted of 1,000 nationals, as well as 250 Romanian and Turkish migrants respectively. However, due to the low number of Turkish nationals in Spain, only Romanian migrants were included in this country. Hence, the envisioned total sample sizes were 6,000 EU-member state nationals currently living in their country of origin, 1,250 intra-EU migrants (Romanian citizens) and 1,250 migrants from a third country (Turkish citizens).

2. Collaboration and communication within the EUCROSS consortium

The EUCROSS consortium consisted of teams at universities and research institutes in Denmark, Germany, Italy, Spain, Romania and the United Kingdom (see imprint page). To coordinate the project at large, several meetings were organised in different locations. In addition an internet forum was used to enable close cooperation across teams and countries. The password protected forum was maintained and administered by the Italian team at the University of Chieti-Pescara and integrated in the official project website (<http://www.eucross.eu>). This way of communication allowed the members of all teams to share information and exchange viewpoints and comments on all project related topics. It was especially important for coordination but also for substantial discussions, for example during the preparation of the survey instrument. The chosen mode of communication did not just allow for the discussion of questionnaire drafts at various stages but also of detailed issues at item level (e.g., wording, construction of answer batteries). Furthermore, the use of an electronic forum ensured the comprehensive documentation of the project.

¹ The author would like to thank Valerie Steeb and Jessica Wengrzik. Both former research assistants contributed to various documents this text builds on.

3. Sample definition

The goal of the EUCROSS project was to collect data on transnational behaviours and orientations of different groups of EU-country residents. To this end quantitative data on three target populations, namely nationals, Romanian migrants and Turkish migrants, were collected. To be included in one of the samples respondents had to be at least 18 years old at the time of the interview.

Taking into consideration the empirical reality of European countries our definition of the national samples was not based on the assumption of ethnically homogenous societies. Hence, the crucial criterion for inclusion in one of the six national samples was citizenship in its strictly legal sense. In using this formal aspect as sampling criterion, EUCROSS sets itself apart from other definitions which consider only such individuals as part of national populations who have been born in the country of residence (CoR) or whose families already lived there for a given number of generations (excluding so-called migration background). A consequence of the provisions made in EUCROSS is that naturalised migrants (including persons originally from Romania or Turkey) can be part of the national population samples, too. Hence, migration experience is considered only one socio-demographic aspect in a contemporary society among others, such as diverse degrees of formal education and different income levels. Nevertheless, language served as an additional indirect filter since interviews with the national populations were conducted in the predominantly used official languages only.

Citizenship was central in the definition of the EUCROSS migrant samples, as well. All respondents of these samples had to be Romanian or Turkish nationals living in one of the surveyed countries without holding the country of residence citizenship. However, these criteria alone would not have assured that participants were in fact migrants, since citizenship laws in a number of countries – especially the still only superficially eased *ius sanguinis* principle in Germany – result in large sub-populations of people born in the country of residence without (unconditionally) receiving the respective citizenship. In public discourse these persons are often addressed as migrants although they never left their country of origin (CoO). However, the inclusion of these individuals in the migrant samples would have been counterproductive since EUCROSS is specifically designed to measure possible effects of personal mobility experiences on individual identification. Therefore, in addition to the stated citizenship requirements, only such persons were eligible for the migrant samples that were not born in the country of residence. This means in consequence that the term migrant, if used with respect to EUCROSS data, does indeed and exclusively refer to people who moved from one country to another (i.e., persons who are in the literature often referred to as so-called first generation migrants).

4. Questionnaire development

4.1. Questionnaire construction

The first step in the development of the EUCROSS questionnaire was constituted by a thorough literature review focussing on previously used instruments to measure cross-

border activities and (trans)national identification. The direct outcome of this work was an operationalisation document which summarised current best practise examples. It further proposed new instruments to operationalise the respective concepts and to measure independent variables (Hanquinet and Savage 2011). Subsequently, a second review process was conducted which concentrated on the identification of tested questionnaire items. A wide range of questionnaires were included in this process. Important sources were general surveys of the European population (e.g., Eurobarometer, European Social Survey), studies which specifically investigated the identification with the European Union (e.g., Bruter 2005), studies which focussed on transnational activities and networks (e.g., Mau 2010) and migrant surveys (e.g., Recchi and Favell 2009; INE 2009).

The main questionnaire, which was designed in English, built heavily on these preliminary efforts. Consequently it incorporated a number of previously used items in their original form, not least in order to ensure the comparability of research outcome. Furthermore, a large number of items in the questionnaire were inspired by other studies, but considerably modified in their wording or with respect to answer categories and scales. Finally, a significant number of innovative items were developed specifically for EUCROSS.

The questionnaire itself consists of four parts, starting with an introductory screening section and ending with the collection of socio-demographic data.² The two main intermediate parts are inquiring cross-border practices, on the one hand, and European identification and cosmopolitan values, on the other hand (for detailed information on the rationale behind item design and combination of items, see Pötzschke 2012).

The questionnaire for all samples mainly consists of the same items in order to assure a high level of comparability of the data gathered on nationals and migrants. Thus it includes only a limited number of questions which are tailored specifically for migrants (e.g., inquiring the year of settlement in the CoR). Instead of using alternative items, in most cases, additional answer categories were added in order to adopt the questionnaire to the social realities of all samples. Using different filters, migration specific data were not only collected on the 'official' migrant samples, but also on nationals with migration experience. During the development process various items and drafts of the questionnaire were discussed using the above mentioned online forum.

Following the preparation of a first questionnaire draft, small scale in-house pre-tests in all countries were scheduled in order to assess the feasibility of the instrument. The questionnaire designed for the survey of national population was therefore translated by all teams from English into the respective official CoR language. Already existing translation of items (which were borrowed from other surveys, like Eurobarometer or the European Internal Movers Social Survey) could be used after they had been double checked by the respective research teams. Each team conducted approximately 16 interviews in which the samples were stratified by gender, age (over and under 45) and

² The EUCROSS questionnaires are not part of this report but published as separate files in the document section of the GESIS data archive.

education (university level and below university level). The pre-tests in all countries were realised between March 10 and March 26, 2012. After their conclusion all teams reported their findings and observations.

This first series of pre-tests did not only allow the identification of weaknesses of single items from a purely methodological point of view. In fact, keeping in mind the intercultural nature of the survey, they also provided the researchers with important hints as to which issues and items (more precisely: which formulations) had to be paid special attention to during the translation process. The draft questionnaire was adjusted where necessary and further developed into the English master questionnaire which also included migrant sample specific filters, answer categories and items.

4.2. *Questionnaire translation*

The translations of the English master questionnaire into Danish, German, Italian, Romanian, Spanish and Turkish were organised by the different teams. However, they were coordinated by the GESIS - Leibniz Institute for the Social Sciences in Germany. The intention was to keep the translation process in all countries as similar as possible which presupposed that all teams followed the same methodological guidelines. To this end GESIS provided the other teams with a handout detailing recommendations about the translation process. Since the majority of these remarks were of a technical character (e.g., explaining the use of the translation template in EXCEL, etc.) they will not be included in this text. The translation handout specified that translators should aim for a translation equivalent in meaning to the source text. On the contrary, “forced” literal translations were not the desired outcome.

In general, EUCROSS applied the *team translation approach* (Behr 2009). In compliance with this strategy each translation was prepared in two stages: First, two separate translations of the questionnaire were realised. At least one of them was done by a professional translator, the other either by another translator or by a member of the research team in the respective country. The translators used standardized templates which left them enough space to make comments regarding their language choice and possible difficulties. In a second step, those individual translations were then merged into a final translation. This was done in a work meeting in which both translators and members of the respective country teams compared the two translations, discussed differences, pending issues or unfamiliar formulations and decided on the final wording of each item. All translations (i.e., both individual translations and the final one), translator remarks, points of discussion and the reached conclusions were documented in the translation template which was then forwarded to GESIS. In a final step, the GESIS team compared the adjustments and notes in order to ensure the consistency of the questionnaire across all languages. This strategy combined the professional knowledge and experience of translators and social scientists in the development of a high-quality cross-cultural survey instrument.

4.3. *Pretest*

Following the completion of the main questionnaire and its implementation into CATI software by the field institute, the latter carried out a number of pre-tests, the first of which was realised on May 18 and 19, 2012 with British nationals. One of the main conclusions of this pre-test was that respondents reacted very suspicious to phone calls. Furthermore, the refusal rate seemed higher than expected. However, in this regard it has to be taken into account that the small range of the test – only 11 interviews were conducted – did not allow for any reliable predictions of the response rate at that time. Nevertheless, it was subsequently decided to modify the introduction sequence (explicitly stating the name of the EUCROSS partner institution in each country) and to include short descriptions of the project in all survey languages on the project website. To this end a standardized text was produced and translated by each team in the respective language. By the end of June 2012 the participant information was available online (see Figure 1).

Between July 1 and August 3, 2012 the second wave of pre-tests was carried out in order to test the questionnaire in the remaining languages (approx. 10 interviews each). The national questionnaires were tested with respondents in the respective countries, while the Turkish and Romanian migrant questionnaires were tested with migrants in Germany. These tests resulted in minor changes of wording and/or the correction of grammatical errors. However, they did not reveal the need for overall revision.

Figure 1: 'Information for participants' as available during the field period on the project website (English version)

The EUCROSS Survey - Information for participants



| [dansk](#) | [English](#) | [Deutsch](#) | [español](#) | [italiano](#) | [română](#) | [türkçe](#) |

Why a survey on the Europeanization of Everyday Life?

European integration is not only a matter of public finance and budgets. While political institutions in Brussels and the national capitals discuss loans, Eurobonds and the fiscal compact, European citizens live a more mundane 'Europe' as part of their everyday life.

European citizens catch low-cost flights to Greece, chat with friends in Germany, plan language courses in Ireland and shop online on French websites. There is another Europe, that of the everyday borderless interactions made possible by almost fifty years of European integration.

How is the Everyday Life Europe shaped? Who is part of it? And do the borderless interactions create an underlying solidarity that strengthens a common identity as 'Europeans'?

Answers to such questions are sought by the EUCROSS research project, promoted by the European Commission in the realm of its Seventh Framework Program and carried out by a Consortium of six European research institutions.

What's happening in these days?

Between June and September 2012 a mass telephone survey on a random sample of more than 8,000 EU residents will be carried out in six different countries (Germany, Italy, Spain, UK, Denmark and Romania). In addition to the national samples, two groups of immigrants, Romanians and Turks, are interviewed in the selected countries.

The survey is conducted by Sozialwissenschaftliches Umfragezentrum (<http://www.suz-umfragen.de>) a specialized center based in Duisburg (Germany) with the support of different national teams of interviewers.

Personal information will be collected through the survey only for research purposes and it will be treated within the terms of national data protection laws. Analysis and reporting of the survey data is completely anonymised. Your telephone number will be erased immediately after the end of the project.

The participation in the survey is voluntary, but your opinion is really important for this research project. Therefore, we would be very grateful for your participation.

What's next?

Data from the telephone interviews will be elaborated by the researchers and a small sub-sample of respondents, on a voluntary basis, will be contacted for an in-depth interview to collect more precise insights into the meaning of their answers.

In the first months of 2014 research results will be presented to the European Commission in a seminar in Brussels and in a final conference hosted by the Chieti-Pescara University while the www.eucross.eu webpage collects information and updates on the project.

5. Fieldwork

5.1. Sampling methods

The quantitative EUCROSS survey was carried out by the field organization Sozialwissenschaftliches Umfragezentrum GmbH (SUZ). The computer-assisted telephone interviews (CATI) were generally conducted by native speakers of the respective language who called the respondents from Duisburg (Germany) where SUZ is located. Interviews with migrants were conducted by Romanian or Turkish language native speakers in Duisburg, too. Only the interviews with Danish nationals had to be subcontracted to another field institute (BERENT Deutschland GmbH) with a branch in Denmark, due to the small number of qualified Danish speaking interviewers available to SUZ. All interviewers received proper training and were familiarised with the scientific goals of the project.

For practical and economic reasons the survey of each sample could only be conducted in one language. For the national samples this was the respective countries' most widely used official language. Romanian or Turkish was used in the case of the surveyed migrant populations. Therefore, especially in the case of migrants with Turkish nationality, members of ethnic minorities (e.g., Kurds) might be underrepresented in the samples.

Random digit dialling (RDD) was used to sample national populations. The sampling of migrants was realised via linguistic screening of names in telephone directories (the so-called "onomastic procedure", Humpert and Schneiderheinze 2000). Only persons who were at least 18 years old and fulfilled the above mentioned additional sampling criteria could participate in the study. By default, to enhance randomization, the interviews were conducted with the person in a given household whose birthday was the most recent and who fulfilled all sampling criteria of the respective sub-study.

5.2. *Field period*

The EUCROSS field period started in June 2012 and ended in April 2013 (see Table 1). There are two main reasons for this somewhat large time frame. The first is the simple fact that the fieldwork had to be suspended for two months during the summer due to the holiday season and the resulting low participation rates.

However, more severe delays resulted from specific problems during the fieldwork. Particularly in the United Kingdom the willingness to take part in the survey was very low. Therefore, the sub-study of UK nationals was amongst the last EUCROSS national studies to be completed, even though it was the very first which went into the field.

While the data collection for all nationals was nevertheless finished by the second week of January 2013, some migrant samples were of especially high concern. Until then the progress in fieldwork for Turkish migrant samples in Italy and Romania as well as Turkish and Romanian migrant samples in the UK were comparatively low. One major problem had been that the total of telephone numbers for Turkish and Romanian migrants identified through the mentioned onomastic procedure was low right from the beginning, especially in these mentioned crucial cases. This was worsened by the fact that, in particular in the United Kingdom, a high amount of telephone numbers – taken from the most recent telephone register – was invalid. The number of potential participants was further reduced by the restrictions of the EUCROSS sampling frame, which excluded naturalised migrants of both nationalities. Since the UK does allow dual citizenship it could be assumed that a higher share especially of Turkish long-term immigrants has taken on the nationality of this particular CoR compared to countries such as Germany. Furthermore, in Romania the name-based recruitment procedure had been complicated by a long established Turkish minority and, more generally, by the lack of a comprehensive telephone directory.

To counteract these problems different strategies were applied. In order to realise further interviews with the difficult-to-reach samples, SUZ started refusal conversion attempts and snowball sampling by mid December 2012. At the same time Turkish and Romanian online questionnaires were installed on the project website so that potential respondents who refused to take the telephone interview could participate online. Furthermore, the field institute acquired subsamples of address lists from commercial enterprises. However, all these approaches did not yield the hoped success.

Ultimately, it was decided to pursue a face-to-face strategy in order to complete the Turkish migrant samples in Italy and Romania as well as both migrant samples in the UK. In all three countries these interviews were organised by members of the respective research teams. In Romania it became clear that almost no quantitative surveys of Turkish migrants had been undertaken before, pushing EUCROSS in a pioneering role. With the help of Ahmet Ecirli, one of the few scholars who had studied Turkish immigrants in Romania (Ecirli, Stănescu, and Dumitru 2011), the planned sample size could finally be realised.

The EUCROSS researchers in the respective countries oversaw the interviewer recruitment and were responsible for interviewer training. Since the face-to-face interviewers ultimately recruited the respondents, a standardised set of instructions was drafted and had to be respected in order to guarantee data quality. Its central requirements were:

- Compliance with general sampling criteria of the respective sample;
- Inclusion of persons of both gender (samples should, in this regard, reflect the gender distribution of the community of Turks/Romanians in the respective country);
- Variation in terms of educational level and age;
- Limitation of interviews to one person per household.

Furthermore, all interviewers were instructed to sample persons from various backgrounds and not to sample larger groups at single events or venues. In general these interviews were conducted as CAPI during which the field personnel recorded the respondent's answers in the same software as used for the telephone interviews. However, the interviewers in Romania and Italy were, in consultation with the EUCROSS researchers, able to realise a number of interviews in CATI mode, too.

Face-to-face interviews were conducted in the following cities:

Italy	Brescia, Bologna, Como, Genoa, Milan, Modena, Padua, Perugia, Peschiera del Garda, Rome, Venice, Verona, Vicenza
UK (Romanian migrants)	Brighton, Bristol, London, Manchester
UK (Turkish migrants)	Brighton, Leeds, London, York
Romania	Bucharest

Table 1 specifies the detailed timeframe of data collection for each sample. Phases one and two of the survey consisted of CATI interviews which were realized by SUZ, as mentioned above. In phase three local teams conducted additional interviews (mostly face-to-face) in order to reach the targeted sample sizes.

The same standardised questionnaire – in its respective translation – was used in all interviews which were conducted as part of the EUCROSS study. The average interview duration of the CATI interviews was 25 minutes for nationals and 28 minutes for the migrant samples. Individuals were contacted and interviewed from Monday to Friday in two time slots (10 a.m. to 1 p.m. and 4.30 p.m. to 9 p.m.) and on Saturdays between 12 p.m. and 6 p.m.

The cooperation rate of CATI interviews for the nationals varied between 9 per cent in the United Kingdom and 38 per cent in Romania.³ For the Romanian migrants it was between

³ For the calculation of each samples' cooperation rate the 'number of completed interviews' was divided by the sum of 'number of completed interviews' and 'refusals'.

29 per cent (Germany) and 67 per cent (Denmark). Finally, in the Turkish samples which were completed entirely in CATI mode the cooperation rate was 23 per cent in Germany and 35 per cent in Denmark. The rates in the other three Turkish samples are significantly higher but as they refer to much smaller CATI samples and would therefore be misleading, we refrain from reporting them.

Table 1: Timetable of EUCROSS fieldwork

Sample	Phase 1		Phase 2		Phase 3	
	Start	End	Start	End	Start	End
Nationals in ...						
Denmark			30.08.2012	30.11.2012		
Germany	04.07.2012	11.07.2012	24.08.2012	23.11.2012		
Italy			24.08.2012	09.01.2013		
Romania			24.08.2012	08.12.2012		
Spain			10.09.2012	19.12.2012		
United Kingdom	18.06.2012	10.07.2012	28.08.2012	12.12.2012		
Romanian migrants in ...						
Denmark			03.09.2012	09.11.2012		
Germany			24.08.2012	14.11.2012		
Italy			03.09.2012	29.11.2012		
Spain			03.09.2012	15.11.2012		
United Kingdom			30.08.2012	28.12.2012	14.02.2013	17.04.2013
Turkish migrants in ...						
Denmark			30.08.2012	24.10.2012		
Germany	04.07.2012	11.07.2012	24.08.2012	18.10.2012		
Italy			30.08.2012	24.01.2013	09.02.2013	15.04.2013
Romania			14.09.2012	02.01.2013	18.02.2013	15.03.2013
United Kingdom			29.08.2012	06.03.2013	13.02.2013	24.04.2013

5.3. Realised sample sizes

Table 2 gives an overview of the realised samples and the mode in which the interviews were conducted.

Table 2: Realised EUCROSS samples

Sample	CATI (SUZ)	CATI based snow ball sampling (SUZ)	Web based quest.	Face to face (local teams)	Skype or CATI (local teams)	Total
Nationals						
Denmark	1014	---	---	---	---	1014
Germany	1001	---	---	---	---	1001
Italy	1000	---	---	---	---	1000
Romania	1000	---	---	---	---	1000
Spain	1000	---	---	---	---	1000
United Kingdom	1001	---	---	---	---	1001
Romanian migrants in ...						
Denmark	250	---	---	---	---	250
Germany	250	---	---	---	---	250
Italy	250	---	---	---	---	250
Spain	250	---	---	---	---	250
United Kingdom	40	2	---	206	---	248
Turkish migrants in ...						
Denmark	250	---	---	---	---	250
Germany	252	---	---	---	---	250
Italy	44	5	---	179	22	250
Romania	17	---	---	186	47	250
United Kingdom	126	9	3	110	---	248

6. Data: Country specific variables and data management issues

The following section provides information on the collection of country/language specific data and different data management issues.

6.1. Measurement of education

In EUCROSS, educational titles were measured in country specific batteries. National respondents were asked to state the highest degree of education (according to the national educational system). Interviewers then coded the answer into the respective battery. The questionnaire asked for the highest educational title of the respondent, his/her parents and his/her partner (if applicable). In the case of migrants, respondents were first asked, whether they received their highest educational title in the CoO or the CoR. They were then asked to state the educational title which was coded in the according battery (i.e., containing CoO or CoR educational titles). Since EUCROSS samples

only included ‘first generation’ migrants, respondents were asked to state the highest educational title of their parents in reference to the educational system of the CoO. The assumption being, that the parents were unlikely to have received their education in the CoR. For the partner CoO or CoR titles could be used.

In order to compare educational levels across countries all teams were in a first step asked to deliver short explanations of the respective educational titles.⁴ In a second step they related the respective titles to classifications of six and four categories (Table 3). After the survey the values of all educational variables were additionally coded into those two classifications, thus providing an instrument which allows the comparison of educational achievements across countries. However, it is important to notice that the order of educational titles in the original batteries does not always correspond to their order in the two classifications. The Danish category “Gymnasiel uddannelse” has, for example, the value three in the original Danish education battery (Table 4). However, in the classifications its value is higher than those of the educational titles with the original value four (“Kort erhvervsuddannelse”) and five (“Faglig uddannelse”). Tables 4 to 10 present all mentioned information regarding the education variables.

Table 3: Educational classification in four and six levels

Long classification	Short classification
1 Primary education or less	1 Lower secondary education or less
2 Lower secondary education	
3 In-between lower and higher secondary education	2 In-between lower and higher secondary education
4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
5 Lower tertiary education	4 Tertiary education
6 Higher tertiary education	

⁴ These are the descriptions included in Tables 4 to 10.

Table 4: Educational titles Denmark

Value ⁵	Response Categories	Explanation	Long classification	Short classification
1	Ikke færdiggjort folkeskole	Not completed primary education	1 Primary education or less	1 Lower secondary education or less
2	Folkeskole (1. til 9. klasse)	Folkeskole is compulsory education that usually lasts from grade 1-9. One can add an additional year to folkeskole (grade 10) but that is voluntary. Students are typically between 6 and 16 when they go to Folkeskole. One obtains basic skills in reading, writing, social science subjects, history and natural sciences.	2 Lower secondary education	1 Lower secondary education or less
3	Gymnasiel uddannelse, studenter eksamen	Gymnasiel uddannelse, studenter eksamen has different acronyms such as: "HF", "HTX" or "HHX" etc. Just calling this education "Gymnasium" would be correct as well. Gymnasium (upper secondary education) typically takes three years to complete and it gives access to enrol at long and "medium-long" type of higher educations. Students graduate with a "studenter eksamen" (in German Abitur) and the grade point average in the studenter exam is decisive if one ones to enrol at university. One can choose between a natural-science, language, social-science or creative focus at gymnasium. Students are typically between 16 and 20 years old but in principle there is no age restriction as to when one starts gymnasium.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
4	Kort erhvervsuddannelse	Kort erhvervsuddannelse, is a short type of vocational training that last for 1-2 years. Typical example is the "AMU" (labour market education). A short vocational training is a training course that qualifies directly for labour market work. Some of the short vocational training programs take place at schools/colleges only. Other types are done together with a sponsoring firm and include practical within firm training.	3 In-between lower and higher secondary education	2 In-between lower and higher secondary education
5	Faglig uddannelse	Faglig uddannelse is a specialized vocational training education in for example commerce, agriculture, craft/trade, social-or health professions etc. Vocational training can last between 1 ½ and 5 years. The faglig uddannelse consists of a basic module in a school, a main module conducted at a sponsoring firm/employer and periods of regular school attendance in between.	3 In-between lower and higher secondary education	2 In-between lower and higher secondary education

⁵ Value of the original variable.

6	Kort videregående uddannelse	Kort videregående uddannelse (short tertiary education) is a short type of tertiary education that combines theory and application. It typically lasts between 2-3 years. Examples are educations as a dental-technician, information technologist, building technician, electrician.	5 Lower tertiary education	4 Tertiary education
7	Mellemlang videregående uddannelse	Mellemlange videregående uddannelser (medium-length tertiary education) usually lasts between 3-4 ½ years. Most of these types of tertiary programs are profession-oriented in a sense that one is educated for a specific type of job. As in case of the short tertiary programs, the medium-length programs also require a certain time where students are doing mandatory internship related to their education to gather practical experience. Subjects that can be studied at this level are pedagogy, acting, journalism, ship-officer, nursing, engineering. Students graduate with a so-called “vocational bachelor” which qualifies to take up a master’s degree at university.	6 Higher tertiary education	4 Tertiary education
8	Lang videregående uddannelse.	A lang videregående uddannelse (long tertiary education) lasts usually 5-6 years and is divided into a three-year bachelor followed by a two year MA degree. This is a mainly theoretical education with a focus on academic and analytical skills. The Danish word for MA education is “kandidat” and possible degrees are for example: “Cand.mag.”, “cand.jur.” or “cand.polyt”.	6 Higher tertiary education	4 Tertiary education

Table 5: Educational titles Germany

Value	Response Categories	Explanation	Long classification	Short classification
1	Schule beendet ohne Abschluss	Left school without a degree.	1 Primary education or less	1 Lower secondary education or less
2	Volks-/Hauptschulabschluss bzw. Polytechnische Oberschule mit Abschluss 8. oder 9. Klasse	A certificate obtained in lower secondary school at the end of 8 th or 9 th grade, when students usually are 14 or 15 years of age. Students with this kind of certificate especially gained practical knowledge during school years. It entitles students to go on with school or start vocational training.	2 Lower secondary education	1 Lower secondary education or less
3	Mittlere Reife/Realschul-	A certificate obtained in secondary education at the end of 10 th grade, when students usually are 16 years of age. Students with this kind of certificate especially	3 In-between lower	2 In-between lower

	abschluss bzw. Polytechnische Oberschule mit Abschluss 10. Klasse	gained practical knowledge during school years. It entitles students to go on with upper secondary school (certain grades are necessary) or to start vocational training.	and higher secondary education	and higher secondary education
4	Fachhochschulreife (Abschluss mit Fachoberschule)	A certificate from upper secondary school, usually obtained at the end of 12 th grade, when students are about 18 years of age. It entitles students to study at a technical college.	4 Higher secondary education (university entrance requirement)	2 In-between lower and higher secondary education
5	Abitur bzw. Erweiterte Oberschule mit Abschluss 12. Klasse (Hochschulreife)	A certificate from upper secondary school, usually obtained at the end of 12 th grade. It entitles students to study at a technical college and at university.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
	Anderen Schulabschluss, und zwar: _____ ⁶	Other type of school leaving certificate: __		
6	Fachhochschul- oder Hochschulabschluss	Undergraduate degree (usually a bachelor's degree) or master's degree.	5 Lower tertiary education	4 Tertiary education
7	Promotion (Dr.; PhD)	Doctorate (PhD)	6 Higher tertiary education	4 Tertiary education

⁶ The German battery allowed for open answers. The educational titles stated were coded into the existing categories as far as possible. The coding of the open answer "Diplom" is reasoned as follows: "Diplom" is overall understood in Germany as an educational title granted when graduating from university. Since, nevertheless, there remain certain doubts whether respondents actually meant a university diploma, the occupational title has been considered in the coding process. For example it can be argued that a person working as a research fellow will necessarily have a university degree and thus his/her open answer "Diplom" can be coded into category "Fachhochschul- oder Hochschulabschluss" (undergraduate degree or master's degree). In cases where the occupation did not necessarily require a university degree, the open answer "Diplom" remained in the category "other" and has not been coded. The open answer "Habilitation" was coded into the existing category "Promotion" (doctorate) since a person necessarily must have obtained a dissertation before he/she could receive a habilitation.

Table 6: Educational titles Italy

Value	Response Categories	Explanation (English)	Long classification	Short classification
1	Senza titolo di studio	Not completed primary education	1 Primary education or less	1 Lower secondary education or less
2	Licenza elementare	Primary school is the first level of education in Italy, usually called scuola elementare. It lasts five years and starts at the age of 6. Before going to primary school children may attend scuola dell'infanzia or scuola materna, usually called asilo. Licenza elementare is the qualification title for this basic level of education.	1 Primary education or less	1 Lower secondary education or less
3	Licenza media/ avviamento professionale	Lower-secondary school is the lower step of the second level of education in Italy, usually called scuola media inferiore or simply scuola media. It lasts three years and starts at the age of 11. Licenza media is the qualification title for this lower step of the second level of education. Avviamento professionale [pre-work school] was the old style education branch dedicated to those boys/girls unable to continue 'normal' high school studies. It no longer exists since many years.	2 Lower secondary education	1 Lower secondary education or less
4	Diploma di scuola media superiore	Upper-secondary school is the upper step of the second level of education in Italy, usually called scuola secondaria superiore or simply scuola superiore. It lasts five years and starts at the age of 14. There are many kinds of high school courses: classic, scientific, artistic, technical, professional. Diploma di scuola media superiore is the qualification title for this upper step of second level of education, valid to go on with academic courses in universities. There are also other qualifications related to artistic or professional high schools but have a shorter duty (three or four years) and do not permit access to universities.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
5	Diploma universitario/ laurea di primo livello	University is the third level of education and starts at the age of 19. The <i>new rules</i> of Italian tertiary education splits university education into two levels (three with Phd). Under the <i>new rules</i> , Laurea di primo livello, known also as laurea breve [short laurea], is the qualification of the first academic degree, giving access to the second level of academic courses in universities. It lasts three years. Under the <i>old rules</i> of Italian university, Diploma universitario was the qualification title for a shorter track of two or three years.	5 Lower tertiary education	4 Tertiary education

6	Laurea vecchio ordinamento/ laurea di secondo livello (specialistica, magistrale)	Under the <i>new rules</i> of Italian universities, laurea specialistica, or laurea magistrale [master laurea], is the qualification title for this second level of academic degree. It lasts two years. Under the <i>old rules</i> , Laurea last four or five years. Both permit access to the third academic level.	6 Higher tertiary education	4 Tertiary education
7	Diploma post-laurea (dottorato, specializzazione)	Diploma post-laurea is a post-graduate degree that lasts three years. Under the <i>new rules</i> of Italian university, it is the third level of academic education. It can be a Dottorato [PhD] or a Specializzazione.	6 Higher tertiary education	4 Tertiary education

Table 7: Educational titles Romania

Value	Response Categories	Explanation (English)	Long classification	Short classification
1	Fără școală	No education.	1 Primary education or less	1 Lower secondary education or less
2	Școală primară	Primary school (grades I-IV) is the first level of education in Romania. It lasts for four years and normally starts at age 6 or 7.	1 Primary education or less	1 Lower secondary education or less
3	Gimnaziu	Lower-secondary school is the lower step of the second level of education in Romania. It lasts for four years and is called <i>gimnaziu</i> (gymnasium) (grades V-VIII). Students usually are between ages 11 and 14 years of age. Graduation is done by two national tests and entitles students to go on with upper-secondary level of education.	2 Lower secondary education	1 Lower secondary education or less
4	Școală profesională ori de meserii	Vocational school called also school of <i>arte si meserii</i> (arts and crafts) is one of the routes after gymnasium. It lasts for two years and is also considered to be part of the lower secondary education. Admission function of results to national tests closing gymnasium. Students obtain knowledge for specific occupations.	3 In-between lower and higher secondary education	2 In-between lower and higher secondary education

5	Liceu	A certificate from upper secondary school, liceu (highschool) lasts for four years (grades IX to XII), and students are usually 18 years old when obtaining it. Admission function of results to national tests closing gymnasium. Graduation by bachelor exams known as the Bacalaureate exam, entitles students to continue with tertiary level education.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
6	Școală post-liceală (inclusiv colegiu)	Lower tertiary education is called <i>colegiu</i> (college) and usually lasts for two years.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
7	Studii superioare/facultate	Undergraduate studies (BA) that last for three years and admission is based on exams or grades to Bacalaureate exams.	5 Lower tertiary education	4 Tertiary education
8	Studii post-universitare	Master (MA – 1-2 years), doctoral (PhD – 3 years), and post-doc schools in Bologna system.	6 Higher tertiary education	4 Tertiary education

Table 8: Educational titles Spain⁷

Value	Response Categories	Explanation (English)	Long classification	Short classification
1	No completó la educación primaria	Not completed primary education.	1 Primary education or less	1 Lower secondary education or less
2	Educación primaria	Educación Primaria (primary education) normally takes six years, from age 6 to age 12, and is organized in three “ciclos” at two years each. Attendance is mandatory and for free. Educación Primaria and Educación Secundaria together form the basic and mandatory level of education in Spain.	1 Primary education or less	1 Lower secondary education or less
3	Secundaria	Educación Secundaria Obligatoria (ESO) (mandatory secondary education) usually takes place between the age of 12 and 16. It consists of four school years which are organized in “ciclos” at two years each.	2 Lower secondary education	1 Lower secondary education or less
4	Bachillerato	Bachillerato (general qualification for university entrance) is a two-year non-mandatory educational level which follows Educación Secundaria Obligatoria. Students with Graduado en Educación Secundaria (graduation from mandatory secondary school) are entitled to go on with this educational level.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
5	Formación profesional	Formación Profesional Específica aims at preparing students for the exercise of a specific profession. To be entitled to study at the medium level students must have obtained the title Graduado en Educación Secundaria or must have studied equivalent courses after the Spanish educational law. There are two ways to be entitled to study at the higher level: first, directly via the title Bachillerato, or, second, via tests. Students obtain, depending whether they have attended the medium or the higher level, a certificate Técnico or Técnico Superior for the specific professional field.	3 In-between lower and higher secondary education	2 In-between lower and higher secondary education
6	Licenciatura o grado	There are two educational forms: a) Studies of the first ciclo (short ciclo), which focus on the professional development of students and end with the receipt of the title Diplomado. b) Studies of the first and second ciclo (long ciclo). These studies consist of	5 Lower tertiary education	4 Tertiary education

⁷ The descriptions of Spanish educational titles are based on Information provided in: Ministerio de Educación, Cultura y Deporte 2002.

		ciclos, but the graduation of the first does not entitle to any title, because it does not constitute a complete educational form and does not provide students with any specific professional qualifications.		
7	Estudios de postgrado	<p>There are two forms of postgraduate studies.</p> <p>a) The first one consists only of two years and leads to the title Licenciado.</p> <p>b) The second one is open to licenciados, engineers and architects and takes two years of study. These studies provide students with a specialization in a scientific, technical or artistic field. Students afterwards are entitled to obtain a doctor's degree (PhD).</p>	<p>6 Higher tertiary education</p>	<p>4 Tertiary education</p>

Table 9: Educational titles United Kingdom

Value	Response Categories	Explanation (English)	Long classification	Short classification
1	Not completed primary education.		1 Primary education or less	1 Lower secondary education or less
2	Primary education	Primary education is the first stage of compulsory education, where children have obtained basic skills like reading, writing and calculating. Children are normally between the age of 5 and 11 in primary school.	1 Primary education or less	1 Lower secondary education or less
3	GCSEs	The General Certificate of Secondary Education (GCSE) is an academic qualification. Students obtain it by passing exams in several subjects (usually between five and ten subjects), normally at the age of 16. They can afterwards continue school to obtain A-levels or go on with vocational training.	2 Lower secondary education	1 Lower secondary education or less
4	A or AS Levels	The Advanced Level General Certificate of Education is commonly referred to as an A-level . A-levels are studied over a two-year period after the GCSEs. Students are normally 18 years old when they obtain the A-levels and are entitled to go on with academic courses in universities.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
5	GNVQ or Apprenticeship	A General National Vocational Qualification , or GNVQ , was a certificate of vocational education <i>awarded until 2007</i> . People holding a GNVQ certificate gained general occupational qualifications through specific courses, which could be studied alongside GCSEs or A-levels, too. These qualifications don't relate to any specific job. An Apprenticeship is a system of training. Apprentices are trained on the job by an employer and obtain theoretical education via the workplace and vocational schools. An apprenticeship is usually done after earning GCSEs.	2 In-between lower and higher secondary education	3 In-between lower and higher secondary education
6	Undergraduate Degree	An undergraduate degree (also called first degree or simply degree) is a colloquial term for an academic degree taken by a person who has completed undergraduate courses, usually at a university. The most common type, a bachelor's degree, takes three to four years of study and entitles to proceed with a master program.	5 Lower tertiary education	4 Tertiary education
7	Post-Graduate Degree	A post-graduate degree usually follows on undergraduate studies. The most common type is the master's degree, which usually takes one or two years of study. Another common post-graduate degree, the doctorate (PhD), usually takes three to four years to complete.	6 Higher tertiary education	4 Tertiary education

Table 10: Educational titles Turkey

Value	Response Categories	Explanation	Long classification	Short classification
1	İlkokul eğitimini tamamlamamış.	Not completed primary school education	1 Primary education or less	1 Lower secondary education or less
2	İlkokul mezunu	Primary school is the first level of education in Turkey. It starts at the age of 6 and lasts for 5 years.	1 Primary education or less	1 Lower secondary education or less
3	Ortaokul mezunu	Middle School is the secondary education in Turkey. It starts at the age of 11 and lasts for 3 years. Some middle schools, such as private ones, or high schools called Anatolian high school have 1 prep year, if the second language is English, or 2 years of prep, if the second language is French or German.	2 Lower secondary education	1 Lower secondary education or less
4	Lise mezunu	High school is the third level of education in Turkey. It starts at the age of 14 and lasts for 3 years.	4 Higher secondary education (university entrance requirement)	3 Higher secondary education (university entrance requirement)
5	Meslek eğitimi veya çıraklık	Meslek eğitimi is similar to vocational training. Meslek liseleri (vocational high schools) give arts and craft, tourism, industrial design (e.g. carpentry), or health (nurse) education. The students attend these schools after they complete middle school. Çıraklık included training at the work place. While the students take courses, they also practice e.g. in a carpenter shop, in factories, in hotels.	3 In-between lower and higher secondary education	2 In-between lower and higher secondary education
6	Lisans	Bachelor's degree is the 4th level of education similar to the undergraduate degree. The students take a national exam and according to their grades, they write down a list of possible universities they would like to go and depending on the demand and supply, they are allocated in the universities.	5 Lower tertiary education	4 Tertiary education
7	Master	Master's degree is the post-graduate degree after having completed the Bachelor's degree. It lasts 2 years.	5 Lower tertiary	4 Tertiary education

			education	
8	Doktora	Doktora is the PhD degree. It lasts for 4 years but students usually take much longer to finish their PhDs.	6 Higher tertiary education	4 Tertiary education

Tables 11 and 12 give an overview of the coding of the original values of the education variables into the four and six category classifications.

Table 11: Assignment of educational titles to the 4-level-classification - overview

New classification (4 categories)	Original categories						
	DK	GER	IT	RO	SP	UK	TR
1 Lower secondary education or less	1, 2	1,2	1, 2, 3	1, 2, 3	1,2,3	1, 2, 3	1, 2, 3
2 In-between lower and higher secondary education	4, 5	3,4		4	4	5	5
3 Higher secondary education (university entrance requirement)	3	5	4	5, 6	5	4	4
4 Tertiary education	6, 7, 8	6,7	5, 6, 7	7, 8	6, 7	6, 7	6, 7, 8

Table 12: Assignment of educational titles to the 6-level-classification - overview

New classification (6 categories)	Original categories						
	DK	GER	IT	RO	SP	UK	TR
1 Primary education or less	1	1	1, 2	1, 2	1, 2	1, 2	1,2
2 Lower secondary education	2	2	3	3	3	3	3
3 In-between lower and higher secondary education	4, 5	3, 4		4	4	5	5
4 Higher secondary education (university entrance requirement)	3	5	4	5, 6	5	4	4
5 Lower tertiary education	6	6	5	7	6	6	6
6 Higher tertiary education	7, 8	7	6, 7	8	7	7	7, 8

6.2. Coding of open answers

Several answer batteries throughout the questionnaire included the possibility to record open answers. All these entries were coded after the end of the field period. The following explains the principles which were applied during this work.

All open answers were coded as far as possible into already existing or added answer categories. Those answers which could not be assigned to either category were coded into the category "other". The content of the open answers was subsequently deleted from the public datasets in order to protect the privacy of the respondents.

Coding of open answers to questions including a country list

A number of questions (such as: [q1_4] "The citizenship of which country or countries do you hold?") used standardized country lists (see Table 13). However, in cases in which the mentioned country was not included in the list or the interviewer simply was not familiar with the country and unable to code it correctly he/she could always note it directly.

Table 13: EUCROSS country list

European Union (EU)		Lithuania	<input type="checkbox"/>	Other countries and areas	
Austria	<input type="checkbox"/>	Luxembourg	<input type="checkbox"/>	Turkey	<input type="checkbox"/>
Belgium	<input type="checkbox"/>	Malta	<input type="checkbox"/>	Albania	<input type="checkbox"/>
Bulgaria	<input type="checkbox"/>	Netherlands	<input type="checkbox"/>	Other European country	<input type="checkbox"/>
Cyprus	<input type="checkbox"/>	Poland	<input type="checkbox"/>	USA	<input type="checkbox"/>
Czech Republic	<input type="checkbox"/>	Portugal	<input type="checkbox"/>	Canada	<input type="checkbox"/>
Denmark	<input type="checkbox"/>	Romania	<input type="checkbox"/>	Mexico	<input type="checkbox"/>
Estonia	<input type="checkbox"/>	Slovakia	<input type="checkbox"/>	Central American country/ Caribbean	<input type="checkbox"/>
Finland	<input type="checkbox"/>	Slovenia	<input type="checkbox"/>	South American country	<input type="checkbox"/>
France	<input type="checkbox"/>	Spain	<input type="checkbox"/>		
Germany	<input type="checkbox"/>	Sweden	<input type="checkbox"/>	Australia/New Zealand	<input type="checkbox"/>
Greece	<input type="checkbox"/>	United Kingdom	<input type="checkbox"/>	Asian country	<input type="checkbox"/>
Hungary	<input type="checkbox"/>	Non-EU Schengen countries			
Ireland	<input type="checkbox"/>	Iceland	<input type="checkbox"/>	South Africa	<input type="checkbox"/>
Italy	<input type="checkbox"/>	Norway	<input type="checkbox"/>	Other African country	<input type="checkbox"/>
Latvia	<input type="checkbox"/>	Switzerland	<input type="checkbox"/>	_____	

In a first step of the coding procedure, those open answers were coded which could be assigned to an existing category unambiguously, i.e. open answers containing a country that was featured in the list but not ticked by mistake (e.g. open answer: “Spain”).

The open answer “Russia”, a country being part of the European and the Asian continent, was coded as “Other European country” since it can be argued that its mainstream culture and cultural heritage are more influenced by Europe than by Asia and therefore it shares more similarities with the former than with the latter.

During the coding process it was observed that many open answers contained countries or collective terms for country groups which could not be assigned to existing categories. After reflections on similarities and differences of these remaining open answers, three additional categories were introduced.

The first new category was called “*European country/countries, not further specified*”. To this category open answers were assigned which contained collective terms for European countries, such as “Scandinavia”, “Baltic States” and “whole EU”. It was decided to build this new category and not to tick each country which might be included in the collective term since the respondents’ understanding of it is unknown (e.g., What countries did the respondent actually think of when answering “whole EU”? Was he/she aware of the current list of member states?, etc.). Furthermore these answers could not be coded in “Other European country” since the terms are regularly used to refer to more than one country.

The second new category built was called *“Non-European country/countries, not further specified”*. This category is quite similar to the aforementioned. The difference, however, is that it was used in all cases in which respondents stated collective terms which are referring to areas outside Europe. Examples for open answers which fall into this category are *“Middle East”*, *“Arabic countries”* and *“North America”*. In these cases it is equally unclear which countries respondents were thinking of. When, for example, using the term *“Middle East”* were they thinking of countries which are included in the existing category *“Asian country”* or were they also thinking about Egypt or other Northern African states which fall into the category *“Other African country”*. Furthermore, it had to be taken into account that such categories may vary by country and/or language (e.g., German *“Nahe Osten”* is not a complete synonym of English *“Middle East”*).

The third new category was called *“Autonomous area/overseas territory of CoR”*. It was introduced to cope with the fact that respondents sometimes stated (autonomous) regions (like Catalonia) or countries within a state (e.g., Scotland) instead of the actual EU member states (Spain or UK). However, with regard to such answers we had to distinguish between two kinds of items: a) those which asked for the country of birth and nationality of respondents and b) those which asked about personal experiences.

In the case of a) the intention behind these questions was to inquire the country in which respondents were born and the formal nationality/-ies they held. Therefore, if a respondent for example stated that he/she was held Scottish citizenship the answer was coded into the existing battery as *“United Kingdom”*.

However, regarding b) the treatment of answers is more complex. The problem can be illustrated using item q2_2a2o as an example:

“Apart from CoR, are there one or more other countries that you are very familiar with? Which country/countries were you thinking of?”

In this case we distinguished between people who live in the state to which the region/country in question belongs and those who live in any other state.

Case 1: A German answered *“Canary Islands”* to this question. Since it is unlikely that the respondent meant to distinguish politically, culturally etc. between these islands and the rest of Spain, and in order to strengthen the comparability of answers, in such cases the code of the respective state (in this case: Spain) was used.

Case 2: A Spaniard gave the same answer. In this case the answer could not be coded in the category *“Spain”*, since the question was about areas which are not part of the CoR. Hence, one solution would be to treat this answer as invalid. However, if a respondent gave such an answer it could be a sign that he/she sees the *“region/country”* in question in some (important) way as distinctive from the rest of the country of residence. Therefore, in such a case the new category *“Autonomous area / overseas territory of CoR”* was assigned.

In summary this means that the third new category was only assigned if the respondent naming an autonomous region etc. was a resident of the EU member state to which this region/country belongs and if the item was not asking for his/her nationality (or that of partner and parents). In the case of people who are not residing in the respective state the answer was always coded into the category of the state itself (e.g., "UK" in the case of "Scotland", "Denmark" in the case of "Greenland" and so on).

Islands, when not belonging to a political entity on the continent (i.e. autonomous area or overseas territory), were coded according to their continental affiliation using the CIA Factbook as source (CIA 2013):

- Maldives to Asia (i.e., "Asian country")
- Madagascar, Mauritius and Seychelles to Africa (i.e., "other African country")
- Papua New Guinea and Fijis to Oceania (i.e., "Australia/New Zealand")

The new variables were only included in the batteries if there were any observations to be coded into them.

Coding of open answers to questions asking for the familiarity with other regions and countries or for reasons of movement and settlement

Description of these questions:

- Question "2.1.1. And why exactly <<is it/are they>> familiar to you?" refers to the respondents familiarity with regions within the CoR.
- Question "2.2.2. And why exactly is this country/are those countries familiar to you?" refers to the respondents familiarity with countries apart from the CoR and – in case of migrants – the CoO.
- Question "2.3. Why did you decide to settle in [CoR]?" applied only to migrants.
- Question "2.6.3. Why did you move there?" asked for the reasons for which respondents moved to countries in which they lived for a longer period (apart from the CoO and CoR) after turning 18.

The coding of open answers to questions 2.1.1, 2.2.2, 2.3 and 2.6.3 was coordinated by the German team at GESIS and realized by each national team for their respective dataset. Each team was asked, as a first step, to code the open answers as far as possible into the existing categories.

Since in all countries a range of open answers could not be coded into existing categories but revealed certain commonalities, it was decided to include additional categories to these questions.

To question 2.1.1 ("And why exactly is it/ are they familiar to you?", referring to regional entities) two categories were added. The first new category "*Spatial proximity*" includes answers which state that the respondent feels familiar to a certain regional entity

because of its spatial proximity to respondent's place of residence. Examples for answers coded into this additional category are: "live in a tri-border region", "immediate vicinity" and "neighbouring town/region" (examples taken and translated from the German dataset). The second new category was called "*Lived there (without further specification)*". Since many respondents simply answered "lived there" or "residence" without stating the reason (such as their occupation or because of their family) this new category was built to summarise these answers.

Question 2.2.2 ("And why exactly is it/ are they familiar to you?") contains the same original categories as question 2.1.1, but this time referring to national entities. Here, as well, a notable number of respondents stated that they feel familiar to a certain national entity/country because of its "*spatial proximity*" or because they "*lived there (without further specification)*". Therefore, the two new categories added to question 2.1.1 were included to question 2.2.2, too. In addition, and differing from additional categories of the aforementioned question, a third new category was added called "*cultural closeness/mention of cultural elements*". Examples for answers coded into this new category are: "same language", "cultural proximity" and "cultural similarity" (examples taken and translated from the Spanish dataset).

The battery used in question 2.3 ("Why did you decide to settle in CoR?") already offered a wide range of nuanced answer categories. The review of open answers nevertheless revealed that these original answer categories did not cover every answer given by respondents and that there were commonalities between certain answers which could in turn be summed up into additional categories. Hence, two new answer categories were added to the question. The first new category "*Political reasons and/or humanitarian reasons*" included answers in which respondents stated that they settled in the CoR for reasons such as "civil war", being "displaced persons" or "refugees" or simply for "political reasons" (examples taken and translated from the German dataset). The second new category "*Family origin/descent/ancestry*" includes answers stating that respondents' ancestors originated from CoR. Examples for this category are "ethnic German" and "of German origin" (examples taken and translated from the German dataset).

The open answers to question 2.6.3 ("Why did you move there?") were coded into existing categories as far as possible. There emerged no patterns which would have justified the introduction of additional categories.

Coding of open answers to questions including a language list

The coding of open answers to questions about languages (2.21.1, 2.21.2 and 2.22.1) was realized by each national team for the respective national dataset. Open answers were coded into existing categories as far as possible. There was one category added during the coding process, namely "*Other Asian language*".

Coding of occupations

The coding of open answers to the questions about respondent's (4.5), his/her parents' (4.13) and his/her partner's occupation (4.22) was realized by each team for their respective national dataset, whereby the Romanian team also organized the coding of open answers for the Romanian migrant samples in the different countries. The coding of open answers for the Turkish migrant samples in the different countries was realized by native speakers recruited in Italy. The coding is based upon the ISCO-08 classification. In all languages standardized translations provided by the EU were used (except for Turkish, where a translation provided by the Turkish Statistical Institute was used).

Coding guidelines were prepared in order to guarantee comparable results across all countries (Figure 2). The respective document builds heavily on coding guidelines compiled by Ganzeboom (2010) and Geis (2011), as well as on the ISCO-08 documentation issued by the International Labour Organization (2012). These guidelines were handed to all coders during the detailed briefing which they received from the members of the respective national teams. The coding was coordinated by the German team at GESIS to which national teams forwarded all relevant questions. Answers to these questions were communicated to all teams, thus assuring that coders in different countries dealt with the same problem in the same way.

In addition to the instructions laid out by the guidelines the following decisions were made and followed by all coders:

- "Farmer" was coded as 6100 since it can be argued that in Europe farmers in general do not work for their own use alone (code 6300) but also produce in order to sell their products.
- Answers such as "owner", "entrepreneur" were coded into major group 1.
- "Factory worker" was coded as 9320.

The ISCO-08 codes were, in addition, used to build the respective ISEI values for each open answer. SPSS-routines provided by Harry Ganzeboom were applied (see: www.harryganzeboom.nl/isco08/isco08.zip (Ganzeboom and Treiman 2013)).

Figure 2: EUCROSS coding guidelines for ISCO-08

Coding of occupations

Open answers to occupational questions in EUCROSS will be coded according to ISCO-08. The coding has to follow the rules laid out in this document, therefore each coder should be provided with a copy.

Coding scheme and handbook

- Please use the official EU translation of ISCO-08 as coding scheme, i.e. if you code Danish answers you should use the Danish translation of ISCO-08 (to be found in your language version of the Official Journal of the European Union, L 292, Volume 52, 10 November 2009; <http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2009:292:SOM:EN:HTML>). If you are unsure about the meaning of a group or subgroup etc. please look up its definition in the ISCO-08 handbook (free pdf version: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf).
- An example of the ISCO coding scheme (English) and the compendium will also be uploaded to the EUCROSS forum.

Preparation and general advice

- General information on what ISCO-08 is and what it is used for can be found on pp. 3-4 of the ISCO-08 handbook (*Overview of ISCO-08* and *Main objectives of ISCO*).
- Coders should **read carefully chapter two of the ISCO-08 handbook** (*Conceptual Framework, Design, Structure and Content of ISCO-08*, pp. 11-19) before coding the first answers.
- Before starting the coding work, coders should familiarize themselves with the coding scheme and its logic.
- If the coder did not code occupations with ISCO-08 before, it might be a good idea to revise the first 50 coded observations at the end of the work, since some ambiguities might have dissolved because of the learning-by-doing effect.

Structure of ISCO-08¹

- ISCO-08 is hierarchical structured
- It consists of 10 major groups → each major group includes one or more sub-major groups → each sub-major group is made up of one or more minor groups → each of the 130 minor groups has one or more unit groups
- The level of detail is increasing from the major group to the unit group level
- Example:

¹ International Labour Organization (ILO) (2012): *International Standard Classification of Occupations. ISCO-08. Structure, group definitions and corresponding tables*, Vol. 1, URL: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf, retrieved: 2013/02/07, pp. 16f.

Major Group	5	Services and Sales Workers
Sub-major Group	51	Personal Services Workers
<i>Minor Group</i>	511	<i>Travel Attendants, Conductors and Guides</i>
Unit Groups	5111	Travel Attendants and Travel Stewards
	5112	Transport Conductors
	5113	Travel Guides

- For each group level one digit is added to the code
- **Each ISCO code assigned in EUCROSS has to consist of four numbers; however trailing zeros may be used (see below).**

Which level of detail are we aiming for?

- EUCROSS data should be coded to the three digit minor group level.
- **Thus, coders should find the appropriate minor group and assign a four digit code consisting of the minor group code followed by a zero.**
- Taking up the example stated above, this means that we do not need to distinguish between *transport conductors* (ISCO code: 5112) and *travel guides* (ISCO code: 5113), both can be coded as *travel attendants, conductors and guides*. Hence the appropriate code for both would be: 5110.
- However, if the coder could identify the appropriate unit group he/she is of course allowed to assign the respective code (i.e., replacing the trailing zero by the respective number).

Vague responses or uncertainties about the content of an occupation

- Since we aim for a code on minor group level **coders should always try to identify the appropriate three digit code.**
- However, we need reliable codes therefore the **coders should never guess!** Therefore, the following rule applies: "If, for example, the only information is the job title "teacher", it can be coded only to the Sub-major Group 23: Teaching Professionals. The response [...] [should] be assigned a code for what is effectively an artificial unit group (2300:Teaching Professionals Not Further Defined) by adding two trailing zeros."²
- The same principle applies if the coder is only certain about the major group.
- Nevertheless, **codes consisting only of one or two digit identifiers should be avoided as much as possible since they leave a lot of uncertainty.** E.g., in the aforementioned case 2300 includes "University and higher education teachers" as well as "Primary school and early childhood teachers" between which we could not differentiate.
- It is likely that some job titles are unfamiliar to the coder or that he/she is not certain of the skill level which is required to perform them etc.
- In such cases the coders should search for further information in the internet. If available official databases which consist of job descriptions should be consulted (e.g., in Germany the Federal Employment office maintains a database that includes

² Ibid., p. 57.

information on most professions for which an official vocational training exists in Germany: <http://berufenet.arbeitsagentur.de/berufe/>).

- If a mentioned occupation matches more than one comparable category the one which requires the lower skill level has to be coded.
- If it is impossible to code at least a major group the response has to be coded as **0004 (impossible to code, unclear)**, see list below.
- This could be the case if answers are a) extremely vague and could fall in several categories which differ substantially from each other, b) if, after some research, the coder is still unable to define the content of an occupation. Some examples for extremely vague responses:
 - Answer (UK): “Worked for the British Museum in London.”
This answer cannot be coded since we do not know whether this person worked there as a scientist in a specific field, as managing director or as member of the cleaning staff etc.
 - Answer (Germany): “Beamter” (civil servant)
This answer cannot be coded since the respondent might be a police officer, a high school teacher or a clerk working in a town’s administration etc.

What if the respondent stated more than one occupation?

- The following rules apply in sequence³:
 - **Numerical dominance rule**: If the respondent indicated that one of several mentioned occupations dominated in terms of working time, the respective answer should be given preference.
 - **Skill level rule**: If several occupations are mentioned, always code the one which involves the highest skill level (e.g., “veterinarian and dairy farmer” → code “veterinarian” = 2250).
 - **Production rule**: If several occupation are mentioned and one involves production, the respective answer should be given preference
- If none of the above stated rules can be applied, the first mentioned occupation has to be coded (Example: The respondent mentioned two occupations which both require the same skill level, there is no indication which activity dominates and none of them involves the production of any goods).

Should/can additional information be considered in the coding process?

- Following recommendations given by Harry Ganzeboom information on educational attainment, gender, age and income should not be considered during the coding procedure.⁴ Therefore, coders will not be provided with this data.
- However, we will provide the according information on the occupational status (employee, self employed, working for the family business).
- EUCROSS collected occupational data on the respondents, on one of their parents and on their partners. However, all of these answers have to be coded separately! This

³ Ganzeboom, Harry B. G. (2010): *Occupation Coding. Do's and Dont's. With special reference to the International Standard Classification of Occupations ISCO-88. With an Extension on ISCO-08, Version 4*, URL: [http://home.fsw.vu.nl/hbg.ganzeboom/pdf/2010-do-and-donts-occupation-coding-\(paper-version4\).pdf](http://home.fsw.vu.nl/hbg.ganzeboom/pdf/2010-do-and-donts-occupation-coding-(paper-version4).pdf), retrieved: 2013/02/11, p. 19.

⁴ Ibid, p. 31.

means that the occupation of parents and partner are not to be considered in cases of uncertainty regarding the coding of the respondent's occupation, and vice versa.

Employment status

- Some respondents not just gave their occupation, but also stated that they are self-employed, business owners etc. Coders do not have to code these information (there is no ISCO code for it anyways), since our questionnaire included the aforementioned item asking specifically for the occupational status.

Additional EUCROSS codes

- The coder has to assign a code for each of the three occupation items to each respondent (i.e., in the end there has to be some code in all fields of the columns which are entitled "ISCO-08 code").
- If none of the standard ISCO-codes can be applied one of the following might be used:

Code	Meaning	Comment
0004	impossible to code (unclear)	The given answer is not specific enough to code at least a major group.
0008	don't know	This code is just to be used if "don't know" has been noted as the respondent's answer.
0009	missing	This code has to be used if the data set does not contain an answer.

6.3. Observation number and group variable

An additional variable (“group”) which identifies each partial sample by a numeric value has been introduced in the dataset. Furthermore, all observations were assigned unique observation numbers (“obsnum”). Table 14 provides an overview of the value distributions in both variables.

Table 14: Overview of the additional group and observation number variables

Sample	Group number <i>[group]</i>	Observation number (range) <i>[obsnum]</i>
Denmark (national sample)	1	1 – 1014
Germany (national sample)	2	1015 – 2015
Italy (national sample)	3	2016 – 3015
Romania (national sample)	4	3016 – 4015
Spain (national sample)	5	4016 – 5015
United Kingdom (national sample)	6	5016 – 6016
Denmark (turkish sample)	7	6500 – 6749
Germany (turkish sample)	8	6750 – 7001
Italy (turkish sample)	9	7002 – 7251
Romania (turkish sample)	10	7252 – 7501
United Kingdom (turkish sample)	11	7502 – 7749
Denmark (romanian sample)	12	8000 – 8249
Germany (romanian sample)	13	8250 – 8499
Italy (romanian sample)	14	8500 – 8749
Spain (romanian sample)	15	8750 – 8999
United Kingdom (romanian sample)	16	9000 – 9247

6.4. Shortcomings of the datasets

It is common sense that life is full of surprises, and so are research projects. Unfortunately, this means that not always everything goes exactly as planned which causes at times shortcomings and errors in the data. In the spirit of scientific accuracy the EUCROSS consortium would like to make the users of these datasets aware of the following problems, which were encountered upon the publication of this report:

Table 15: Shortcomings of the datasets

Question number	Question	Variable(s)	Dataset (subsample)	Description
2.13	Please think about all family members, in-laws and friends you have who live in [CoR]. I would like to know how many are originally from other countries.	q2_13	Nationals (Denmark)	In the data collected by the Danish subcontractor (see p. 13) a routing error occurred: Only those nationals who were not born in Denmark were asked about the origin of their contacts.
2.21.2.	Which language do you speak at home most of the time (i.e., with the members of the household you live in)?	q2_21b_1 - q2_21b_39	Romanian migrants	Due to a routing problem only a negligible share of the Romanian migrants in all countries but the UK answered this question. Hence, the information is missing for most observations.

References

- Behr, Dorothee. 2009. *Translationswissenschaft und international vergleichende Umfrageforschung. Qualitätssicherung bei Fragebogenübersetzungen als Gegenstand einer Prozessanalyse*. GESIS - Schriftenreihe. Vol. 2. Bonn: GESIS – Leibniz-Institut für Sozialwissenschaften.
- Bruter, Michael. 2005. *Citizens of Europe? The Emergence of a Mass European Identity*. Houndmills u.a.: Palgrave Macmillan.
- Central Intelligence Agency (CIA). 2013. "The World Factbook." <https://www.cia.gov/library/publications/the-world-factbook/index.html>.
- Ecirli, Ahmet, Iulian Stănescu, and Mihai Dumitru. 2011. *The Turkish Community in Bucharest. A Sociological Overview*. <http://www.inovatiасociala.ro/index.php/jurnal/article/view/129> (accessed 2013/01/14).
- Ganzeboom, Harry B. G. 2010. *Occupation Coding. Do's and Dont's. With Special Reference to the International Standard Classification of Occupations ISCO-88. with an Extension on ISCO-08*. [http://home.fsw.vu.nl/hbg.ganzeboom/pdf/2010-do-and-donts-occupation-coding-\(paper-version4\).pdf](http://home.fsw.vu.nl/hbg.ganzeboom/pdf/2010-do-and-donts-occupation-coding-(paper-version4).pdf) (accessed 2013/02/11).
- Ganzeboom, Harry B. G. and Donald J. Treiman. 2013. *International Stratification and Mobility File: Conversion Tools*. Amsterdam: Department of Social Research Methodology. <http://www.harryganzeboom.nl/ismf/index.htm> (accessed 2013/06/10).
- Geis, Alfons. 2011. *Handbuch für die Berufsvercodung*: GESIS. Survey Design and Methodology. http://www.gesis.org/fileadmin/upload/dienstleistung/tools_standards/handbuch_der_berufscodierung_110304.pdf (accessed 2013/08/02).
- Hanquinet, Laurie and Mike Savage. 2011. *Operationalisation of European Identity, Cosmopolitanism and Cross-Border Practices*. EUCROSS Working Paper 2. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395749> (accessed 2015/07/22).
- Humpert, Andreas and Klaus Schneiderheinze. 2000. "Stichprobenziehung für telefonische Zuwandererumfragen. Einsatzmöglichkeiten der Namensforschung." *ZUMA Nachrichten* 24 (47): 36-63.
- Instituto Nacional de Estadística (INE), ed. 2009. *Encuesta Nacional de Inmigrantes 2007. Una Monografía*. Madrid: INE.

- International Labour Organization (ILO). 2012. *International Standard Classification of Occupations. ISCO-08. Structure, Group Definitions and Correspondence Tables 1: International Labour Organization*. http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf (accessed 2013/02/07).
- Mau, Steffen. 2010. *Social Transnationalism. Lifeworlds Beyond the Nation-State*. International Library of Sociology. London and New York: Routledge.
- Ministerio de Educación, Cultura y Deporte. 2002. *El sistema educativo Español 2002*. Madrid: Secretaría General Técnica.
- Pöttschke, Steffen. 2012. *Measuring Transnational Behaviours and Identities*. EUCROSS Working Paper 4. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395325> (accessed 2015/07/22).
- Recchi, Ettore and Adrian Favell. 2009. *Pioneers of European Integration. Citizenship and Mobility in the EU*. Cheltenham: Elgar.

List of EUCROSS publications

Final Report

Recchi, Ettore, ed. 2014. *The Europeanisation of Everyday Life: Cross-Border Practices and Transnational Identifications among EU and Third-Country Citizens - Final Report*. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395269>.

Working paper

Favell, Adrian, Ettore Recchi, Theresa Kuhn, Janne Solgaard, and Juliane Klein. 2011. *State of the Art Report*. EUCROSS Working Paper 1. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395738>.

Hanquinet, Laurie and Mike Savage. 2011. *Operationalisation of European Identity, Cosmopolitanism and Cross-Border Practices*. EUCROSS Working Paper 2. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395749>.

Recchi, Ettore. 2012. *Transnational Practices and European Identity. from Theoretical to Policy Issues*. EUCROSS Working Paper 3. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395725>.

Pöttschke, Steffen. 2012. *Measuring Transnational Behaviours and Identities*. EUCROSS Working Paper 4. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395325>.

Salamońska, Justyna, Lorenzo Grifone Baglioni, and Ettore Recchi. 2013. *Navigating the European Space. Physical and Virtual Forms of Cross-Border Mobility among EU Citizens*. EUCROSS Working Paper 5. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395617>.

Hanquinet, Laurie and Mike Savage. 2013. *Europeanisation and Globalisation*. EUCROSS Working Paper 6. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395684>.

Pöttschke, Steffen, Deniz Duru, Nazli Sila Cesur, and Michael Braun. 2014. *Cross-Border Activities and Transnational Identification of Turkish Migrants in Europe*. EUCROSS Working Paper 7. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395374>.

Croitoru, Alin, Dumitru Sandu, and Elena Tudor. 2014. *Romanians' Social Transnationalism in the Making*. EUCROSS Working Paper 8. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395609>.

Policy Briefs

Favell, Adrian and David Reimer. 2013. *Winners and Losers? Citizens and Sceptics? European Integration and the Spread of Cosmopolitanism*. EUCROSS Policy Brief 1. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395294>.

Apaydin, Fulya and Juan Díez Medrano. 2014. *Are Cross-Border Practices a Threat to Democratic Participation among EU Citizens?*. EUCROSS Policy Brief 2. <http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395599>.